*sustainability*

# Sustainable Cultural Management

Edited by
Łukasz Wróblewski, Ana Gaio and Ellen Rosewall

Printed Edition of the Special Issue Published in *Sustainability*

www.mdpi.com/journal/sustainability

MDPI

# Sustainable Cultural Management

# Sustainable Cultural Management

Special Issue Editors

**Łukasz Wróblewski**
**Ana Gaio**
**Ellen Rosewall**

**MDPI**

*Special Issue Editors*

Łukasz Wróblewski
WSB University
Poland

Ana Gaio
City, University of London
UK

Ellen Rosewall
University of Wisconsin-Green Bay
USA

This is a reprint of articles from the Special Issue published online in the open access journal *Sustainability* (ISSN 2071-1050) from 2018 to 2019 (available at: https://www.mdpi.com/journal/sustainability/special_issues/Sustainable_Cultural_Management)

For citation purposes, cite each article independently as indicated on the article page online and as indicated below:

LastName, A.A.; LastName, B.B.; LastName, C.C. Article Title. *Journal Name* **Year**, *Article Number*, Page Range.

# Contents

# About the Special Issue Editors

**Łukasz Wróblewski** (PhD), Head of the Department of Management and Production Engineering at University of Dąbrowa Górnicza, member of the Polish Academy of Sciences (Commission for Polish–Czech and Polish–Slovak Relations), Vice President of the Scientific Society of Organisation and Management, Branch in Dąbrowa Górnicza. Since 2016, doctor Łukasz Wróblewski has been the Polish rapporteur at the "Arts Management Network" in Weimar. He is a representative of University of Dąbrowa Górnicza at "The European network on cultural management and policy" in Brussels. He also acts as an expert of the American Marketing Association. Since 2017, he has been the Editor-in-Chief of the renowned scientific journal *Cultural Management: Science and Education* published by Logos Verlag in Berlin. He is the author of nearly 100 scientific publications (including three independent monographs) in Polish and English dealing with the subject of cultural management.

**Ana Gaio** (PhD). Dr Gaio has worked and researched in the cultural and creative sector for over 25 years, in the UK and internationally. In her time at City, University of London she has taught and researched in this area of study and currently leads the development of a new MA in Global Creative Industries. She has been an external examiner at various universities and teaches internationally. Her research interests include the formation of public policy (cultural policy in particular), and the evolution of the non-profit paradigm in creative and cultural organisations. She was part of the team that developed the UK's Creative Industries Mapping for the UK's Department of Culture, Media and Sport in 2001, which provided a blueprint for creative industries' development in many other parts of the world. She has served on the boards of several creative organizations and sector bodies such as the Audience Agency, and currently serves on the Skills Working Group of the UK's Creative Industries Federation. She is also a Vice-President of ENCATC (the European network for cultural policy and management education and research), an ex-officio member of the US Association of Arts Administration Educators' board of directors, and an advisor to the China Arts Administration Education Association.

**Ellen Rosewall** is Professor of Arts Management at University of Wisconsin and Coordinator of the Arts Management program. She has been Executive Director of Schola Cantorum (Palo Alto, CA), Interim Director and Capital Campaign Manager of the Green Bay Botanical Garden, and Director of Marketing and Development at the Weidner Center. She has been President of Arts Wisconsin, the Wisconsin Public Radio Association and the Northeastern Wisconsin Arts Council. In 2009 she was named an Arts in Crisis mentor through the John F. Kennedy Center for the Performing Arts. She currently serves as Vice President of the Association of Arts Administration Educators, an international service organization for arts management academic programs. Professor Rosewall is the author of Arts Management: Bringing Arts and Audiences Together in the 21st Century, published in 2013 by Oxford University Press and renowned as the standard textbook for introductory Arts Management courses.

*Editorial*

# Sustainable Cultural Management in the 21st Century

**Łukasz Wróblewski [1],*, Ana Gaio [2] and Ellen Rosewall [3]**

[1]   Research Institute on Territorial and Inter-Organizational Cooperation, University of Dąbrowa Górnicza, Cieplaka 1c, 41-300 Dąbrowa Górnicza, Poland
[2]   Department of Sociology, City, University of London, Northampton Square, London EC1V 0HB, UK
[3]   Department of Arts Management, University of Wisconsin-Green Bay, 2420 Nicolet Dr., Green Bay, WI 54311, USA
*   Correspondence: lwroblewski@wsb.edu.pl; Tel.: +48-692-344-057

The connections between culture and sustainability have been in the public agenda since the 20th century. However, whilst global sustainability programmes at international institutional levels are yet to recognise the role of culture in its sustainability policies, the bid (albeit failed) in the early 2000s to formally add 'culture' to the trilogy of sustainability pillars (economic, social and environmental) mobilised a new discourse for the reframing of cultural policy narrative, which in turn urged a reassessment of methods of cultural management reflecting the same concerns among the sector's grassroots. The idea of sustainability and culture working together and their envisioned role in future-proofing society and human development captured the imagination of cultural commentators, policy makers and practitioners alike, keen to fulfil these principles 'out there'; in cultural organizations and events mega and small, in cities and regions, local and global. The papers in this Special Issue reflect this appeal.

They also echo the semantic journeys and complexities inherent in the concepts of sustainability and culture and their interface. The definition of sustainability as a paradigm within which to interpret biological and social interdependencies [1] contrasts with more descriptive temporal and spatial accounts but provides an important clue about the (eco) systemic nature of this concept and its contingency on the 'interdependency' of systems' elements, which is what might need to be 'managed'. The subsequent application of the term to processes of development [1] shifted the emphasis from sustainability to sustainable development, lending a processual connotation, if not tangibility, to the sustainability discourse. Along similar lines, the application of these concepts to business (as to many other disciplines), acknowledged its embeddedness, in other words, its interdependencies with society and the environment and stressed the relevance of the sustainability vision to business (and therefore) to management, codified in the 'triple bottom line' framework [2]. Hence, sustainable (business) management is concerned with attaining, amongst other things, an economically, socially, and environmentally responsible society and in doing so with engaging in and securing sustainable development. More specifically, a system can also be seen from an internal, organizational perspective and the resource-based perspective that is common to sustainability and management, often focusing on the economic 'pillar' and expressing a concern for economic viability, is also studied as an organizational subset of sustainable management.

Culture is an equally complex and multifaceted term, commonly evoked as the broad and inclusive arts and culture sector and as ways of life and collective identities. At the height of the international debate, a decade or so ago, over the value of culture and the (perceived development) value of a then emergent creative economy (North and South, East and West), it was a matter of time before the cultural and sustainability policy agendas intersected. Various theories have expounded the relationship between culture and sustainability and, similarly, sustainable development [1,3–5], though these invariably postulate the use of culture, its manifestations or their operation, as an instrument, as a *subject* of sustainability. Culture in its various expressions resonates on many levels of people's

everyday lives, which makes it a perfect vehicle for social and economic mobilisation [6]. Less explored in the extant literature, however, is an-other ontology of culture within the scope of sustainability in which culture (in any of its dimensions) is assumed to be the *object*–not the subject–of sustainable practice. This applies to culture as a way of life as to cultural undertakings, a museum, an art gallery, a film production company, which like any other concern interact with society and the environment as producers, consumers, social and economic actors. Still, these ultimately operate in the pursuit of their inherent cultural, prosocial mission, collectively expressing and transforming society as aesthetic innovators, as curators of cultural memory, as community engagement cultivators, as hubs and outlets for cultural and creative expression. On this premise, sustainable cultural management might be aptly described in terms of the deployment of responsible management practices and policies with the goal to fulfil these outcomes and, more generally, to sustain a thriving culture.

The concept of sustainability offers a new framework for redesigning cultural policies and revisiting cultural management methods through a comprehensive approach that encompasses care for the environment, develops practices for sound management of public resources and brings the concept of social responsibility to the forefront [7]. This concept requires an innovative approach not only to the cultural offer and the provision of services in the field of culture, but also to the formation of long-term relations with interested parties and investments in local communities. Cultural organizations that introduce innovations in line with the sustainable management concept must constantly improve their management systems, processes and tools, whilst skillfully managing their relations with various interest groups. This consequently leads to the provision of value which combines both the economic and social aspects [8,9].

Given this, the Special Issue on *Sustainable Cultural Management* fulfils a considerable gap in the literature, and attempts to illuminate this broad and tricky field in an interesting manner. The publication consists of fifteen separate articles. The geographical variety of individual cases is one of the greatest strengths of the publication. Individual articles deal with different aspects of sustainable cultural management from a variety of countries, including Poland, Czech Republic, Romania, Italy, Spain, and Taiwan, as well as China and USA. Although the structure of the publication is not a traditional one, it finds its rationale and contributes to the aim of the overall project. The theoretical and empirical components of the publications are well balanced and the Special Issue on *Sustainable Cultural Management* provides ample and interesting new findings. Well-referenced bibliographic resources and their own research underpin the contents of the publication.

In the first article, titled Sustainable Management of the Offer of Cultural Institutions in the Cross-Border Market for Cultural Services—Barriers and Conditions, by using different notions of the market, a new definition of a cross-border market for cultural services was presented. Authors based this on the example town divided by a border–Cieszyn (Poland) and Český Těšín (Czech Republic) indicated by barriers in the town, which made it difficult for the residents to benefit from the cultural offer that was available on the other side of the border. The results of the authors' research proved that despite numerous cross-border Czech–Polish projects carried out by cultural institutions, language, information, economical, and psychological barriers limited the full implementation and application of the concept of sustainable cultural management in the town divided by a border.

The second article written by Łukasz Wróblewski and Zdzisława Dacko-Pikiewicz concentrates on the problems of sustainable consumer behaviour in the market of cultural services in Central European countries. In this article, most of the attention was devoted to the culture service, customers' choice of means of transport used on the way to a cultural event. In the article, it was proven that despite various legal regulations conducive to sustainable consumption in Poland, the majority of Polish consumers of cultural services in the analysed area of consumer behaviour still do not follow this concept.

The next article, authored by Pier Luigi Sacco, Guido Ferilli, and Giorgio Tavano Blessi presents a new conceptual framework to analyze the evolution of the relationship between cultural production and different forms of economic and social value creation in terms of three alternative socio-technical regimes that have emerged over time. Authors explain how, with the emergence of the Culture 3.0

regime characterized by novel forms of active cultural participation, the distinction between producers and users of cultural and creative contents is increasingly blurred, new channels of social and economic value creation through cultural participation acquire increasing importance. Authors noticed also that, the Culture 3.0 perspective is finding space in the EU's strategic thinking on the role of culture in future policies. However, having to face the urgencies posed by the many economic and social criticalities of today, there is a constant risk that the EU marginalizes in practice the role of cultural policy rather than upgrading it to the new level, and that would be a sign that there is still a significant gap in terms of strategic vision and conceptual awareness of the revolutionary implications of Culture 3.0.

Article four, prepared by Łukasz Wróblewski, Katarzyna Bilińska-Reformat, and Mateusz Grzesiak, focuses on the sustainable activity of cultural service consumers of social media users. The article presents the results of a survey that was conducted in 2018 on a group of 1021 consumers of cultural services, who at the same time regularly used social media. The statistical analysis carried out and the research results obtained proved that the activity of consumers of cultural institutions on the Internet, and in particular, on social media, stimulated the brand's awareness/associations with the brand of a cultural institution and the perception of its quality.

The fifth article, entitled *Moving Urban Sculptures towards Sustainability: The Urban Sculpture Planning System in China*, prepared by Zhe Liu, Pieter Uyttenhove, and Xin Zheng, is based on the review of more than 100 articles, plans, and government documents, and findings obtained from semi-structured interviews. The article argues that urban planning strategies and policies have been conceived as strategic instruments by the Chinese municipal governments to realize sustainable development of urban sculptures. Findings of authors are very valuable, because they would enrich knowledge on geographic studies of public art planning through the contextualized analysis of a Chinese urban sculpture planning system.

A further article prepared by Hailing Wang, Libiao Bai, Ning Huang, Qiang Du, and Tingting Zhang depicts culture as a base in new kind of management from the social aspect, termed as Social Project Culture (SPC). Authors noticed that SPC can promote sustainable development and improve the management level and efficiency of organizations by promoting management by project application across society. In addition, it can reduce the communication barriers in different enterprises and improve the success rate of cooperation. For managers, SPC can reduce the management difficulties caused by different cultures, outdated management, and changing environments. For government, it can indirectly promote the economic development of society by prompting the prosperity of enterprises and organizations.

Article seven, prepared by Gail Markle, focuses on an understanding, pro-environmental behavior in the United States. The author using insights from grid-group cultural theory and cognitive sociology, designed a mixed-methods study, which examined the factors that influenced pro-environmental behavior among a nationally representative U.S. sample ($n = 395$). Qualitative results indicated that individuals develop culturally specific environmental socio-cognitive schemas, which they use to assign meaning to the environment and guide their environmentally significant behavior. Quantitative results indicate cultural orientation, pro-environmental orientation, environment identity, and environmental influence predict pro-environmental behavior. According to the opinion of the author, applying these combined theoretical perspectives to the social problem of environmental degradation could facilitate the development of targeted strategies for bringing about impactful behavioral change. This study is significant because synthesizing grid-group cultural theory and cognitive sociology enables us to better understand obstacles to the individual and collective performance of efficacious pro-environmental behavior.

The next article, entitled *Sustainable Management of Contemporary Art Galleries: A Delphi Survey for the Spanish Art Market*, written by Alicia Mateos-Ronco and Nieves Peiró Torralba, focuses on art galleries, which are the most influential intermediaries in the Spanish primary contemporary fine-art market and perform a role that goes beyond the mere distribution of works of art. This paper develops and applies a prospective methodology based on the information compiled by twenty-five experts to

identify and evaluate the factors that determine the current situation and future outlook for Spanish contemporary art galleries. The results show, that the survival of these organizations will depend on their ability to adapt to the changing conditions of the economic environment; reactivating and internationalizing demand and redirecting their business model towards sustainable management by implementing appropriate business management models and techniques.

Article nine, titled *Filmmaking and Crowdfunding: A Right Match?* written by Mina Fanea-Ivanovici, complements the other parts of the publication in an appropriate manner. In this study, the author raises the question of identifying alternative financial resources for filmmakers in Romania. The main aim of the article was to study Romanian filmmakers' attitudes towards crowdfunding and its perceived suitability for financing film projects. The author based on the results of the study, argued that regulating crowdfunding in Romania was a desired and necessary step in its development. Such regulation does not primarily regard the existing forms of crowdfunding in Romania—reward-based and donation-based—which can still be used without any intervention. However, regulation would allow the existence and operation of crowdfunding platforms in the more advanced forms of this financing instrument: equity-based crowdfunding, lending-based crowdfunding, invoice trading and hybrid forms.

The tenth article written by Izabela Luiza Pop, Anca Borza, Anuta Buiga, Diana Ighian, and Rita Toader concentrates on the achieving of cultural sustainability in museums. The main aim of the paper was to develop econometric models that explained the influence of heritage exposure; environmental behavior; openness to the public; and effectiveness and performance in collecting, preserving, and researching the cultural heritage. To achieve this goal authors conducted survey research in 86 Romanian museums. The findings of the study indicated that museums' effectiveness and performance, openness to the public, and heritage exposure have a positive impact on cultural sustainability.

A further article prepared by Yi-De Liu, entitled *Event and Sustainable Culture-Led Regeneration: Lessons from the 2008 European Capital of Culture, Liverpool* is based on long-term and multi-faceted data. The study aimed to contribute to the debate on urban cultural policy and management by answering two research questions: What are the key success factors for sustainable culture-led regeneration? How can cities strike a balance between the dilemmas of culture-led regeneration? The author's research revealed that incorporating events in a city's long-term regeneration trajectory, continued support and enhancement of local cultural processes and structures, and highlighting community involvement and development were major factors to ensuring the cultural sustainability of the event.

The next study written by Yongchun Yang, Yan Sun, and Weiwei Wang concentrates on the research on Tibetan folk's contemporary Tibetan cultural adaptive differences and its influencing factors. Authors noticed that the Tibetans' cultural adaptive strategies tended toward integration of modern and traditional culture in the affective, behavioral, and cognitive dimensions, whose characteristics were especially represented in the behavioral dimension. This represents a genuinely useful enrichment of the publication and contributes to its versatile nature as it concerns both functional and geographical aspects of the culture.

The main purpose of article thirteen written by Jan Suchacek was to analyze and evaluate cultural and creative industries in Ostrava, the third largest city of the country that at the same time constituted a typical representative of old industrial urban fabrics in the Czech Republic. In this article special attention was devoted to the emerging cultural clusters that appeared to be indispensable in terms of sustainable cultural management. The results of the author's research indicated that the paths towards cultural management sustainability could differ substantially from recipes, which were well-proven in leading developed territories. The author's analysis confirmed some developmental effects evoked by the concentration of cultural industries and cultural clusters in Ostrava could be identified, but genuine qualitative transformation towards a more cultural and sustainable milieu in Ostrava undoubtedly requires more time.

Article fourteen, titled, The Role of Marketing in Cultural Institutions in the Context of Assumptions of Sustainable Development Concept—A Polish Case Study, prepared by Magdalena Sobocińska, was based on literature studies and the results of empirical and quantitative research that was conducted on a sample of 451 people managing cultural institutions in Poland. An analysis of research results showed that consumers of culture were ranked first as recipients of targeted actions conducted by cultural institutions. An increase in the diversity of cultural offers, including the concept of sustainable development, emerged as a factor stimulating the development of the culture market, being closely related to growth of the quality of cultural offer in Poland.

In the final paper, The Sustainable Development of Social Media Contents: An Analysis of Concrete and Abstract Information on Cultural and Creative Institutions with "Artist" and "Ordinary People" Positioning, Yulin Chen used social media content discovery technology to analyze 9529 image posts. The results showed that for abstract themes, for example, art or design, people could be more easily guided by information with the help of images, which stimulated positive emotions, resulting in more actual engagement behavior, including posting and sharing.

These constructs are common threads running through (implicitly in cases) this Issue's articles. In this context, the papers that follow expose and interrogate a varied range of problematics and critical questions in the relationship between sustainability and culture and how they intersect, engaging with them at a variety of levels, from the international to the local, from culture to cultural organizations, from policy to management. In summary, the presented Special Issue on *Sustainable Cultural Management* is of pivotal importance in the field of cultural management, as it reflects both the trans-disciplinary nature of the field, as well as the spectrum of cultural individuality caused by geographical differentiation. The publication covers a wide selection of issues related to sustainable cultural management, which means that it can be recommended to a varied audience. First of all, it can be recommended to managers experienced in cultural management, where success is measured more by the degree of mission accomplishment and the social benefits achieved rather than by profit. Another group are the employees of cultural organizations who want to improve their knowledge about sustainable cultural management. Our Special Issue can also be recommended to artists, researchers, students, state and local government employees, founders and patrons of art, and all those who want to understand the importance of sustainable cultural management. As the editors of this Special Issue, we see this breadth of research and exploration into sustainable cultural management as its key contribution to current perspectives in the field.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References

1. Throsby, D. Culturally sustainable development: Theoretical concept or practical policy instrument? *Int. J. Cult. Policy* **2017**, *23*, 133–147. [CrossRef]
2. Elkington, J. Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development. *Calif. Manag. Rev.* **1994**, *36*, 90–100. [CrossRef]
3. Dessein, J.; Soini, K.; Fairclough, G.; and Horlings, L.; Battaglini, E.; Birkeland, I.; Duxbury, N. *Culture in, for and as Sustainable Development*; Conclusions from the COST Action IS1007 Investigating Cultural Sustainability; University of Jyväskylä: Jyväskylä, Finland, 2015.
4. Kangas, A.; Duxbury, N.; De Beukelaer, C. Introduction: Cultural policies for sustainable development. *Int. J. Cult. Policy* **2017**, *23*, 129–132. [CrossRef]
5. Portolés, J.B.; Dragićevic Šešić, M. Cultural rights and their contribution to sustainable development: Implications for cultural policy. *Int. J. Cult. Policy* **2017**, *23*, 159–173. [CrossRef]
6. Pratt, A.C. Creative Industries and Development: Culture in development, or the cultures of development? In *The Oxford Handbook of Creative Industries*; Jones, C., Lorenzen, M., Sapsed, J., Eds.; Oxford University Press: Oxford, UK, 2015; pp. 503–515.
7. Liu, J. Measuring the value and impact of culture: Why and how? A literature review of academic and practical works. *Cult. Manag. Sci. Educ.* **2018**, *2*, 9–30. [CrossRef]

8. Dragićević Šešić, M.; Stefanović, M. Leadership styles and values: The case of independent cultural organizations. *Cult. Manag. Sci. Educ.* **2017**, *1*, 29–37. [CrossRef]
9. Bernstein, J. Building audiences frequency and loyalty. *Forum Sci. Oecon.* **2017**, *5*, 5–15.

*Article*

# Sustainable Management of the Offer of Cultural Institutions in the Cross-Border Market for Cultural Services—Barriers and Conditions

**Łukasz Wróblewski [1,*], Bogusław Dziadzia [2] and Zdzisława Dacko-Pikiewicz [3]**

[1]   Department of Management and Production Engineering, WSB University,
      41-300 Dąbrowa Górnicza, Poland
[2]   Department of Cultural Education, University of Silesia in Katowice, 40-007 Katowice, Poland;
      boguslaw.dziadzia@us.edu.pl
[3]   Department of Pedagogy, WSB University, 41-300 Dąbrowa Górnicza, Poland; zdacko@wsb.edu.pl
*    Correspondence: lwroblewski@wsb.edu.pl; Tel.: +48-692-344-057

**Abstract:** The concept of sustainable management in culture has been recognised in global strategic documents on sustainable development for more than a decade. It is also increasingly reflected in the cultural polices of particular states, and—very importantly—cultural managers who are responsible for shaping the cultural offer in cities are becoming more interested in this concept. Despite the increasing attention being paid to this topic among both practitioners and theoreticians of management, in none of these documents or other works can we find any content that is directly related to the possibility of applying this concept in a town which, due to political turmoil, has been divided by a national border. Hence, this gap was the direct impulse for taking up research in this field. In the article, by using different notions of the market, our own definition of a cross-border market for cultural services was developed, and the conditions for the functioning of this market were presented based on the example town of Cieszyn (Poland) and Český Těšín (Czech Republic). In the opinion of the authors of the article, the development and functioning of a cross-border market for cultural services is essential for the application of the concept of sustainable management of the cultural offer in a town divided by a border. For the purpose of the article, a survey and individual interviews with experts shaping the cultural offer in Cieszyn and Český Těšín were conducted. The results of the research prove that despite numerous cross-border Czech–Polish projects carried out by cultural institutions, there are still many barriers in the town, which make it difficult for the residents to benefit from the cultural offer that is available on the other side of the border. These barriers limit the full implementation and application of the concept of sustainable management of the cultural offer.

**Keywords:** sustainable management of culture; town divided by a border; cross-border market for cultural services; cultural offer; Cieszyn-Český Těšín

## 1. Introduction

The term "sustainable development" or "sustainable resource management" is attributed to Hans Carl von Carlowitz, who used it in relation to the treatment of forests that he managed in Saxony (Germany) in the 18th century. His main idea was to preserve the existence of the forest; he thus formulated and implemented such concepts as the rule of cutting only as many trees as could grow in their place in the relevant period of time. He noticed that a forest can exist without man, whereas man cannot exist without the forest. Hence, he protected forest resources against exploitation, although it could have brought a significant and rapid increase in income. At the same time, he harvested timber, not only for nurturing, but also for economic reasons, in order to obtain funds for the preservation of

the forest [1,2]. This model quickly spread in forestry across the whole of Germany, and later it was also adopted by other countries in Western Europe. In the 21st century, this solution is successfully implemented in the field of culture as well. In the same way that there is no man without a forest, there is no man without culture. One cannot measure or calculate what is existential and what forms the basis for human existence. One cannot answer the questions: "Who am I?" and "What am I doing here?" without culture that is understood in the broadest sense of the word. An attempt at measuring and estimating the existential value of culture is the same kind of misunderstanding as calculating the existential value of a forest. Hence, in accordance with the concept of the sustainable management of culture, we must finance culture in order to exist, and not in order to earn money; otherwise, it would lead to the degradation of humanity as a society and prevent its development, also in terms of economy.

The first global document (signed by more than 650 cities, self-governments, and organisations from all over the world), raising the problem of sustainable management of culture, and thus establishing the rules and obligations of cities and self-governments in the context of cultural development was Agenda 21 from 2008 [3]. Two years later, this document was amended by the United Cities and Local Governments (UCLG)—a global network of cities, self-governments, and municipal associations from the 120 countries associated in the United Nations (UN)—at the International Congress in Mexico, where the elaboration entitled Culture: Fourth Pillar of Sustainable Development [4] was approved. This document directly indicates the relations between culture and sustainable development. It deals with sustainable development in the context of developing a cultural policy in which culture is treated as a driving force for development; it also mentions the promotion of the cultural dimension in all public policies (culture as the development factor). The third of the global documents (and so far, the last one) was the declaration entitled Placing Culture at the Heart of Sustainable Development Policies, also known as the Hangzhou Declaration—the name derived from the city in China where in 2013, the International Congress of United Nations Educational, Scientific and Cultural Organization (UNESCO) devoted to links between culture and sustainable development was held [5]. At this congress, with the participation of the global community and the main interested parties: cultural practitioners, managers, and scientists performing research in this field, the ways of strengthening the role of culture in the worldwide debate on sustainable development were discussed, as well as the adoption of culture as the driving force for all development.

The three documents mentioned above did not remain as only empty records, as they quickly found their references in the global cultural policy. This can be proved by strategies of implementing the concept of sustainable development in the cultural context, such as the common document of International Federations of Arts Councils and Culture Agencies (IFACCA), Coalitions for Cultural Diversity (IFCCD), and Agenda 21 for Culture and Culture Action Europe: Culture as a Goal in the Post-2015 Development Agenda. In this document, which is the result of cooperation between government and self-government organisations and cultural environments in general, there is a statement about ensuring cultural stability for the well-being of all.

Among other important strategic documents, it is also worth mentioning the work entitled "Culture 21: Actions–Commitments on the role of culture in sustainable cities", which through relevant additions, supplements Agenda 21 in terms of culture, and transforms it into specific obligations and actions [6]. At present, this document serves as an international guide and a set of specific solutions (tools) for cities, aimed at supporting activities and cooperation between city authorities, managers of cultural institutions, and residents. This document contains guidelines constituting a basis for building a strategy for the development of sustainable culture, as well as the sustainable offer of cultural institutions at a local level. One of the guidelines is the balance between the strategic goals of cultural institutions, on the one hand, and the expectations of the recipients of the cultural offer on the other. Unfortunately, none of the aforementioned documents contains guidelines concerning sustainable management in culture, the sustainable management of the offer of cultural institutions in a town divided by a border, or the development of a cross-border market for cultural services. In this area,

there is a considerable research gap. The very lack of a definition of the cross-border market for cultural services was a direct impulse to engage in this topic.

In addition, over the last twenty years, along the borders of member states of the European Union, including the Polish and Czech border, the intensification of various types of activities aimed at supporting cross-border cooperation in the field of culture can be observed [7,8]. Among other things, these activities serve to blur the borders and divisions between the local communities, and to shape their new quality (they should become a place of meetings, and not divisions) [9,10]. On the Polish and Czech border, in particular in town divided by a border, such as Cieszyn-Český Těšín, it is expressed in the growing number of cultural events that are being organised, and which are often implemented as part of cross-border cultural projects co-financed from the funds of the European Union [11,12]. Nevertheless, this situation poses new challenges for the managers of the cultural institutions of Cieszyn and Český Těšín, and requires the implementation of the concept of the sustainable management of culture and the rules of sustainable management by the offer of cultural institutions [13]. This, however entails taking responsibility for culture, which, on the one hand, requires an even deeper examination of the cultural offers available on both sides of the border (its quality, its saturation with artistic content, or its availability), and on the other hand, is determined by an in-depth analysis of the needs of both Polish and Czech addressees of this offer. Hence, one of the main goals of the article was to find out how frequently the residents of a town divided by a border participate in cultural events that are organised on both its sides, as well as to identify the main barriers which make it difficult for the inhabitants to benefit from the cultural offers available both on the Polish and the Czech side of the border. Barriers that should be overcome, along with the implementation of the concept of sustainable management of culture were identified. The conclusions from the research and the recommendations contained in this article may be a contribution to the debate on the conditions for the development of a cross-border market for cultural services, or the possibilities of the application of the concept of sustainable management in the offers of cultural institutions in other cities (in particular, cities in the European Union), which similarly to Cieszyn and Český Těšín, have been divided by a national border.

## 2. Materials and Methods

Before discussing the methodology used in the research on the cross-border market for cultural services in Cieszyn and Český Těšín, it should be explained how the authors understand the issue of the cross-border market for cultural services. Source literature does not mention such a term, which may indicate a clear research gap in this area.

In attempting to define the cross-border market for cultural services, both the economic and geographical market definitions were used, according to which the cross-border market for cultural services was the entirety of the exchange relations between service providers that meet cultural needs and the consumers purchasing these services in the regions of the countries sharing a common border. In other words, it will be a collection of buyers (consumers of cultural services, mainly the local community) and sellers (self-government and government cultural institutions, third-sector cultural institutions and other cultural entities) who carry out transactions regarding cultural services in areas along the border of the countries (border and cross-border regions). A geographical understanding of the cross-border market for cultural services indicates a territory that is located on both sides of the border (in the present case, between Poland and the Czech Republic), as a separate area with similar purchasing and selling conditions. The classic (economic) understanding of the market reduces the definition of the cross-border market for cultural services to the general exchange relations between sellers, offering services that meet cultural needs and buyers, representing the demand for these services. It includes both the subjective (who participates in the trading process) and the objective aspect (what is the object of trade)—Figure 1.
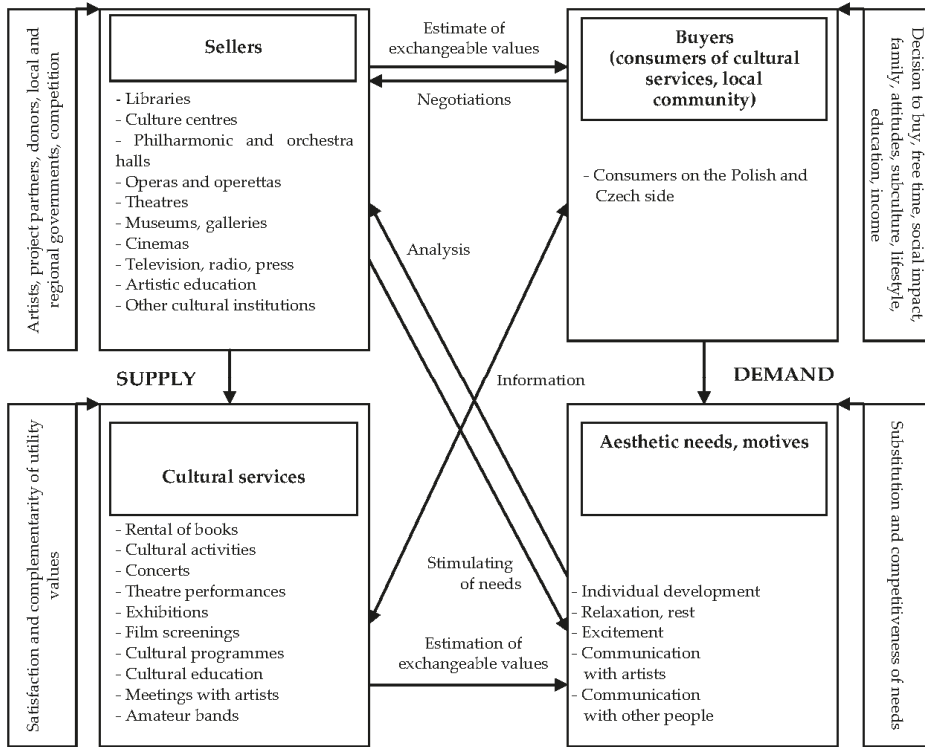
**Figure 1.** Structure of the cross-border market for cultural services.

The cross-border market for cultural services should therefore be treated as a system whose elements form a specific structure. In this system, we can distinguish [14,15]:

(i) market entities, i.e., the sellers (cultural institutions, third-sector cultural organisations, other cultural entities) and the buyers (consumers of cultural services, mainly the local community);

(ii) market objects, i.e., cultural services and aesthetic needs, motives for using the services of cultural entities available on the market);

(iii) relations between market entities and objects.

In this article, the analysed field is a town which, due to political decisions made at the end of the First World War, has been divided for a hundred years into Cieszyn (49°45′04′′ N, 18°37′55′′ E) on the Polish side of the border (approx. 36,000 inhabitants) and Český Těšín (Czech Republic, 49°44′46′′ N, 18°37′34′′ E, approx. 25,000 inhabitants)—Figure 2. In 2007, both cities joined the so-called Schengen Zone and became subject to visa-free travel without border control.
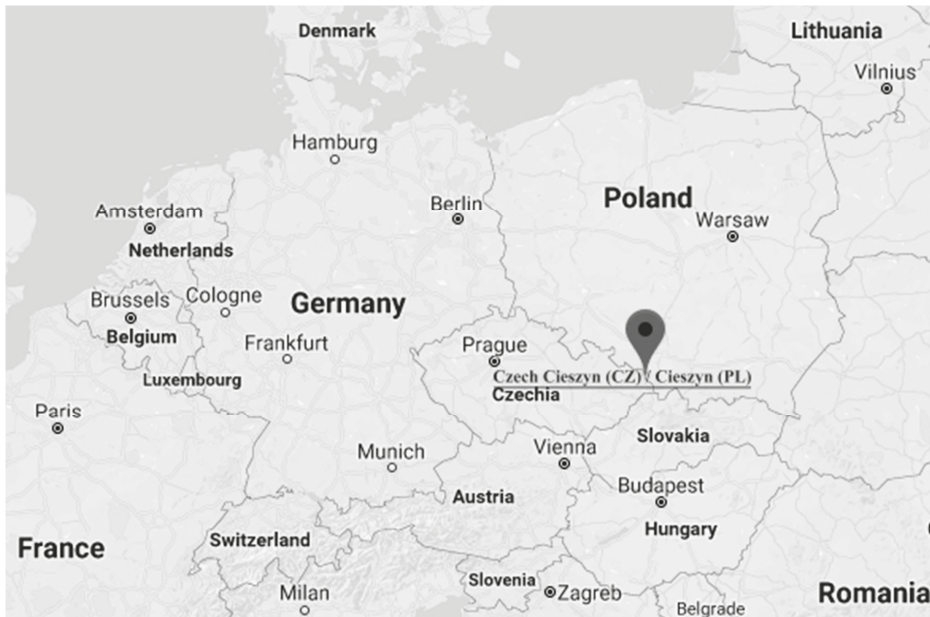
**Figure 2.** The location of the border cities Czech Cieszyn (CZ)/Cieszyn (PL).

The Polish–Czech cross-border market for cultural services in these cities, functions on many different levels. It concerns not only economically significant activities, such as the investment "A Garden on Both Banks of the River" (co-financed from the funds of the European Union under the European Regional Development Fund), which connects the two towns, but also flagship events, such as the largest event in the town in terms of attendance, the Three Brothers' Festival. However, the key to the sustainable management of cultural services in the cross-border market for cultural services is the commitment and common responsibility for the cultural offer on the part of self-government authorities, managers of cultural institutions, and the citizens involved (the commitment of the latter is visible e.g., in the third-sector cultural organisations functioning in the town). Currently, cooperation between Polish and Czech municipal authorities and the third sector is operating on many levels. Self-government authorities and the managers of self-government cultural institutions are involved in nearly all of the larger events that organised by representatives of the third sector. This concerns many small initiatives as well as international events which have contributed to the development of the Polish–Czech cross-border market for cultural services for many years. These include, in particular, such events as the Film Festival, "Kino na Granicy" (Filmová přehlídka Kino na hranici) or the Theatre Festival, "Bez Granic".

The supply side of the cross-border market for the cultural services of Cieszyn and Český Těšín is represented by a number of institutions whose offer is not limited to only one side of the river running along the national border. Despite its small size, the town boasts two theatres. On the Polish side, it is Adam Mickiewicz Theatre; on the Czech side, it is a theatre with both a Polish and Czech stage. Interestingly, the Polish stage located in Těšínské Divadlo is financed by the Czech Marshal's Office without any subsidies from Polish sources. In the town as a whole, two large cultural centres are active: Cieszyn Cultural Centre "Dom Narodowy" and Kulturní a společenské středisko Střelnice. Other important cultural places include: the Municipal Library in Cieszyn, the Municipal Library in Český Těšín (Městská knihovna Český Těšín), a reading room and literary cafe Avion (Čítárna a kavárna Avion), the internationally recognised and design-oriented Cieszyn Castle, the Museum of Cieszyn Silesia and the Cieszyn Library, which boasts a number of unique publications from the last

five centuries. Within the Polish–Czech cross-border market for cultural services, many associations are active. The most visible ones include: the "Olza" Association of Development and Regional Cooperation, Cieszyn Silesia Euroregion, Polish Cultural, and the Educational Union in the Czech Republic, the Congress of Poles in the Czech Republic, Association "Kultura na Granicy" (Culture on the Border), Association "Člověk na hranici" (Man on the Border), Polish–Czech-Slovak Solidarity, and Association "Education Talent Culture". The many privately-owned initiatives and places, playing a more or less significant role, should also be mentioned. Such places are also important for the development of the cross-border market for cultural services, and the sustainable management of the cultural offer on this market. Examples of such places are: Literary Cafe "Kornel i Przyjaciele", Teahouse "Laja", Club "Dziupla", Bar "Blady Świt" (Bledý úsvit), as well as such cultural events as a cycle of charity concerts entitled "Aktywuj Dobro".

The main purpose of the conducted research was to determine how often the residents of the town divided by a border participate in cultural events organised in Cieszyn and Český Těšín, as well as to define the main obstacles that make it difficult for residents to benefit from the cultural offer available abroad (in the neighbouring country). These obstacles present a challenge for the managers of cultural institutions in the process of the sustainable management of their offer. Three research hypotheses were adopted, according to which it is assumed that:

**Hypothesis 1 (H1):** *The range of impact of the offer of Polish cultural institutions located in Cieszyn is limited to the Polish side of the town.*

**Hypothesis 2 (H2):** *The range of impact of the offer of Czech cultural institutions located in Český Těšín is limited to the Czech side of the town.*

**Hypothesis 3 (H3):** *The main barrier that hinders the residents of both Cieszyn and Český Těšín in making use of the cultural offers available on the other side of the border is a lack of interest in the neighbouring country's culture.*

In order to verify the adopted hypotheses, a survey was conducted on a group of 799 residents of Cieszyn and Český Těšín—which constitutes approx. 1% of all of the inhabitants of the town on both sides of the border. The group consisted of persons who, in 2017, participated at least once in any cultural event organised in the town divided by a border. The survey was carried out using the PAPI (Paper and Pen Personal Interview) and the CAWI (Computer Assisted Web Interview) technique. The survey questionnaire was developed in both Polish and Czech. Electronic questionnaires were made available to the residents of Cieszyn and Český Těšín on the following websites: https://goo.gl/forms/Gu7E23zM9uFxgVfD2 (questionnaire in Polish), https://goo.gl/forms/eS2GwmnaMQ40k3NU2 (questionnaire in Czech). Basic information about the conducted research is presented in Table 1.

**Table 1.** Basic information about the conducted research.

| Specification | Research |
|---|---|
| Research method | Survey |
| Research technique | PAPI (paper and pen personal interview)<br>CAWI (computer-assisted web interview) |
| Research tool | Paper questionnaire<br>Electronic questionnaire |
| Sample selection | Targeted<br>(residents of Cieszyn and Český Těšín making use of the cultural offers of these towns) |
| Sample size | 799 in total (1.31% of the total population)<br>Residents of Cieszyn 490 (1.36% of the population of Cieszyn)<br>Residents of Český Těšín 309 (1.24% of the population of Český Těšín) |
| Spatial extent of research | Cieszyn and Český Těšín |
| Research date | October 2017–January 2018 |

Data source: Collected by this research.

Pierre Bourdieu indicates not without reason that "the mysteries of culture have their catechumens, their initiates, their holy men, that 'discrete elite' set apart from ordinary mortals" [16]. Although this statement seems to be a mental shortcut, it is beyond doubt that on the territory of a divided town, such as Cieszyn and Český Těšín, it is possible to find experts who, owing to their education and functions performed in the field of broadly understood culture, have a more extensive and detailed knowledge than other residents of the town. Therefore, in order to obtain a more complete picture of the issues analysed in this article, complementary research was conducted using the interview method in the form of individual in-depth interviews (IDI) with 40 experts—directors of cultural institutions, creators, animators, and organisers of cultural events in Cieszyn (20 persons) and Český Těšín (20 persons)—Table 2.

The interview questionnaire (in Polish and in Czech) contained 17 questions in total, seven of which were short, based on association and completion, while the remaining 10 questions were open and in-depth.

The survey was conducted among the residents of Cieszyn and Český Těšín between October 2017 and January 2018, while the interviews were carried out between February and June 2018. The survey was preceded by consultations with employees of the Cultural Department of the Town Hall in Cieszyn and Český Těšín. The purpose of the consultations was to check the correctness of the research assumptions as well as to test the research tools being developed. Discussions in the relevant groups enabled the final version of the questionnaire and guidelines for the interview to be refined, as a result of which it was possible to start the main research. This article is limited to the presentation of selected results of the research which were relevant for the verification of the adopted research hypotheses.

The research was part of the project entitled "Programme for the Culture of Cieszyn and Český Těšín" co-financed by the European Regional Development Fund—Interreg V-A Programme Czech Republic—Poland as part of the Micro-Projects Fund of the Cieszyn Silesia Euroregion—Těšínské Slezsko and the state budget.

In order to obtain reliable results, an inductive method was used, i.e., the method of incomplete numerical induction. It is inductive reasoning, the premises of which do not exhaust the entire universe of objects to which the general principle expressed in the conclusion of the reasoning refers. Here, the premises are specific sentences, while the conclusion is a general sentence, and each premise follows logically from the conclusion. It is a method by which a general principle is derived from a limited number of details [17,18].

**Table 2.** Experts participating in the in-depth interviews.

| No. | Experts on the Polish Side (Cieszyn) | Experts on the Czech Side (Český Těšín) |
|-----|--------------------------------------|-----------------------------------------|
| 1 | Director of the Cieszyn Castle | Director of the Youth Centre in Český Těšín |
| 2 | Director of the Cieszyn Cultural Centre "Dom Narodowy" | Director of Albrechtova střední škola Český Těšín |
| 3 | Director of the Cieszyn Library | Director of the Association "Człowiek na Granicy" (Man on the Border) in Český Těšín |
| 4 | Director of the Adam Mickiewicz Theatre in Cieszyn | Deputy Director, coordinator of cultural projects Mateřská škola, základní škola a střední škola Slezské diakonie |
| 5 | Director of the Municipal Library in Cieszyn | Vice-President, project manager in the Polish Youth Association in the Czech Republic—club "Dziupla" in Český Těšín |
| 6 | Director of the Museum of Cieszyn Silesia | Project coordinator, organisational employee of Otwarte Pracownie/Otevřené Ateliéry |
| 7 | Director of the Festival "Viva il Canto", Associate Dean for Promotion and Artistic Activities of the University of Silesia, Faculty of Fine Arts in Cieszyn | Employee of the Literary Cafe "CAFE AVION" in Český Těšín |
| 8 | Head of the Cultural Education Department in the Faculty of Ethnology and Educational Science of the University of Silesia, Branch in Cieszyn | Member of the Association EducationTalentCulture based in in Český Těšín |
| 9 | President of the Polish Cultural and Educational Union in the Czech Republic | Theatre director, artist of the Theatre in Český Těšín |
| 10 | President of the Association "Kultura na Granicy" (Culture on the Border), Director of the Film Festival PL "Kino na Granicy" (Cinema on the Border) | Member of the Cultural Committee of the town of Český Těšín |
| 11 | Secretary of the Polish–Czech-Slovak Solidarity, Regional Branch in Cieszyn | Coordinator of the Polish–Czech projects in the Půda Association in Český Těšín |
| 12 | Head of the Culture, Sports, Tourism and Non Governmental Organisation Department of the Poviat Starosty in Cieszyn | Head of the PR Department, Spokesperson of the Muzeum Těšínska in Český Těšín |
| 13 | Director of the "Na Granicy" Political Critique Centre | Coordinator of the Polish–Czech projects in the Municipal Library in Český Těšín |
| 14 | Director of the Museum of Printing in Cieszyn | Animator of the Cultural Centre Slezanek, Český Těšín |
| 15 | President of the Management Board of the Creative Women's Club in Cieszyn | Animator of the Youth Centre in Český Těšín |
| 16 | Manager of Polish–Czech projects in the Polish Cultural and Educational Union in the Czech Republic | Culture referent in the town of Český Těšín |
| 17 | Journalist of "Głos"—Polish newspaper in the Czech Republic | Director of the Project "Every Czech Reads to Kids" |
| 18 | Member of the Main Board of Macierz Ziemi Cieszyńskiej | Director of the Association "Asociace obecne prospěšných služeb" in Český Těšín |
| 19 | Treasurer of the "Rotunda" Association in Cieszyn | Coordinator of cultural projects in the Cultural Centre "Střelnice" in Český Těšín |
| 20 | President of the OFKA Social Cooperative in Cieszyn | Public relations manager in the town of Český Těšín |

Data source: Collected by this research.

**3. Results**

Coming to the main part of the analysis, it must be indicated that the obtained results of the conducted survey, due to the sampling method applied (in the survey, non-random sampling methods were used—targeted selection), provides knowledge about the respondents' opinions on the selected behaviours of the residents of Cieszyn and Český Těšín at the Polish–Czech cross-border market for cultural services, and not the factual state in this scope. However, it is necessary to bear in mind the large size of the research sample, as well as the reliability and goodwill of the respondents.

One of the main issues examined was related to the frequency of benefiting from the cultural offer. The residents of Cieszyn and Český Těšín were asked about how often they made use of the cultural offers of institutions and cultural entities located in Cieszyn (on the Polish side) and Český Těšín. The results with a division into residents of Cieszyn and Český Těšín are presented in Table 3.

**Table 3.** Frequency of making use of the offers of cultural institutions and entities in Cieszyn and Český Těšín in 2017 by residents (in %, on average).

| Specification | Residents of Cieszyn N = 490 | | | | Residents of Český Těšín N = 309 | | | |
|---|---|---|---|---|---|---|---|---|
| | Not Once | Once | 2–3 Times | 4 or Many Times | Not Once | Once | 2–3 Times | 4 or Many Times |
| Cultural institutions in Cieszyn | 69.27 | 17.58 | 6.48 | 6.67 | 84.16 | 10.81 | 2.84 | 2.19 |
| Cultural institutions in Český Těšín | 88.66 | 7.12 | 2.29 | 1.94 | 51.13 | 22.98 | 12.82 | 13.07 |

Data source: Collected by this research.

The data presented in Table 3 shows that the vast majority of the residents of Cieszyn (69%) had not made use of the offer of the cultural institutions located in their town. The cultural institutions that were visited by Polish respondents in 2017 usually included the Municipal Library in Cieszyn—21% of respondents, the Cieszyn Castle (17%)—here, however, in the course of further in-depth research, it turned out that the respondents first of all had in mind a walk around the Castle Hill, but not a visit to, for example, one of the Cieszyn Castle exhibitions, as well as the "Piast" Cinema (17%). The situation was even less optimistic regarding the inhabitants of Český Těšín. In 2017, as many as 84% of inhabitants did not even once use the cultural offer available on the Polish side of the town. The remaining inhabitants of Český Těšín most often visited such cultural institutions on the Polish side as: Cieszyn Castle (11%)—similarly as in the case of Poles, visiting the Cieszyn Castle was most often in the form of a walk around the Castle Hill, "Piast" Cinema (5%), and the Municipal Library in Cieszyn (3%), which Poles living in the Czech Republic (members of the Polish Cultural and Educational Union in the Czech Republic) most often use (Table 4).

**Table 4.** Frequency of making use of the offer of cultural institutions and entities in Cieszyn in 2017 by residents (in %).

| Cultural Institutions and Entities in Cieszyn | Residents of Cieszyn N = 490 | | | | Residents of Český Těšín N = 309 | | | |
|---|---|---|---|---|---|---|---|---|
| | Not Once | Once | 2–3 Times | 4 or Many Times | Not Once | Once | 2–3 Times | 4 or Many Times |
| Adam Mickiewicz Theatre | 29.39 | 42.86 | 16.94 | 10.82 | 67.64 | 22.33 | 7.12 | 2.91 |
| Museum of Cieszyn Silesia | 66.12 | 27.14 | 4.49 | 2.24 | 74.11 | 20.39 | 4.21 | 1.29 |
| Municipal Library in Cieszyn | 41.84 | 24.29 | 13.27 | 20.61 | 85.44 | 9.06 | 2.27 | 3.24 |
| Cieszyn Cultural Centre "Dom Narodowy" | 48.37 | 30.61 | 12.45 | 8.57 | 75.73 | 14.89 | 6.47 | 2.91 |
| Song and Dance Ensemble of the Cieszyn Region | 73.67 | 8.78 | 4.29 | 13.27 | 91.26 | 6.47 | 0.32 | 1.94 |
| "Piast" Cinema | 32.04 | 31.02 | 19.80 | 17.14 | 69.90 | 17.48 | 8.09 | 4.53 |
| Cieszyn Library | 79.39 | 16.12 | 3.06 | 1.43 | 86.08 | 9.39 | 1.62 | 2.91 |
| Museum of Printing in Cieszyn | 81.02 | 15.51 | 1.22 | 2.24 | 84.47 | 13.92 | 0.65 | 0.97 |
| Cieszyn Castle | 32.86 | 32.24 | 17.76 | 17.14 | 49.19 | 29.45 | 10.36 | 11.00 |
| Neighbourhood Cultural and Recreation Centre | 88.16 | 7.35 | 1.63 | 2.86 | 91.59 | 5.18 | 1.29 | 1.94 |
| Museum of the 4th Regiment of Podhale Rifles | 88.78 | 8.78 | 0.82 | 1.63 | 95.47 | 3.88 | 0.32 | 0.32 |
| Museum of Protestantism | 89.39 | 7.14 | 1.63 | 1.84 | 95.79 | 3.88 | 0.32 | 0.00 |
| Museum and Library of the Brothers Hospitallers | 91.84 | 6.33 | 0.41 | 1.43 | 93.53 | 6.15 | 0.32 | 0.00 |
| UL Kultury | 87.76 | 8.78 | 1.22 | 2.24 | 93.85 | 4.21 | 0.65 | 1.29 |
| "Na Granicy" Political Critique Centre | 87.55 | 6.94 | 3.27 | 2.24 | 88.35 | 9.39 | 1.62 | 0.65 |
| J.I. Paderewski State Music School of the first and second degree | 80.61 | 10.61 | 4.49 | 4.29 | 94.82 | 2.91 | 1.62 | 0.65 |
| University of Silesia—Faculty of Fine Arts in Cieszyn | 78.78 | 14.29 | 3.47 | 3.47 | 93.53 | 4.85 | 0.97 | 0.65 |
| **Total** | **69.27** | **17.58** | **6.48** | **6.67** | **84.16** | **10.81** | **2.84** | **2.19** |

Data source: Collected by this research.

The presented data also show that Poles living in Cieszyn very rarely visit cultural institutions that are located on the other side of the border. The Těšín Theatre is the cultural institution in Český Těšín which enjoys the greatest interest among Poles. Nearly 5% of the surveyed residents of Cieszyn visited this institution in 2017 four or many times, 5% of the Cieszyn residents surveyed visited the Těšín Theatre 2–3 times and 12% of them did so once. Such a result could have been expected given the fact that the Theatre located in Český Těšín, in addition to the Czech theatre group, features a "Polish Stage"—a group of Polish actors putting on plays in Polish. The surveyed residents of Český Těšín declared, in turn, that in Český Těšín they most often made use of the offer of the literary café AVION, which is located in the immediate vicinity of the "Friendship Bridge" connecting Cieszyn with Český Těšín. In 2017, Café AVION was visited four or many times by 22% of the surveyed Český Těšín residents. In addition, the Municipal Library in Český Těšín was visited 4 or many times by 21% of Czech respondents, and the Těšín Theatre—by 20% of the surveyed residents of Český Těšín (Table 5).

**Table 5.** Frequency of making use of the offer of cultural institutions and entities in Český Těšín in 2017 by residents (in %).

| Cultural Institutions and Entities in Český Těšín | Residents of Cieszyn N = 490 | | | | Residents of Český Těšín N = 309 | | | |
|---|---|---|---|---|---|---|---|---|
| | Not Once | Once | 2–3 Times | 4 or Many Times | Not Once | Once | 2–3 Times | 4 or Many Times |
| Těšín Theatre | 78.16 | 12.45 | 4.69 | 4.69 | 19.74 | 31.39 | 28.80 | 20.06 |
| Museum of the Těšín Region | 92.45 | 5.31 | 0.82 | 1.43 | 70.55 | 19.42 | 6.47 | 3.56 |
| Municipal Library in Český Těšín | 91.43 | 5.51 | 1.63 | 1.43 | 44.34 | 23.62 | 11.33 | 20.71 |
| Youth Centre in Český Těšín | 96.33 | 2.04 | 0.61 | 1.02 | 53.72 | 20.06 | 9.06 | 17.15 |
| Folk group Slezan Český Těšín | 95.31 | 3.06 | 0.41 | 1.22 | 77.67 | 12.62 | 4.85 | 4.85 |
| "Central" Cinema | 87.76 | 7.96 | 2.24 | 2.04 | 27.18 | 35.60 | 20.39 | 16.83 |
| Cafe AVION | 78.37 | 13.67 | 4.69 | 3.27 | 28.48 | 32.36 | 16.83 | 22.33 |
| Cafe & Club DZIUPLA | 85.31 | 9.59 | 3.27 | 1.84 | 79.29 | 12.30 | 3.24 | 5.18 |
| Polish Cultural and Educational Union in the Czech Republic | 93.47 | 4.29 | 0.82 | 1.43 | 87.06 | 6.47 | 3.56 | 2.91 |
| KaSS Strelnice | 87.96 | 7.35 | 3.67 | 1.02 | 23.30 | 35.92 | 23.62 | 17.15 |
| **Total** | **88.66** | **7.12** | **2.29** | **1.94** | **51.13** | **22.98** | **12.82** | **13.07** |

Data source: Collected by this research.

Another issue which was examined was related to barriers making it difficult for the residents to benefit from the cultural offers of Cieszyn and Český Těšín. In the opinion of the interviewed experts, the main barrier hindering access to the cultural offer in the neighbouring country was the language barrier (85%) and the lack of information about the cultural offer on the other side of the border (80%). Despite the fact that the Polish and Czech languages belong to the same group of Slavic languages and are very similar to each other—showing many common features (e.g., vocabulary, grammar, and inflection), specialised vocabulary in some thematic areas (including the area of culture) is, however, quite different in the two languages. Residents of Cieszyn and Český Těšín communicate with each other using a colloquial language (a mix of Polish and Czech languages) in everyday, simple situations (e.g., when shopping or using public and intercity transport in both cities), however, difficulties often occur in communication when it becomes necessary to understand specialist or literary language (e.g., technical language or the language used by artists and culture organisers). Although the language barrier on the Polish–Czech or Polish–Slovak border is much smaller than, for example, that on the Polish–German or the Franco–German border (where they have completely different language groups), the people responsible for developing a sustainable cultural offers in Cieszyn and Český Těšín should not underestimate it—as shown by the results of surveys conducted among the residents (Figure 3). The residents of both cities, not knowing the language of the neighbouring country well, can take advantage the offers of museums, galleries, or symphonic orchestras located on both sides of the border without any obstacles, but they may have difficulties understanding the content of the offers of cultural institutions, such as cinemas or theatres. Therefore, common language education is necessary to overcome this barrier. Unfortunately, such education in Cieszyn and Český Těšín is incidental. Although, of course, there are primary and secondary schools in Cieszyn and Český Těšín where additional extracurricular activities in the Polish and Czech are conducted, there are, however, too few of them, and the obligatory foreign language taught at schools in both Cieszyn and Český Těšín is currently English. It is also worth noting here that the language barrier is more of a hindrance to Český Těšín's cultural offer for Poles (around 32%) than the reverse—for residents of the Czech side of the city (around 21%). This is related to the fact that a large Polish minority lives on the Czech side, even having its representative in the municipal authorities (one of the deputy mayors of Český Těšín declares Polish nationality and is fluent in Polish).
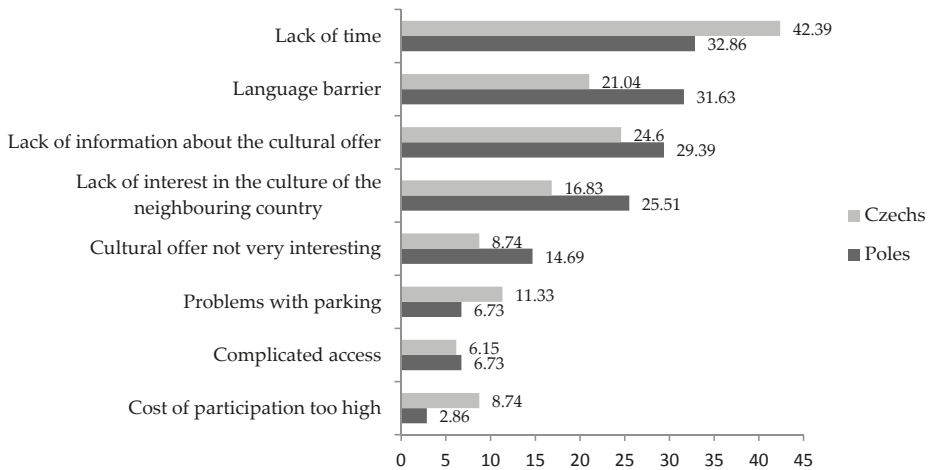
**Figure 3.** Barriers hindering the access of residents of Cieszyn and Český Těšín to the cultural offer of the neighbouring country (in %). The results do not add up to 100 because respondents could tick more than one answer.

In addition, according to the majority of the interviewed experts (65%), an important reason for the residents not making use of the cultural offer was the low position of culture in their hierarchy of needs, which was directly related to a lack of proper preparation for the reception of culture. At this point, attention was drawn to the deficiencies in the cultural education, which were provided in primary and secondary schools both on the Polish and the Czech side. It is worth remembering that Polish–Czech cross-border cultural education means better preparation for participation in culture, i.e., participation in the artistic and cultural activities of both the Polish and Czech society. This education in both cities must first of all meet the needs of the young generation, both in terms of form and content of the message. It can take the form of e-learning education or through the use of suitable internet applications available for mobile devices, e.g., smartphones or tablets. In the process of cultural education, increased emphasis should be placed on the active participation of people in cultural events in the cross-border dimension of culture, and overcoming the stereotype of the passive reception of culture. However, the key task of cultural education in Cieszyn and Český Těšín is, above all, the development of cooperation between cultural institutions and organisations, and both primary and secondary schools. The program of joint Polish–Czech cultural education should be born at the "cross-border round table", in order to jointly develop its concept, which would then be implemented in parallel in Polish and Czech schools. It is also extremely important to increase the scope of hobby and artistic activities in self-governmental cultural institutions and non-governmental organisations. This will allow cultural education to combine with social integration.

The experts also indicated that the cultural offers for both Cieszyn and Český Těšín were very chaotic (63%), and the residents of both the Polish and the Czech side had difficulties in finding or understanding them. Moreover, many cultural events overlapped with one another. The problem of common Polish–Czech promotion, or rather the lack of such promotion, was also raised (60%). It would seem that in a town divided by a border, information placed on posters or even on the websites of cultural institutions should be available both in Polish and in Czech. Unfortunately, an analysis of the websites of all the self-government cultural institutions of Cieszyn and Český Těšín proves that usually this is not the case [19,20]. The offer of the Polish cultural institutions does not reach the other side of the border—similarly, the cultural institutions in Český Těšín do not really strive to attract the Polish audience from Cieszyn. Moreover, barriers of a legal nature were indicated, such as the lack of the possibility for students from the Polish side to freely attend cultural events organised on the

Czech side, or the need to buy additional insurance for the students. Experts (40%) also highlighted the so-called "provincial closure"—in their opinion, the residents of Cieszyn and Český Těšín are simply not interested in the culture of the neighbouring country, and the cultural offer available on the other side of the border, which is also proven by the results of the survey conducted among the residents of Cieszyn and Český Těšín. However, the survey shows that the inhabitants of Český Těšín are more interested in Polish culture than the inhabitants of Cieszyn are interested in Czech culture (it probably results from the fact that in Český Těšín a large Polish minority is still present and active). In addition, the residents of Český Těšín (16%) cross the border more often than the residents of Cieszyn (11%) in order to benefit from the cultural offer available on the other side of the border. In our opinion, it is worth mentioning that the organisers of the cultural life themselves are less affected by the aforementioned "provincial closure". In the light of other research, these persons usually have an intrinsic awareness of their position in the structure of the local, peripheral community. However, the word "province" does not have a negative meaning here. It is associated with a number of advantages, and even some kind of pride in living in the periphery. The main barriers hindering access to the cultural offer in the neighbouring country, according to the interviewed residents of Cieszyn and Český Těšín, are presented in the Figure 3.

According to the respondents, the main barrier that hinders the residents of both Cieszyn and Český Těšín in making use of the cultural offer available on the other side of the border, both for Poles and for Czechs, is a lack of time (33% and 42% of respondents respectively), which may indicate that the cultural needs of the respondents are not among their priorities. This state of affairs (the low position of culture in the hierarchy of needs) was indicated by 65% of the interviewed experts. For Poles, an almost equally important barrier hindering the use of the cultural offer of Český Těšín is the lack of knowledge of the Czech language (32%), followed by the lack of information about the cultural offer available in the neighbouring country (29%) and the lack of interest in the culture of the neighbouring country (26%). The same barriers (although in a slightly different order) were indicated by the residents of Český Těšín in relation to the cultural offer available on the Polish side of the border (Figure 3).

Despite the indicated barriers, most of the interviewed experts (70%) stated that the cooperation between the cultural institutions from Cieszyn and Český Těšín was good and enabled further development of the Polish–Czech cross-border market for cultural services. This can also be proven by:

(i)     the important position of culture in the strategic documents of both towns, the Cieszyn county, the Cieszyn Silesia Euroregion, and the provinces on both sides of the border [21,22],
(ii)    a large number of various types of entities: public, commercial, and non-governmental, dealing with culture on both sides of the border [23,24],
(iii)   the great importance of culture as an element function in other areas that are important in the socio-economic development of the whole region (e.g., tourism) [25,26],
(iv)    the multiplicity and relative durability of bilateral partnerships based on cross-border projects in the field of culture, including, in particular, projects that are co-financed by the European Union, which foster the strengthening of cross-border cooperation [27,28].

However, the majority of experts (65%) admitted that in order to effectively implement the concept of the sustainable management of the offer of cultural institutions in a town divided by a border, the cooperation between cultural institutions should be much more intense in such fields as:

(i)     common cultural education,
(ii)    common Polish–Czech promotion of organised cultural events,
(iii)   common calendar of events,
(iv)    common public transport.

The importance of the better coordination of cross-border activities was also highlighted. At present, this coordination takes place mostly at a national level (separately on the Polish and the Czech side), while there is a lack of coordination at the transnational, cross-border level.

## 4. Discussion

Sustainable management of the offers of Polish and Czech cultural institutions—cooperation in the field of culture between Cieszyn and Český Těšín, is one of the basic forms of cross-border activity aimed at "blurring the borderline" on this section of the Polish–Czech border. Its aim is to strive to strengthen the harmonious development of both twin towns and the cohesion of the entire Cieszyn Silesia region. Thanks to joint Polish–Czech projects, cultural institutions functioning both on the Polish and the Czech side of the town are shaping the common locality of the two towns, not only because of the spatial closeness, but also due to the ability of social reproduction [29,30]. Many activities and events are of a cyclical nature, and some of them have a long-standing tradition. However, the results of the conducted research show that over 84% of the surveyed residents of Český Těšín have never made use of the cultural offer that is available on the Polish side of the border. Therefore, it can be assumed that the range of impact of the Polish cultural institutions located in Cieszyn is limited mainly to the Polish side of the borderland. Similarly, the spatial range of the impact of cultural institutions operating in Český Těšín is usually limited to the Czech side of the town (89% of the surveyed residents of Cieszyn have never benefited from the cultural offer available in Český Těšín). Therefore, the hypotheses H1 and H2, assuming that the range of impact of the offer of cultural institutions located in Cieszyn or Český Těšín is limited mainly to the part of the town in which they function, proved to be true. This was also confirmed by the results of former research in Cieszyn and Český Těšín, which showed that the division into Poles and Czechs is still very visible among the residents of both towns [7,22], and therefore the Polish–Czech cross-border market for cultural services is still at an early stage of development.

The functioning of the Polish–Czech cross-border market for cultural services in a town divided by a border and its importance for the social environment is determined by many complementary factors. From the perspective of cultural institutions and cultural offer management, these factors oscillate around the balance between the identification of the cultural needs of various social groups and the possibilities of pursuing articulated goals, which are often included in the strategic documents of the town, or in the statutes and development strategies of cultural institutions. The entities responsible for shaping the cultural offer include, among others, self-government and national institutions (in this case, one should say "government" institutions). In the development of modern societies, in the system of entities shaping the cultural environment, apart from the aforementioned organisations, the so-called third sector organisations (often abbreviated as "NGO" for non-governmental organisations) and private organisations have gained importance.

The fact that a national border exists, and that it cuts through the analysed town of Cieszyn-Český Těšín is, in this case, a socio-political factor. This factor poses a great challenge to the managers of cultural institutions that are responsible for shaping the cultural offers that are available for the residents of both the Polish and the Czech side of the town. The border and the attachment to the given nation in the described area is not illusory, although both sides belong to the European Community and the Schengen Zone. Even if we treat this national adherence as "( . . . ) an imagined political community—and imagined as both inherently limited and sovereign" [31], the matter of this symbolic attribution to the national community cannot be omitted in the light of these considerations.

Despite the opening of the borders and the functioning of cultural institutions, both on the Polish and the Czech side of the town, as well as the social and cultural capital of this area, is still connected with the history. What is more, it concerns not only contemporary history, but also that which dates back hundreds of years. Natural migration flows and politics have played an important part in this process. Particularly significant changes in the national composition of the population affected the Czech side of the town. The population formerly prevailing in this area, declaring themselves to be Poles, currently comprises only a few percent of all inhabitants. This change of composition was caused by political reasons aimed at the marginalisation of the former inhabitants of the town. Economic reasons related to the economic development of the town and its surroundings were also not without importance. These changes in the population structure have a fundamental meaning for the

sustainable management of the cultural offers and cultural institutions and the cross-border market for cultural services. The recipients of the cultural offers of Cieszyn and Český Těšín look at their place of residence from totally different perspectives. New inhabitants brought to Český Těšín in the second half of the 20th century, coming from remote regions of the Czech Republic and Slovakia, are not rooted in this area and therefore lack a basis, which constitutes human identity in a fundamental way [32]. On the other hand, those residents who can trace their roots even back to the late Middle Ages, by glorifying the past of their town, often fail to notice its current needs.

The past and socio-political changes largely determine the cultural offers of the cultural institutions functioning in the town. In the described region, the Olza river, running along the national border, forms a kind of a mental barrier, which, despite the formal dissolution of the borders, is nurtured in the hearts of the residents on both sides of the river. Regardless of the right to cross it freely, the existence of the border has its consequences for the self-identification of the residents and thus the functioning of the Polish–Czech cross-border market for cultural services. At this point, it is worth indicating that Poland and the Czech Republic are currently at a similar level of development. In the category of competitiveness, both countries are ranked relatively high in "The Global Competitiveness Report" for 2016–2017 [33]: they are listed among the 30 most competitive countries. Both nations also attach importance to similar values, such as family and health. In addition, both Poles and Czechs have a low level of confidence in politics. Apart from the numerous similarities that could be indicated here, one area significantly differentiates the two nations. It is their approach to religion. According to the findings of the "Global Index of Religiosity and Atheism", 81% of Poles deem themselves to be religious, compared to only 20% of Czechs. In terms of religiousness, residents of the Czech Republic, despite their close proximity to Poland, are closer to such countries as China or Japan, which have the highest percentage of declared atheists [34]. The matter of the approach to religion is not without significance here, as it is one of the aspects which can influence mutual trust and the understanding of attitudes of the residents on both sides of the border, as well as the mutual sympathy or antipathy expressed by them. These problems may directly affect the cultural offers of cultural institutions and, therefore, the functioning of the cross-border market for cultural services. Despite the aforementioned differences, it is the average Pole, out of all the nations in the world, that has the greatest liking for Czechs. On the other hand, the same rankings prove that Czechs are not as fond of Poles. However, it is worth observing that as a national minority (and in the town of Český Těšín, which is discussed here, Poles constitute a significant minority), Poles are ranked very highly by Czechs.

The aforementioned conditions are only some of the problems that are present in the everyday life of the divided town of Cieszyn and Český Těšín that managers of cultural institutions have to face in their attempts at creating a cultural offer that is addressed to the residents of the both sides of the border. However, their efforts are often misunderstood and confronted with a strong sense of distinctness, often involving reluctance and various forms of chauvinism or xenophobia. This reluctance may be expressed by a dismissive attitude towards the inhabitants of the "other side", verbal jokes, or indifference. It can also be acute in social situations, for example, in the manifestation of dislike towards representatives of the foreign nationality in public places. However, among the residents of both towns, the prevailing attitude is a mere lack of knowledge about the other nation. Hence, persons and institutions involved in cultural life assume a special kind of responsibility, where the local and national interests are often complementary, but sometimes mutually exclusive. At the same time, although it smacks of irony, many important cultural events and institutions—which, by definition, are supposed to connect both towns—have the word "border" in their name.

This state of affairs, in turn, makes it difficult to fully implement the concept of the sustainable management of the offer of cultural institutions in a town divided by a border. According to the interviewed experts, the main barriers (problems) that will have to be faced by the authorities and the managers of cultural institutions that are willing to develop the concept of sustainable management in culture, and to build the Polish–Czech cross-border market for cultural services, also include:

(i)     language barrier (85% of experts)—ignorance or poor knowledge of the neighbouring country's language is an important barrier to the full receipt of the offer of some of the neighbour's cultural institutions (e.g., theatre, cinema, or library),

(ii)    lack of information about the cultural offer on the other side of the border (80%),

(iii)   the low position of culture in the hierarchy of the needs of the residents of both Cieszyn and Český Těšín (65%),

(iv)    chaos in the cultural offers on both sides of the town, the overlapping dates of cultural events (63%),

(v)     lack of joint Polish–Czech promotion of the cultural offers (60%),

(vi)    lack of interest by the inhabitants of both towns for the culture of the neighbouring country (40%),

(vii)   difficulties in developing a cultural offer that is equally appealing to Poles and Czechs (even a very popular theatre actor in Poland may be completely anonymous to the residents of Český Těšín),

(viii)  economic barrier—for example, for the residents of Český Těšín, the cultural offer in some Polish cultural institutions (e.g., Adam Mickiewicz Theatre in Cieszyn) is less attractive price-wise than a similar cultural offer that is available on the Czech side of the town,

(ix)    psychological barrier—in the consciousness of some residents of Cieszyn and Český Těšín, there is a permanent border dividing the town into two different parts (Polish and Czech).

Therefore, hypothesis H3, assuming that the main barrier that hinders the residents of both Cieszyn and Český Těšín from making use of the cultural offer that is available on the other side of the border is a lack of interest in the cultural offer of the neighbouring country, was not confirmed.

The interviewed experts also pointed to changes in the cultural offer, which in their opinion, could facilitate the implementation of the concept of the sustainable management of the offer of cultural institutions in a town divided by a border, such as Cieszyn and Český Těšín. The vast majority of them (75%) stated that above all, quality should be valued more than quantity, which means that the large number of cultural events being organised (which causes chaos in the cultural offer of the town) should be limited for the benefit of their quality. Moreover, in the experts' opinion, proper coordination of activities performed on both sides of the town by the Polish and the Czech cultural department in the town is necessary. According to some experts (45%), cultural departments should become more focused on the coordination of activities performed by self-governmental cultural institutions, and should support them in the promotion of the cultural offer on the other side of the border. In the opinion of 55% of experts, town halls should organise panels and meetings with the participation by all of the directors of self-governmental cultural institutions, in order to establish a schedule of cultural events, profile the cultural offer, and determine the common "direction" and the common goals of both a strategic and current (operational) nature. Ideally, such meetings would be organised together with the participation of representatives of self-governmental cultural institutions located in Český Těšín. At the same time, it was noticed that in a town divided by a border, such as Cieszyn and Český Těšín, common Polish–Czech cultural policy is necessary. Such a cultural policy should be one that would last longer than only one electoral period. Town authorities should clearly express what they expect from the cultural institutions. For example, they should determine whether the cultural offer should follow the expectations of the majority of residents and whether it should be more commercial (closer to entertainment) or whether it should be more ambitious and filled with artistic content (which would, however, require greater financial expenses and much more intensive cultural education than before). In the experts' opinion, the cultural policy in Cieszyn and Český Těšín should be based on the concept of sustainable development in culture, and the understanding that in the common culture of Poland and the Czech Republic, there is something that could be defined as a value-creation chain. At the same time, culture must no longer be seen from the perspective of different sectors; instead, the potential of the cultural institutions of Cieszyn and Český Těšín should be treated as a capital that significantly influences the development of other industries, such as tourism, and which stimulates the socio-economic development of the whole region.

## 5. Conclusions

The cross-border partnership of local self-governments, i.e., the City of Cieszyn and Český Těšín in the field of culture, presented in the article, is innovative in nature, as it develops intersectoral cooperation between self-governmental organisations, the third sector, or private organisations with different competences, resources, and potentials. At the same time, successful cross-border cultural projects in this area (e.g., the "Two Shores Garden", the "Cinema on the Border", the "Three Brothers Day") confirm that cultural problems are not limited to the sphere of public management, but are also very important for the third sector, i.e., private entities representing the needs and expectations of local communities. The sustainable management of the offers of cultural institutions in a city divided by a border should lead to the gradual improvement of the offer, the professionalisation of culture management, and an improvement of methods and techniques of human resources management for the development of the cultural sector in both cities. Bringing these assumptions to life will lead to an increased interest in the cultural offer, and also the offer that is available on the other side of the border, due to the fact that it will be possible to prepare a cultural offer in the neighbour's language and to promote it through media that is tailored to different market segments. However, we must remember that due to the independent conditions on the market of cultural services, a cross-border offer (dedicated to the residents of both cities) should be available in cross-border cities, along with an offer that is dedicated only to the city residents in which the cultural institution functions.

Sustainable management of the cultural institutions' offer in a city divided by a border requires very difficult changes, because they take place in a poorly measurable and strongly individualised area of attitudes and mutual understanding. The development of mutual understanding depends to a large extent on the scope, form, and effectiveness of intersectoral communication, which cannot be limited to individual, semi-formal conversations, the consideration of financial matters, passing on information about decisions taken by the offices of both cities, or arrangements for individual events. Intersectoral consultations should exceed sectoral affiliations and address all issues that are related to local culture, starting with its overall vision. The participation of non-governmental organisations or private cultural entities cannot be limited here to consulting their cooperation with the local government, and therefore only to some of the cultural issues. There is a need to work out a cross-border strategy for the development of the cultural offer, which would exceed, on the one hand, the horizon of a single budget year, and on the other hand—the routine of shaping local culture only by planning specific events.

In summary, analysing the research results presented here, as well as the available source literature, one can point to the priorities for the development of cross-border cooperation in European Union cities belonging to Schengen, which, like Cieszyn and Český Těšín, are divided by a border. These priorities are:

(i)    Cross-border cooperation between self-governments, institutions, and other cultural entities in both cities,
(ii)   Shared cultural education of the inhabitants of both cities, especially for children and youth,
(iii)  Development of the cross-border cultural offer and the improvement of its accessibility for various groups of recipients,
(iv)   Creating common cross-border branded products in the field of culture,
(v)    Undertaking joint cross-border information and promotion activities that are carried out in a language that is understandable to the inhabitants of both cities.

The aforementioned priorities for the development of cross-border cooperation in the field of culture cover the key areas of activity that should be developed within the organisational and financial capacity of all stakeholder groups who should be involved in the development of the cross-border market for cultural services. The implementation of the indicated priorities will also enable the sustainable management of the cultural institutions' offers in cross-border cities, which should take place through the following activities:

(i)     At various levels (between the self-governments of both cities, between public cultural institutions, non-governmental organisations, and private organisations operating in both cities),

(ii)    In various thematic areas (e.g., joint cultural education, joint marketing activities, joint staff training, common bilingual cultural offers, etc.),

(iii)   In the formal dimension (e.g., as official contacts between institutions) and in the informal dimension (e.g., contacts of informal groups, non-official relations, social relations, etc.),

(iv)   Through better mutual understanding (e.g., learning the language of a neighbour's country, regular consultative meetings),

(v)    By implementing a common cross-border cultural policy (e.g., including similar cultural tasks in the budgets of both cities, joint micro-grants for the development of cross-border cooperation between informal groups and associations).

The presented activities are necessary to create a balanced, diversified, attractive, and diverse cultural offer, corresponding to the authentic cultural needs of the residents of cities that share a state border. With the current, very large, and broadly understood degree of competition in the sphere of culture, only an extremely attractive cultural product is able to induce the public to give up other forms of free time and dedicate it to active participation in culture. However, we should remember that not all cultural projects should have a clearly trans-border dimension. A cross-border cultural offer should be created if its full reception is possible for residents on both sides of the border, and if it is potentially interesting for the inhabitants of both cities.

## References

1.   Wagemann, M. Sustainable forestry: The basis of future management. *Sugar Ind.* **2011**, *136*, 179–184.

2.   Ott, W. The development of sustainable forestry in Württemberg—Idea and historical reality. *Allgemeine Forst und Jagdzeitung* **2014**, *185*, 118–127.

3.   Agenda 21 for Culture, Agenda 21 2008. Available online: http://www.agenda21culture.net/sites/default/files/files/documents/multi/ag21_en.pdf (accessed on 22 April 2018).

4.   Culture: Fourth Pillar of Sustainable Development, UCLG 2010. Available online: http://www.agenda21culture.net/documents/culture-the-fourth-pillar-of-sustainability (accessed on 22 April 2018).

5.   Placing Culture at the Heart of Sustainable Development Policies, UNESCO 2013. Available online: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/final_hangzhou_declaration_english.pdf (accessed on 22 August 2018).

6.   Culture 21: Actions—Commitments on the Role of Culture in Sustainable Cities, UCLG 2010. Available online: http://www.worldurbancampaign.org/culture-21-actions-%E2%80%93-commitments-role-culture-sustainable-cities (accessed on 26 August 2018).

7.   Kurowska-Pysz, J. Opportunities for Cross-Border Entrepreneurship Development in a Cluster Model Exemplified by the Polish–Czech Border Region. *Sustainability* **2016**, *8*, 230. [CrossRef]

8.   Medeiros, E. Cross-border cooperation in Inner Scandinavia: A Territorial Impact Assessment. *Environ. Impact Assess. Rev.* **2017**, *62*, 147–157. [CrossRef]

9.   Kurowska-Pysz, J. Assessment of trends for the development of cross border cultural clusters. *Forum Sci. Oecon.* **2015**, *3*, 31–51.

10.  Schenone, C.; Brunenghi, M.M.; Pittaluga, I.; Hajar, A.; Kamali, W.; Montaresi, F.; Rasheed, M.; Wahab, A.A.; El Moghrabi, Y.; Manasrah, R.; et al. Managing European Cross Border Cooperation Projects on Sustainability: A Focus on MESP Project. *Sustainability* **2017**, *9*, 112. [CrossRef]

11.  Wróblewski, Ł. Application of marketing in cultural organizations: The case of the Polish Cultural and Educational Union in the Czech Republic. *Cult. Manag. Sci. Educ.* **2017**, *1*, 79–92. [CrossRef]

12. Kurowska-Pysz, J. A model of sustainable development of cross-border inter-organizational cooperation, conclusion from the research. In *Business Models: Strategies, Impact and Challenges*; Jabłoński, A., Ed.; Nova Science Publishers: New York, NY, USA, 2016.

13. Szczepańska-Woszczyna, K. The importance of organizational culture for innovation in the company. *Forum Sci. Oecon.* **2014**, *2*, 27–39.

14. Wróblewski, Ł. *Cultural Management. Strategy and Marketing Aspects*; Logos Verlag: Berlin, Germany, 2017.

15. Sobocińska, M. Management of value for customers on the culture market. *Int. J. Bus. Perform. Manag.* **2015**, *16*. [CrossRef]

16. Bourdieu, P. *Distinction. A Social Critique of the Judgement of Taste*; Harvard University Press: Cambridge, MA, USA, 1994.

17. Lisiński, M. Structural Analysis of the Management Science Methodology. *Bus. Manag. Educ.* **2013**, *11*, 109–136. [CrossRef]

18. Biesta, G. Pragmatism and the Philosophical Foundations of Mixed Methods Research. In *SAGE Handbook of Mixed Methods in Social & Behavioral Research*; Tashakkori, A., Teddlie, Ch., Eds.; SAGE: Thousand Oaks, CA, USA, 2010.

19. Wróblewski, Ł. Websites of Polish cultural and educational organizations in the Czech Republic—Analysis and evaluation. *Forum Sci. Oecon.* **2015**, *3*, 65–78.

20. Kurowska-Pysz, J.; Wróblewski, Ł.; Szczepańska-Woszczyna, K. Identification and assessment of barriers to the development of cross-border cooperation. In *Innovation Management and Education Excellence through Vision 2020, Proceedings of the 31st International Business Information Management Association Conference, Milano, Italy, 25–26 April 2018*; Soliman, K.S., Ed.; International Business Information Management Association: Milan, Italy, 2018; pp. 3317–3327.

21. Kurowska-Pysz, J.; Castanho, R.A.; Naranjo Gómez, J.M. Cross-border cooperation—The barriers analysis and the recommendations. *Pol. J. Manag. Stud.* **2018**, *17*, 134–147.

22. Wróblewski, Ł.; Kurowska-Pysz, J.; Dacko-Pkiewicz, Z. Polish-Czech micro-projects as a tool for shaping consumer behaviour on the cross-border market for cultural services. In *Innovation Management and Education Excellence through Vision 2020, Proceedings of the 31st International Business Information Management Association Conference, Milano, Italy, 25–26 April 2018*; Soliman, K.S., Ed.; International Business Information Management Association: Milan, Italy, 2018; pp. 3131–3141.

23. Kurowska-Pysz, J. *Partnership Management in Polish-Czech Micro-Projects in Euroregion Beskidy*; Economic Policy in the European Union Member Countries; Silesian University: Karvina, Czech Republic, 2016.

24. Wróblewski, Ł. The Influence of Creative Industries on the Socioeconomic Development of Regions in Poland. *Int. J. Entrep. Knowl.* **2014**, *2*, 45–57. [CrossRef]

25. Hooper, B.; Kramsch, O. (Eds.) *Cross-Border Governance in the European Union*; Routledge: London, UK, 2004.

26. Kurowska-Pysz, J. The Circumstances of Knowledge Transfer within the Scope of the Cross-Border Czech-Polish Projects 2014–2020. *Forum Sci. Oecon.* **2015**, *3*, 31–43.

27. Castanho, R.A.; Loures, L.; Cabezas, J.; Fernández-Pozo, L. Cross-Border Cooperation (CBC) in Southern Europe—An Iberian Case Study. The Eurocity Elvas-Badajoz. *Sustainability* **2017**, *9*, 360. [CrossRef]

28. Gramillano, A.; Levarlet, F.; Nilsson, H.; Camagni, R.; Capello, R.; Caragliu, A.; Fratesi, U.; Lindberg, G. *Collecting Solid Evidence to Assess the Needs to Be Addressed by Interreg Cross-Border Cooperation Programmes*; Directorate General for Regional and Urban Policy; European Commission: Brussels, Belgium, 2016.

29. Appadurai, A. *Modernity at Large. Cultural Dimensions of Globalization*; University of Minnnesota Press: London, UK; Minneapolis, MN, USA, 1996.

30. Interreg Va Czech Republic—Poland Programme 2014–2020. Available online: https://www.keep.eu/keep/programme/31 (accessed on 10 August 2018).

31. Anderson, B. *Imagined Communities. Reflections on the Origin and Spread of Nationalism*; Revised Edition; Verso: London, UK; New York, NY, USA, 2006.

32. Weil, S. *The Need for Roots: Prelude Towards a Declaration of Duties Towards Mankind*; Routledge: London, UK; New York, NY, USA, 2002.

33. Schwab, K. *The Global Competitiveness Report 2016–2017*; World Economic Forum: Geneva, Switzerland, 2016.
34. Global Index of Religiosity and Atheism; WIN-Gallup International. Available online: https://sidmennt. is/wp-content/uploads/Gallup-International-um-tr%C3%BA-og-tr%C3%BAleysi-2012.pdf (accessed on 31 August 2018).

# Sustainable Consumer Behaviour in the Market of Cultural Services in Central European Countries: The Example of Poland

**Łukasz Wróblewski [1,*] and Zdzisława Dacko-Pikiewicz [2]**

[1]   Department of Management and Production Engineering, WSB University,
      41-300 Dąbrowa Górnicza, Poland
[2]   Department of Pedagogy, WSB University, 41-300 Dąbrowa Górnicza, Poland; zdacko@wsb.edu.pl
*    Correspondence: lwroblewski@wsb.edu.pl; Tel.: +48-692-344-057

**Abstract:** In the second decade of the 21st century, in the developed countries of Central Europe, we can observe the transfer of free time to consumption, including the consumption of cultural services. This change, however, has led to some disturbances in the consumption of cultural services. Disturbances, which in particular relate to the sphere of needs, the sphere of the means of meeting needs and, finally, the sphere of consumer behaviour; for example, in relation to transport. In this article, most of the attention was devoted to the last category of disturbances (the sphere of consumer behaviour) and specifically concerned the culture service customers' choice of means of transport to a specific cultural event. The research carried out by the authors shows that the most popular means of transport used on the way to a symphonic concert held in Katowice is still one's own car. This applies to both residents of the city of Katowice, who could easily get to the concert using public transport (bus, tram) or on foot, as well as people from outside Katowice (who, as the research shows, very rarely use Katowice's extensive rail network and well-developed intercity bus service). Thus, it has been proved that despite various legal regulations conducive to sustainable consumption, the majority of Polish consumers of cultural services in the analysed area of consumer behaviour do not follow this concept. The article opens with a review of the literature on free time and the sustainable consumption of cultural services. The next part of the study presents the results and conclusions of research conducted on a group of 515 consumers of philharmonic services. The last part of the article discusses the results obtained and indicates the existing management implications.

**Keywords:** sustainable consumption; cultural services; cultural institutions; philharmony; Katowice

## 1. Introduction

In the second decade of the 21st century, in the developed countries of Central Europe (including Poland), we can observe a systematic shortening of working time and a reduction in the time spent on life's basic needs, as a result of which the amount of free time is increasing [1]. According to Cieloch et al. [2] (p. 17), this time can be filled with activities deemed desirable and it is one of the main paths leading to self-discovery for contemporary man. It is a special resource that serves to meet self-fulfillment needs through activities such as: travel and sports, having a hobby, reading, meeting friends and family, performing religious practices, volunteer work, fulfilling creative passions or experiencing the presence of works of art, and listening to and performing music.

The transfer of free time to consumption, including the consumption of cultural services, is fostered both by the enrichment of society in developed countries, as well as the legal regulations introduced in them. An example of such regulations may be the trade ban covering two Sundays of each month that has been introduced in Poland, or the 500+ programme, by which families with

children receive additional monthly funds from the state budget, which are spent, among other things, on meeting cultural needs. However, these changes have also led to some disturbances in the consumption of cultural services; disturbances which may particularly relate to:

(i) **The sphere of needs**; balance in this sphere is disturbed when the needs felt by the consumer are not his own needs, but are artificially created by, for example, advertising and marketing specialists, or formed as a result of social comparisons (e.g., participation in contemporary music concerts only because friends or neighbours are participating) [3,4];

(ii) **The sphere of means to meet the needs**; here, disturbances occur when the means of satisfying the needs do not really serve to satisfy them (e.g., instead of going out with family to the theatre or the cinema, we decide to watch another episode of the soap opera or reality show on TV). W. Muszyński [5] said that, in the 21st century, a significant part of free time is consumed by the use of the media (television, computers, Internet, mobile phones). These meet most of the cultural needs of society and provide the so-called passive rest, as a result of which the consumer may paradoxically say "I feel tired" instead of "I became tired", which could be the effect of actively using the offer of cultural institutions;

(iii) **The sphere of consumer behavior**; this imbalance arises when, from among several ways to meet the need, the consumer chooses those that pose a greater burden to the environment (for example, despite the fact that a short distance of two kilometres to the museum or philharmonic can be travelled on foot or using public transport—bus, tram, subway—the consumer decides to use his own diesel car). This seemingly insignificant choice of the means of transport implies, however, a decision on whether we are dealing with sustainable or unsustainable consumption [6,7].

In this study, most of the attention was devoted to the last category of disturbances (the sphere of consumer behaviour) and specifically focused on the choice of means of transport by the consumer of cultural services on the way to a specific cultural event.

In the debate on sustainable consumption, one of the basic problems is the lack of general agreement on the definition of sustainable consumption—it still has not been determined up to what level consumption remains balanced and at what point it becomes unsustainable [8,9]. There is still no agreement on strategies that would best shape sustainable consumption, especially with regard to the sphere of cultural services [10–12]. For example, there are still no unambiguous answers to the questions on whether to support cultural education more, raise environmental awareness, or develop new services in the cultural sector. Therefore, various authors suggest that sustainable consumption in the cultural sector should be treated as an umbrella term, which covers issues such as: human needs, justice, quality of life, resource efficiency, the minimisation of waste generation, thinking in terms of product life cycle lengths, consumer health and safety, consumer sovereignty, etc. [10,13].

This paper, however, uses the definition of sustainable consumption developed by H. Jastrzębska-Smolaga [14], a precursor of research on sustainable consumption in Poland, according to which the balanced consumption of cultural services means a process of using cultural services that meet one's needs, resulting in a better quality of life, but under two simultaneously fulfilled conditions:

(i) The achievement of these objectives will be accompanied by a simultaneous radical reduction in the use of natural resources and energy, the reduction of waste emissions and environmental pollution, and discontinuation of the use of toxic materials [15];

(ii) Achievement of a better quality of life for present generations will not become a hindrance to satisfying the fulfilment of needs by future generations [14] (pp. 72–73).

By culture services, we mean the products of cultural entities being subject to exchange, which are characterised by immateriality, impermanence, and diversity [16,17].

The implementation of sustainable consumption in the sphere of culture therefore means that the consumers of cultural services take responsibility for making ethical purchases, using the cultural offer in such a way as to limit the negative impact of consumption on the environment [18] (p. 551), which,

in turn, ensures a decent life for everyone, within the limits of the Earth's resources [19,20]. In the sphere of culture, sustainable consumption can therefore consist of using the services of cultural institutions in such a way as to limit the negative impact on the environment. This may be manifested, for example, in more frequent use of public transportation on the way to a specific cultural event. Therefore, the main purpose of this article is to determine what percentage of consumers of culture services, attending a symphony, uses means of transport such as a city bus, tram, bike, or walking. Thanks to this, it will be possible to recognise whether the behaviour of the surveyed consumers of cultural services in Poland are in line with the concept of the sustainable consumption of cultural services.

## 2. Materials and Methods

The research conducted in Katowice (the capital of the Silesian Metropolis, the largest city in the Silesia region in Poland) was part of a project implemented by Medialab Katowice within the Shared Cities: Creative Momentum international platform. The project was co-funded by the European Union as part of the Creative Europe Programme (https://www.sharedcities.eu/).

The main aim of research conducted was to determine the means of transport used by participants in artistic events to reach the concert in Katowice. The following issues were addressed in detail:

(i)    means of transport used by the inhabitants of Katowice to reach cultural events organized by the philharmonic institutions in Katowice;

(ii)   means of transport used by the inhabitants of the Province of Silesia to reach cultural events organized by the philharmonic institutions in Katowice;

(iii)  means of transport used by people residing outside the Province of Silesia to reach cultural events organized by the philharmonic institutions in Katowice.

Due to the relatively high costs, as well as the long duration, of full study (in order to be able to obtain full information about the correlation between the place of residence of participants in artistic events and the means of transport to the philharmonic institution, the study should be conducted during the whole artistic season among all participants in the concerts), the method of incomplete numerical induction was used. This is an inductive inference, the premises of which do not exhaust the whole world of objects to which general law expressed in the conclusion of reasoning refers to. The premises are detailed sentences here, the conclusion is a general sentence, and each premise results logically from the conclusion. This is a method in which a general rule is derived from a limited number of details [21,22].

The respondents included the purchasers of cultural services provided by two philharmonic institutions in Katowice: the Polish National Radio Symphony Orchestra (NOSPR) in Katowice and Henryk Mikołaj Górecki Silesian Philharmonic in Katowice (SP). Both philharmonic institutions are located in the city centre of Katowice—there is a bus stop, as well as a tram stop, in their immediate vicinity. The distance between the two institutions from the main railway station and the main bus station does not exceed one kilometre (Figure 1).

Quantitative research was conducted on the day of artistic events organized by the NOSPR and the SP immediately prior to their commencement. Information on the artistic events during which research was conducted is presented in Table 1.

For research purposes, the mini-interview method was selected, and the research tool was comprised of interview guidelines and a registration sheet. The application of this method gives a much better chance that the respondent will be willing to provide information (compared to the survey method), especially nowadays, when similar questions (postal code collection) are widely used in large shopping centres.

Research was non-exhaustive—the sample size was 525 people. A total of 10 people were excluded from the sample because they gave the wrong postal code (the postal code given by seven people was not recognized in the postal code system of the Polish Post), and in addition, three people arrived at

the NOSPR concert from outside Poland (two from Germany, one from Switzerland). As a result of the verification, a sample of 515 people was adopted.
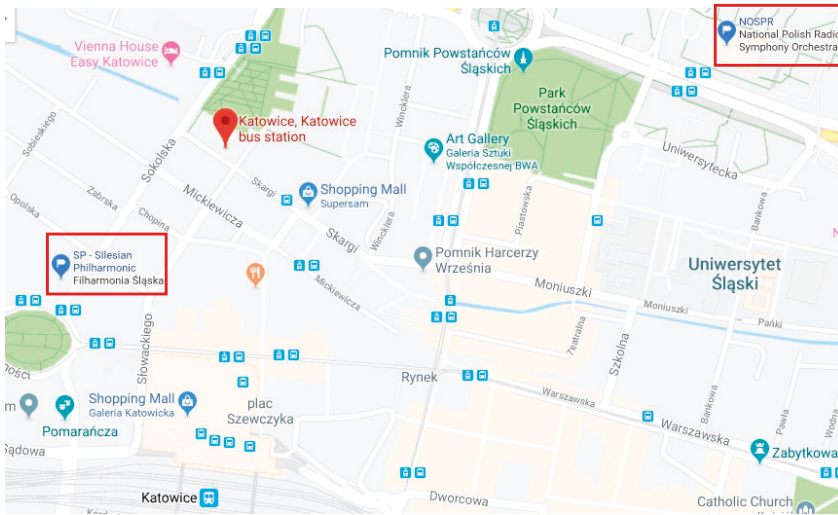


**Figure 1.** Location of the NOSPR and SP concert hall in Katowice.

**Table 1.** Basic information on the artistic events during which research was conducted.

|  | **Polish National Radio Symphony Orchestra in Katowice (NOSPR)** | **Henryk Mikołaj Górecki Silesian Philharmonic in Katowice (SP)** |
|---|---|---|
| Date | 25 March 2017 (Saturday) | 7 April 2017 (Friday) |
| Concert hour | 19:30 | 19:00 |
| Place of the concert | NOSPR main concert hall | Karol Stryja main concert hall |
| Performer | Polish National Radio Symphony Orchestra in Katowice | Henryk Mikołaj Górecki Silesian Philharmonic in Katowice |
| Conductor | Alexander Humala (Belarus) | Mykola Diadiura (Ukraine) |
| Soloists | Genevieve Strosser—viola<br>Daniel Costello—French horn<br>Hannah Weisbach—oboe/English horn | Tomasz Daroch—cello |
| Programme | 7th festival of the first performances<br>Jacek Domagała—Normandy<br>Hanna Kulenty-Majoor—Viola Concerto No. 1<br>PRASQUAL—Mashrabiyya. Poem of the wandering world on oboe/English horn, French horn and 93 musicians in 6 groups in space | Master interpretations<br>Edward Elgar—Cello Concerto in E minor op. 85<br>Antonin Dvorak—IX Symphony in E minor op. 95 *From the New World* |
| Period in music | Contemporary music | Romanticism, neo-romanticism |

Data source: Own elaboration.

Concert participants were asked to provide the postcode of their place of residence and the means of transport they used to come to the concert. The researchers entered the information collected manually into the registration sheet. The postal code, the means of transport, and the gender of the respondent were entered in the appropriate space. Research was conducted with the consent of the management of both philharmonic institutions (NOSPR and SP) in the place designated by the

institution staff (an NOSPR hall and an SP hall and foyer). The most important information on the research is shown in Table 2.

**Table 2.** Basic research assumptions.

| Detailed List | Research | |
|---|---|---|
| Research method | Mini interview | |
| Research tool | Interview guidelines, registration sheet | |
| Sample selection | Intentional (participants in the concerts of the NOSPR and the Silesian Philharmonic in Katowice) | |
| Sample size | 515 people | |
| | NOSPR—285 | SP (Silesian Philharmonic)—230 |
| Spatial scope of research | Katowice (NOSPR) | Katowice (SP) |
| Date of research | 25 March 2017 (Saturday) | 7 April 2017 (Friday) |
| Place of research | Hall | Hall, foyer |
| Time of research | 18:30–19:30 | 18:00–19:00 |

Data source: Own elaboration.

The application of this method allowed for collecting detailed information about the territorial origin of the participants and how they reached the institution. An electronic database of postal codes of the Polish Post (kody.poczta-polska.pl) was used to compile the collected material. The postcode database allowed for a data set covering every postal area, municipality, county, and province of the place of residence of the participant to be obtained. The information obtained can be used, like geomarketing activities in commercial sectors, to develop the marketing communication strategy of philharmonic institutions and build their brand. It may also be useful for the local government of Katowice to build the image of the city, or to determine the city's status or its metropolitan level.

## 3. Results

Moving on to the main part of the analysis, it should be noted that the results of the research, due to the sampling method used, provide knowledge about the respondents' opinions concerning the behaviour of consumers in the market of cultural services in Poland, and not the actual state in this regard. However, we should take into account the large size of the research sample, as well as the integrity and good will of the respondents.

The sample consisted of 277 women (53.79%) and 238 men (46.21%). These were people living in 13 provinces. The respondents residing in the Province of Silesia represented all 19 Silesian cities with the county rights, as well as 15 out of 17 counties in the Province of Silesia. The largest group of respondents (453) was people living in the Province of Silesia—87.96% of all respondents. The remaining respondents (62 people, 12.04%) gave the postcode of their place of residence outside the Province of Silesia. Every fourth person visiting the Katowice's philharmonic institution was an inhabitant of Katowice (129 people, 25.05%).

Participants in artistic events organized at the Polish National Radio Symphony Orchestra in Katowice and the Henryk Mikołaj Górecki Silesian Philharmonic were asked about the main means of transport they used to come to the concert. Respondents pointed to the means of transport, such as bus, TAXI, tram, coach, car, and train; some also came to the concert on foot. One person—a Swiss citizen—arrived at the NOSPR concert by plane. None of the respondents pointed to the bicycle as the main means of transport that they used to come to the concert. The research results are summarized in Tables 3–6.

**Table 3.** Means of transport used to reach Katowice's philharmonic institutions (N = 515).

| Means of Transport | Total (N = 515) | | Inhabitants of the Province of Silesia (N = 453) | | Inhabitants of Katowice (N = 129) | |
|---|---|---|---|---|---|---|
| | In nos | in % | In nos | w % | In nos | in % |
| On foot | 27 | 5.24 | 27 | 5.96 | 27 | 20.93 |
| Bicycle | - | - | - | - | - | - |
| TAXI | 9 | 1.75 | 9 | 1.99 | 7 | 5.43 |
| Tram | 12 | 2.33 | 12 | 2.65 | 7 | 5.43 |
| Bus | 33 | 6.41 | 33 | 7.28 | 21 | 16.28 |
| Coach | 24 | 4.66 | 11 | 2.43 | - | - |
| Car | 390 | 75.73 | 351 | 77.48 | 67 | 51.94 |
| Train | 20 | 3.88 | 10 | 2.21 | - | - |
| Total | 515 | 100 | 453 | 100 | 129 | 100 |

Data source: Own elaboration.

**Table 4.** Means of transport used by visitors to the NOSPR.

| Means of Transport | Total (N = 285) | | Inhabitants of the Province of Silesia (N = 238) | | Inhabitants of Katowice (N = 64) | |
|---|---|---|---|---|---|---|
| | In nos | In % | In nos | in % | In nos | in % |
| On foot | 21 | 7.37 | 21 | 8.82 | 21 | 32.81 |
| Bicycle | - | - | - | - | - | - |
| TAXI | 1 | 0.35 | 1 | 0.42 | 1 | 1.56 |
| Tram | 4 | 1.40 | 4 | 1.68 | 3 | 4.69 |
| Bus | 9 | 3.16 | 9 | 3.78 | 8 | 12.50 |
| Coach | 20 | 7.02 | 8 | 3.36 | - | - |
| Car | 216 | 75.79 | 189 | 79.41 | 31 | 48.44 |
| Train | 14 | 4.91 | 6 | 2.52 | - | - |
| Total | 285 | 100 | 238 | 100 | 64 | 100 |

Data source: Own elaboration.

**Table 5.** Means of transport used by visitors to the Silesian Philharmonic (SP).

| Means of Transport | Total (N = 230) | | Inhabitants of the Province of Silesia (N = 215) | | Inhabitants of Katowice (N = 65) | |
|---|---|---|---|---|---|---|
| | In nos | in % | In nos | w % | In nos | in % |
| On foot | 6 | 2.61 | 6 | 2.79 | 6 | 9.23 |
| Bicycle | - | - | - | - | - | - |
| TAXI | 8 | 3.48 | 8 | 3.72 | 6 | 9.23 |
| Tram | 8 | 3.48 | 8 | 3.72 | 4 | 6.15 |
| Bus | 24 | 10.43 | 24 | 11.16 | 13 | 20.00 |
| Coach | 4 | 1.74 | 3 | 1.40 | - | - |
| Car | 174 | 75.65 | 162 | 75.35 | 36 | 55.38 |
| Train | 6 | 2.61 | 4 | 1.86 | - | - |
| Total | 230 | 100 | 215 | 100 | 65 | 100 |

Data source: Own elaboration.

The data presented in Table 3 indicates that the car is the means of transport dominating among the inhabitants of Katowice and the inhabitants of the Province of Silesia, and among all the people reaching Katowice's philharmonic institutions. Differences appear in the subsequent positions. For obvious reasons, the inhabitants of Katowice come on foot—every fifth inhabitant of Katowice (20.93%). Most often, the inhabitants of Katowice use public transport (bus and tram)—21.71%. Table 4 presents the means of transport used by the participants of the concert of the Polish National Radio Symphony Orchestra in Katowice.

The data presented in Table 4 shows that half of the participants of the NOSPR concert came to the concert on foot (nearly 33%) or by public transport (bus—12.50%, tram—4.69%). Other people used the car (48.44%) or taxis (1.56%). The inhabitants of the Province of Silesia definitely preferred the car (79.41%) as the main means of transport for travelling to the concert. This is probably related to

the availability of many free parking spaces in the immediate vicinity of the NOSPR building. Table 5 presents the means of transport used by the participants of the concert in the Silesian Philharmonic in Katowice.

**Table 6.** Means of transport used by visitors to the NOSPR and SP broken down by gender.

| Means of Transport | Total (N = 515) | | Inhabitants of the Province of Silesia (N = 453) | | Inhabitants of Katowice (N = 129) | |
|---|---|---|---|---|---|---|
| | Women (N = 277) | Men (N = 238) | Women (N = 250) | Men (N = 203) | Women (N = 76) | Men (N = 53) |
| On foot | 5.05 | 5.04 | 5.60 | 5.91 | 18.42 | 22.64 |
| Bicycle | - | - | - | - | - | - |
| TAXI | 2.17 | 1.26 | 2.40 | 1.48 | 5.26 | 5.66 |
| Tram | 2.17 | 2.10 | 2.40 | 2.46 | - | - |
| Bus | 6.86 | 5.88 | 7.60 | 6.90 | 17.11 | 15.09 |
| Coach | 5.05 | 4.20 | 2.80 | 1.97 | - | - |
| Car | 75.81 | 76.47 | 77.20 | 78.82 | 53.95 | 50.94 |
| Train | 2.89 | 5.04 | 2.00 | 2.46 | 5.26 | 5.66 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

Data source: Own elaboration.

The data presented in Table 5 proves the previous findings that the car is the means of transport most often used by people coming to the concert in Katowice. Every fifth inhabitant of Katowice surveyed came to the Friday concert by bus—this might be due to the fact that a public transport stop is exactly opposite the main entrance to the Silesian Philharmonic.

Table 6 shows which means of transport are used by the surveyed consumers of NOSPR's and SP's cultural services on the way to the concert, broken down by the gender of the respondents.

The data presented in Table 6 shows that over 75% of all respondents come to the concerts in Katowice's philharmonic institutions, the NOSPR and the SP, by car. The data also show that there are no significant differences between the surveyed men and women regarding the choice of means of transport on the way to a symphony concert. The most frequently chosen means of transport by both men and women was their own car.

## 4. Discussion

The research shows that the most popular means of transport used on the way to a symphonic concert held in Katowice is one's own car [23]. This applies to both residents of the city of Katowice, who could easily get to the concert using public transport (bus, tram) or on foot, as well as people from outside Katowice (who, as the research shows, very rarely use Katowice's extensive rail network and well-developed intercity bus service). Considering the fact that the majority of music lovers still come to a symphony concert by their own car (over 75%), as well as the fact that the vast majority of cars in Poland are petrol or diesel cars and the average age of a passenger car in Poland in 2016 was 15 [24], it is difficult to agree with the statement that the surveyed consumers of the services of philharmonic institutions in Katowice act in accordance with the concept of sustainable consumption (at least in the analysed area of consumer behaviour). This is also confirmed by other surveys conducted by the authors based on a sample of 2599 consumers of cultural services in Katowice in 2017 [25]. The research was conducted both in cultural institutions (National Polish Radio Symphony Orchestra in Katowice, Silesian Theatre, Silesian Museum, "Szyb Wilson" Art Gallery and "Silesia Film" Institution), as well as during numerous festivals and events organised in Katowice (Intel Extreme Masters, Interpretacje, JazzArt Festival, Regiofun, Silesia Bazaar, Silesian Jazz Festival and Tauron Nowa Muzyka)—Table 7.

**Table 7.** How the respondents travel to an event organised by a cultural institution (in %).

| No. | Event | Public Transport (Bus, Tram) | On Foot | By Train, Bus | By Bike | By Car | Other |
|---|---|---|---|---|---|---|---|
| 1 | Industriada—Szyb Wilson (N = 73) | 15.10 | 4.10 | - | - | 71.20 | 9.60 |
| 2 | Intel Extreme Masters (N = 503) | 20.10 | 6.80 | - | 0.60 | 37.20 | 35.40 |
| 3 | Interpretacje (N = 95) | 28.40 | 10.50 | 10.50 | 1.10 | 48.40 | 1.10 |
| 4 | JazzArt Festival (N = 116) | 17.20 | 21.60 | - | - | 54.30 | 6.90 |
| 5 | Silesian Museum (N = 382) | 23.80 | 20.40 | - | 0.30 | 41.90 | 13.60 |
| 6 | NOSPR (N = 203) | 12.30 | 7.90 | 3.40 | 0.50 | 68.00 | 7.90 |
| 7 | Regiofun (N = 101) | 37.40 | 17.20 | 6.10 | 2.00 | 35.40 | 2.00 |
| 8 | Silesia Bazaar (N = 75) | 10.70 | 14.70 | - | 2.70 | 68.00 | 4.00 |
| 9 | Silesia Film (N = 176) | 31.80 | 15.30 | 2.80 | 0.60 | 49.40 | - |
| 10 | Silesian Jazz Festival (N = 115) | 13.00 | 9.60 | 7.80 | - | 67.80 | 1.70 |
| 11 | Tauron Nowa Muzyka (N = 464) | 13.60 | 24.10 | - | 1.90 | 33.20 | 27.20 |
| 12 | Silesian Theatre (N = 296) | 21.00 | 6.10 | 5.10 | - | 66.10 | 1.70 |
|  | Total (N = 2599) | 20.36 | 13.19 | 2.97 | 0.81 | 53.41 | 9.26 |

Data source: Own study based on research.

Therefore, one should consider what solutions can be put in place to improve the current situation, so that the consumption of cultural services in Poland becomes more balanced (at least in the sphere of consumer behaviour). According to G. Ritzer [26,27], a change in the behaviour of consumers, including consumers of cultural services (the shift towards sustainable consumption), will not be possible without the introduction of systemic changes. He believes that it is not realistic for consumers to solve the problem of unsustainable consumption by only changing their individual behaviours. In order to create patterns of the sustainable consumption of cultural services at the individual level, it will be important to counterbalance negative trends related to consumption through appropriate systemic solutions (for example, some Polish cities are introducing free public transport to cultural institutions, other cities have banned diesel cars, and cultural education or education about sustainable energy management has been introduced in schools). Similarly, E. Assadourian [28] (pp. 113–124) claims that even those consumers of cultural services who introduce restrictions in their lives (i.e., for example, give up going to a concert at the Philharmonic in their own car in favour of public transport) are not able to carry out deeper changes when acting alone [29]. The only way to create a truly sustainable civilisation is to transform social and cultural norms in such a way that sustainable consumption and a sustainable lifestyle will become popular, universal, and attractive to follow (as is the case in New York, for example, where manual workers, regular office workers, and managers of large corporations use the metro). Of key importance for the implementation of sustainable consumption, however, is the construction of its framework conditions. To this end, economic, legal, and awareness instruments are used, as well as the building of green infrastructure, etc. It should be remembered that consumers, despite the responsibility they must bear, paradoxically cannot be burdened with excessive responsibility [30,31].

Making sustainable choices about the possible means of transport on the way to a symphony concert can be made easier using so-called choice editing, i.e., institutions and the local or federal government shape consumer choices. In shaping these choices in the area of transport, accessibility and mobility should be taken into account [32,33]. Accessibility means easy access to cultural goods and services, social facilities such as providing non-motorised forms of transport in urban areas (walking, cycling, roller-skating, etc.), and if necessary, providing motorised means of transport that are more efficient and create less pollution—in particular, the use of public transport, such as trams and electric buses. Mobility means maximising the sense of satisfaction per unit of mobility [34]. With the lowest possible level of mobility (meaning the actual level of consumption in the area of transport), an increase in satisfaction is desired (Figure 2).

When writing about the sustainable consumption of cultural services, we should not, however, forget that it takes place in three key areas. In addition to the sphere of consumer behaviour, which was the subject of research by the original authors (in relation to transport), the sustainable consumption of cultural services should also be considered at the level of the sphere of needs and the sphere of the means of meeting needs. According to G. Ritzer [26,27], changing the behaviour of consumers of

cultural services in the sphere of needs and in the sphere of the means of meeting needs will be much more difficult than in the sphere of consumer behaviour. Such a change is very difficult for at least two important reasons:

(i)   consumption in the sphere of culture is becoming less associated with the conscious purchase of culture services with a high level of artistic content, and is increasingly associated with entertainment and mass culture—the proportions in this area are becoming seriously disturbed. G. Ritzer [26,27] doubts that consumers will be willing to voluntarily give up the pleasures offered by entertainment for more difficult and more ambitious high culture;

(ii)  on the other hand, a significant number of consumers of culture services experience pleasure in consuming cultural services that provide a higher social status (Veblen's theory of conspicuous consumption). The result is that in their choices, people often imitate the behaviour of a class which is at a level higher in the social stratification system. Veblen was of the opinion that people would endure even modest private lives, just to have public symbols that they deem desirable [26] (p. 312).

W. Muszyński [5] also draws attention to other disturbances in the sustainable consumption of cultural services. According to him, a significant part of leisure time that could be spent on the consumption of cultural services is, in the 21st century, consumed by the use of media (Internet, television, computers, mobile phones). This is also confirmed by research conducted by the Public Opinion Research Centre in Warsaw (CBOS) [1] and research in the Ariadna national panel conducted in February 2018 [35], which show that the most popular form of spending free time in Poland is browsing the Internet 75% and watching TV (nearly 66%). Only 9% of surveyed Poles said that they used the services of cultural institutions in their free time. According to Borys [32], in the second decade of the 21st century, there were many opportunities to meet cultural needs—however, these opportunities mean that it is easy to "become lost" and start meeting "not-one's own" needs (i.e., it is very difficult to avoid unsustainable consumption patterns). Therefore, the sustainable consumption of cultural services is possible under the condition that every person conducts an "honest diagnosis of the state of their consciousness" [36] (p. 1) necessary to understand their own needs, both basic and imposed (external, constrained needs). In the opinion of Rogall [37], the cure for such a state of affairs should be working on one's self-development and broadening one's own perspective. Shaping rational thinking (so as not to be fooled by various temptations calling for unsustainable consumption) is an indispensable premise where, for example, in leisure time, a cultural offer that develops and enriches (satisfies the need for self-realisation) will be selected, and if a passive activity is selected (e.g., watching a film on TV), it will be a conscious choice.
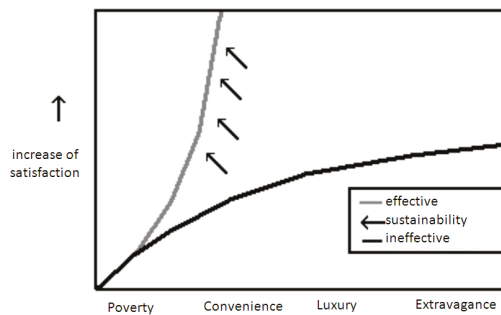


**Figure 2.** Sustainable consumption in transport—increased satisfaction with a slight increase in mobility. Data source: Own work based on [34].

In summary, it follows from the considerations that have been presented that the key issue for the implementation of the new paradigm of consumption in the cultural sector is the dissemination

of a conscious and responsible consumer attitude. A conscious and responsible consumer who makes sustainable consumer choices is a person who realises the reasons for specific behaviours and their compliance with sustainable consumption patterns. Sustainable consumption in the cultural sector requires the introduction of sustainable management of the development of the cultural offer. Such a management model means, among other things, the development of public and alternative communication (walking, biking) instead of private (car) transportation [38] (p. 39). It also means the conscious and thoughtful selection of services from the rich cultural offer available on the market.

## References

1. *Free Time of Poles*; Public Opinion Research Centre in Warsaw (CBOS): Warsaw, Poland, 2010.
2. Cieloch, G.; Kuczyński, J.; Rogoziński, K. *Czas Wolny—Czasem Konsumpcji?* Państwowe Wydawnictwo Ekonomiczne: Warsaw, Poland, 1992.
3. Wróblewski, Ł. *Cultural Management. Strategy and Marketing Aspects*; Logos Verlag: Berlin, Germany, 2017.
4. Sobocińska, M. *Uwarunkowania i Perspektywy Rozwoju Orientacji Rynkowej w Podmiotach Sfery Kultury*; Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu: Wrocław, Poland, 2015.
5. Muszyński, W. *Nowy Wspaniały Świat? Moda, Konsumpcja i Rozrywka Jako Nowe Style Życia*; Wydawnictwo Adam Marszałek: Toruń, Poland, 2009.
6. Voinea, L.; Filip, A. Analyzing the main changes in new consumer buying behavior during economic crisis. *Int. J. Econ. Pract. Theor.* **2011**, *1*, 14–19.
7. Paluch, Ł.; Sroka, W. Socio-economic and environmental determinants of suistainable development of rural communes in małopolska province. *Acta Sci. Pol. Oecon.* **2013**, *12*, 65–76.
8. Defila, R.; Di Giulio, A.; Kaufmann-Hayoz, R. Sustainable Consumption—An UnwieldyObject of Research. *GAIA* **2014**, *23*, 148–157. [CrossRef]
9. Edbring, E.G.; Lehner, M.; Mont, O. Exploring consumer attitudes to alternative models of consumption: Motivations and barriers. *J. Clean. Prod.* **2016**, *123*, 5–15. [CrossRef]
10. Mont, O.; Plepys, A. Sustainable consumption progress: Should we be proud or alarmed? *J. Clean. Prod.* **2008**, *16*, 531–537. [CrossRef]
11. Schor, J.B.; Craig, J.; Thompson, E. *Sustainable Lifestyles and the Quest for Plenitude: Case Studies of the New Economy*; Yale University Press: Yale, CT, USA, 2014.
12. Evans, D. Consuming conventions: Sustainable consumption, ecological citizenship and the worlds of worth. *J. Rural Stud.* **2011**, *27*, 109–115. [CrossRef]
13. Olsen, M.C. *The Logic of Collective Action: Public Goods and the Theory of Groups*; Harvard University Press: Cambridge, MA, USA, 1965.
14. Jastrzębska-Smolaga, H. *W Kierunku Trwałej Konsumpcji. Dylematy, Zagrożenia, Szanse*; Wydawnictwo Naukowe PWN: Warsaw, Poland, 2000.
15. Vringer, K.; Heijden, E.; Soest, D.; Vollebergh, H.; Dietz, F. Sustainable Consumption Dilemmas. *Sustainability* **2017**, *9*, 942. [CrossRef]
16. Wróblewski, Ł. Application of marketing in cultural organizations: The case of the Polish Cultural and Educational Union in the Czech Republic. *Cult. Manag. Sci. Educ.* **2017**, *1*, 79–92. [CrossRef]
17. Kolb, B.M. *Marketing for Cultural Organisations: New Strategies for Attracting Audiences to Classical Music, Dance, Museums, Theatre & Opera*; Thomson Learning: Cork, Ireland, 2005.

18. Evans, D. Thrifty, green or frugal: Reflections on sustainable consumption in a changing economic climate. *Geoforum* **2011**, *42*, 550–557. [CrossRef]

19. Lorek, S.; Spangenberg, J.H. Sustainable consumption within a sustainable economy-beyond green growth and green economies. *J. Clean. Prod.* **2014**, *63*, 33–44. [CrossRef]

20. McDonald, S.; Oates, C.J.; Alevizou, P.J.; Young, C.W.; Hwang, K. Individual strategies for sustainable consumption. *J. Mark. Manag.* **2012**, *28*, 445–468. [CrossRef]

21. Lisiński, M. Structural Analysis of the Management Science Methodology. *Bus. Manag. Educ.* **2013**, *11*, 109. [CrossRef]

22. Biesta, G. Pragmatism and the Philosophical Foundations of Mixed Methods Research. In *SAGE Handbook of Mixed Methods in Social & Behavioral Research*; Tashakkori, A., Teddlie, C., Eds.; SAGE: Thousand Oaks, CA, USA, 2010.

23. Dacko-Pikiewicz, Z.; Wróblewski, Ł. Spatial range of the influence of the philharmonic institutions in Katowice. *Forum Sci. Oecon.* **2017**, *5*, 17–34.

24. *Liczba Samochodów w Polsce, Europie i Na Świecie*; Newsweek: Warsaw, Poland, 2018; Available online: https://www.newsweek.pl/styl-zycia/liczba-samochodow-w-polsce-europie-i-na-swiecie-statystyki/c6v0rwv (accessed on 10 October 2018).

25. Wróblewski, Ł. Consumer behaviour in the market of cultural services. *Am. J. Arts Manag.* **2018**, *1*, 1–13.

26. Ritzer, G. *Magiczny Świat Konsumpcji*; Warszawskie Wydawnictwo Literackie Muza S.A.: Warsaw, Poland, 2004.

27. Ritzer, G. *Makdonaldyzacja Społeczeństwa*; Wydawnictwo Literackie Muza S.A.: Warsaw, Poland, 2005.

28. Assadourian, E.; Prugh, T. (Eds.) *State of the World 2013. Is Sustainability Still Possible?* Island Press: Washington, DC, USA, 2013; Available online: http://www.worldwatch.org/bookstore/publication/state-world-2013-sustainability-still-possible (accessed on 10 March 2018).

29. Assadourian, E. The Path to Degrowth in Overdeveloped Countries. In *State of the World 2012: Moving toward Sustainable Prosperity*; Worldwatch Institute, Island Press: Washington, DC, USA, 2012; Available online: https://www.researchgate.net/publication/283415624_The_Path_to_Degrowth_in_Overdeveloped_Countries (accessed on 10 October 2018).

30. Akenji, L. Achieving absolute reductions in material throughput and energy use in society. *J. Clean. Prod.* **2013**, *65*, 1–2. [CrossRef]

31. Akenji, L.; Bengtsson, M. *Making Sustainable Consumption and Production the Core of the Sustainable Development Goals*; Institute for Global Environmental Strategies: Kanagawa, Japan, 2014.

32. Borys, T. *Analiza Istniejących Danych Statystycznych Pod Kątem Ich Użyteczności Dla Określenia Poziomu Zrównoważonego Rozwoju Transportu Wraz z Propozycją Ich Rozszerzenia*; Raport z realizacji Ekspertyzy; Ministerstwo Inwestycji i Rozwoju: Warsaw, Poland, 2008; Available online: http://www.mir.gov.pl/Transport/Zrownowazony_transport/Dokumenty_i_opracowania/Documents/Analiza_danych_statystycznych_zrownowazony_transport_2008.pdf (accessed on 10 March 2018).

33. Holden, E. *Achieving Sustainable Mobility*; Ashgate Publishing Limited: Aldershot, UK, 2007.

34. Litman, T. Measuring transportami on: Traffic, mobility and accessibility. *ITE J.* **2003**, *73*, 28–52.

35. *Uczestnictwo Polaków w Kulturze i Formy Spędzania Czasu Wolnego*; Ariadna: Warsaw, Poland, 2018; Available online: http://ciekaweliczby.pl/zycie-kulturalne-sposoby-spedzania-czasu-wolnego-polakow/ (accessed on 10 October 2018).

36. Borys, T. Zrównoważony rozwój i jakość życia człowieka czyli krótka historia o trzech drogach i postawach życiowych. *Ekonatura* **2011**, *5*, 28–30.

37. Rogall, H. *Ekonomia Zrównoważonego Rozwoju: Teoria i Praktyka*; Wydawnictwo Zyski i S-ka: Poznań, Poland, 2010.

38. Zaręba, D. *Ekoturystyka*; Wydawnictwo Naukowe PWN: Warsaw, Poland, 2006.

*Article*

# From Culture 1.0 to Culture 3.0: Three Socio-Technical Regimes of Social and Economic Value Creation through Culture, and Their Impact on European Cohesion Policies

**Pier Luigi Sacco** [1,2,3,4,*], **Guido Ferilli** [1] **and Giorgio Tavano Blessi** [1]

[1] Department of Humanities, IULM University Milan, Via Carlo Bo, 1, 20143 Milano, Italy;
guido.ferilli@iulm.it (G.F.); g.tavano@iuav.it (G.T.B.)
[2] RLL, Boylston Hall, Harvard University, Cambridge, MA 02138, USA; pierluigi_sacco@fas.harvard.edu
[3] metaLAB (at) Harvard, 42 Kirkland Street, Cambridge, MA 02138, USA; pierluigi@metalab.harvard.edu
[4] Bruno Kessler Foundation, Via Santa Croce, 77, 38122 Trento, Italy; psacco@fbk.eu
[*] Correspondence: pierluigi.sacco@iulm.it

**Abstract:** We develop a new conceptual framework to analyze the evolution of the relationship between cultural production and different forms of economic and social value creation in terms of three alternative socio-technical regimes that have emerged over time. We show how, with the emergence of the Culture 3.0 regime characterized by novel forms of active cultural participation, where the distinction between producers and users of cultural and creative contents is increasingly blurred, new channels of social and economic value creation through cultural participation acquire increasing importance. We characterize them through an eight-tier classification, and argue on this basis why cultural policy is going to acquire a central role in the policy design approaches of the future. Whether Europe will play the role of a strategic leader in this scenario in the context of future cohesion policies is an open question.

## 1. Introduction

Culture-led local and regional development has been a policy and media buzz across Europe and almost elsewhere in the world in the last two decades [1], and there is ample evidence of success stories, as well as of instructing failures, that provides a basis for an understanding of the structural and contextual conditions that enable (or block) culture's capacity to generate social and economic value [2–4]. Despite this, and especially so in moments of economic stagnation where culture is the natural target of public budget cuts [5–8], there is a widespread perception that the role and potential of culture in long-term competitiveness strategies is seriously under-recognized, and this is especially true for Europe [9].

It is therefore no wonder that culture plays a marginal role in the European cohesion policy and policy agenda [10], and that the share of public resources for cultural activities and initiatives falls short of the share of cultural and creative sectors in the total European Union Gross Domestic Product (GDP), despite the recognized importance of the latter [11]. Culture appeals to European policy makers for the promotion of social cohesion, but less so as a driver of economic growth [12]. Consequently, culture occupies a side seat in EU regional Smart Specialization Strategies [13], or becomes a tactical tool of local consensus building [14].

How can culture be at the same time a pillar of European identity and an important area of economic value and jobs creation and a marginal policy target? This apparently puzzling state of affairs is mainly the consequence of a persisting gap in the conceptualization of the role of culture in an advanced, knowledge-based economy as is the European one nowadays. Many policymakers outside the cultural sphere still regard the cultural sectors as a low-productivity branch of the economy, relying upon external subsidies more than autonomously creating economic value. As a consequence of this wrong conceptualization, cultural activities are regarded as a center of cost to be put under control, and pleas from sector stakeholders are perceived as partisan, rent-seeking advocacy.

The issue has a major national and trans-national dimension in the European policy debate. The relevance of successful case studies of culture-led development of cities and regions depends on the attitudes of national policymakers rather than local ones, as the latter behave as strategic followers [15]. Studies on the size and importance of the European cultural and creative sectors [16–18] raise some momentary attention but fail to enable a stable focus in the EU policymaking agenda priorities, due to the lack of a proper conceptual model of the role of culture in development processes. The importance of building a nation-wide awareness of the policy relevance of culture has become clear, for instance, when in 2013 a 100% cut in the cultural budget of Newcastle, one of the U.K.'s top success cases of culture-led development [19], although not free of controversy [20], was threatened. National newspapers covered the story [21], helping to turn the total cancellation into a, however shocking, 50% cut. Furthermore, even in the U.K. where cultural policy manages to make the headlines sometimes, the general trend heads toward a massive downsizing of cultural budgets [22]. In other EU countries, the trends are even worse.

Europe is therefore at risk of lagging behind in a field that elsewhere attracts strategic and policy attention and economic resources, such as in dynamic, Far-Eastern countries, such as South Korea, Hong Kong, Singapore and China, or in ambitious, small Middle-Eastern countries such as Qatar and Abu Dhabi. Also, Europe is not the incumbent leader in the global market for cultural and creative contents, to the advantage of the United States, due to EU countries' failure to implement a joint strategy in the field, which would be a rather formidable task in political terms due to the fact that several EU countries have carefully developed, and consistently deploy, their own national cultural strategies [23–26]. Currently, the bigger challengers to the USA are Japan and China, with Germany, U.K., France, and Italy all following at some distance. Future spending trends suggest a widening gap, as the Asia-Pacific area consistently outperforms Europe in this regard [27]. As of 2017, among the top ten countries for market size of their media industries, there were the four larger EU creative economies (Germany, U.K., France, and Italy, in this rank order), but their combined size totaled slightly more than half of the USA market size [28]. Moreover, Japan and China as the second and third countries for market size both vastly outperformed EU's largest creative economy, namely Germany, whose size amounted to slightly more than half of Japan's or China's. Finally, the combined market size of the three Far-Eastern countries in the top ten (Japan, China, South Korea, in this rank order, with Japan and China basically equivalent in size) again substantially outperformed that of the four top European creative economies (the combined size of the former being 34% bigger than that of the latter). Therefore, not only Europe's combined top creative economies cannot stand the comparison with that of the USA, but they are not even the closer geo-economic competitor, having been replaced in this respect by the combined top Far-Eastern creative economies. Also, new global players, such as Brazil and Canada, also made the top list (as well as South Korea itself, whose market size already outperforms that of both Canada and Italy), signaling an ongoing globalization of the cultural and creative arena, a trend likely to further consolidate as more emerging, densely populated countries, such as India, Mexico, or Turkey, are increasing both their production and investment focus and their consumption spending in the field.

This latter intuition is reinforced at the urban geographical scale (see Table 1), looking at the top fifteen global cities for entertainment and media spending in 2009, 2014, and the projection for 2018 [29]. In the future, non-European mega-cities will likely have a growing impact on the global

cultural and creative economy, exposing Europe to further competitive pressure. However, as it can be clearly seen by the trends highlighted in Table 1, European cities, with the exception of London, are already losing positions in the global ranking, with Madrid disappearing from the top fifteen in the 2010s and Berlin and Paris steadily sliding toward the bottom of the ranking. It can be expected that in the next decade, London could be the only European city left in the list.

**Table 1.** Top 15 global cities for entertainment and media spending, in billion $US. Source: [29].

| 2009 | | 2014 | | 2018 | |
|---|---|---|---|---|---|
| Tokyo | 17.6 | New York | 19.7 | New York | 23.6 |
| New York | 15.8 | Tokyo | 19.5 | Tokyo | 20.1 |
| London | 13.9 | London | 16.3 | London | 18.5 |
| Seoul | 8.6 | Seoul | 11.9 | Seoul | 13.5 |
| Sydney | 7.1 | Hong Kong | 9.1 | Hong Kong | 11.2 |
| Los Angeles | 6.9 | Los Angeles | 8.3 | Los Angeles | 9.9 |
| Hong Kong | 5.9 | Sydney | 8 | Sydney | 8.9 |
| Chicago | 4.7 | Chicago | 5.7 | Singapore | 6.7 |
| Berlin | 4.3 | Singapore | 5.4 | Moscow | 6.7 |
| Singapore | 4.1 | Berlin | 4.8 | Chicago | 6.5 |
| Paris | 3.8 | Moscow | 4.8 | São Paulo | 5.4 |
| Moscow | 3.2 | Paris | 4.4 | Berlin | 5.1 |
| Toronto | 3.2 | Toronto | 4.1 | Toronto | 5.0 |
| Madrid | 2.4 | São Paulo | 3.7 | Paris | 4.9 |
| São Paulo | 2.2 | Shanghai | 3.2 | Shanghai | 4.9 |

The picture that emerges therefore puts Europe under pressure in terms of its future relevance in the global cultural and creative contents arena, and all the more if major EU countries fail to coordinate strategically under a common EU platform. Fragmentation (and small population size) leaves EU countries below the critical size needed to achieve a leading global player status, and this even applies to Germany and the U.K., despite London's role as a global media and content capital, closely connected to its financial capital role (but with the pending uncertainty about the consequences of Brexit [30]).

The present paper offers some preliminary reflections in this respect by introducing a new conceptual framework for the understanding of the contribution of culture to economic and social value creation in terms of three different socio-technical regimes that have emerged over time. Such framework provides a basis for a rethinking of the role of cultural policies in future European cohesion and competitiveness strategies. Our framework also helps to explain why the contribution of culture to social and economic development tends to be overlooked by policymakers, and with what consequences. The logical scope of our framework is in principle not confined to Europe, but reflecting upon the European scenario is particularly useful in the light of the central role of Europe in the development of the cultural production regimes, which are the conceptual pillars of our reasoning.

## 2. Three (Complementary) Socio-Technical Regimes of Value Production: From Culture 1.0 to Culture 3.0

The misconceptions about the role of culture in the contemporary economic context can be traced back to the persistence of obsolete conceptualizations of the relationship between cultural activity and the generation of economic (and social) value added. To illustrate this point, we need to sketch out a basic, inevitably crude, account of the evolution of the relationship between the two spheres.

The emergence of a structured model of relationship between cultural production and the socio-economic context is intertwined with the construction of human relational structures and with the development of human cognition [31]. The socially embedded nature of cultural and artistic production in a grassroots regime has largely done without, for a long phase of human history, the social recognition of culture as an autonomous, socially legitimized sphere of activity, even

in already advanced socio-economies, such as those of the Ancient Empires where the arts were flourishing, but were also mainly instrumental to the celebration of political and religious power. Cultural production abilities had a prominent role in many spheres of the Ancient Empires social and economic life, from court entertainment to crafts [32], but the only meaningful identity to be recognized, celebrated, and transmitted in relation to them was that of the King itself, with the artist remaining a humble, anonymous presence. The identity and social role of the artist are gradually defined in classical Greece [33], and find their full-fledged formulation with the patronage model of Imperial Rome [34].

For centuries, artistic and cultural production as a clearly identified, socially legitimized sphere of activity has been structured by what we could call the Culture 1.0 regime, founded upon the concept of patronage, which is at the root of the first, and most ancient, socio-technical regime of value production through culture. Culture 1.0 is typical of a pre-industrial economy, where culture is neither a proper economic sector, nor it is accessible to the majority of potential audiences. The provision of culture is secured by the individual initiative of patrons. In its classical form, patronage is the province of individuals with considerable financial possibilities and social status, who derived them from sources other than cultural commissioning, but decided to employ some to secure to cultural producers the material means to make a living in exchange for the enjoyment of the outcome of creative production to be shared with their acquaintances. Patronizing culture may substantially enhance the patron's social image and reputation, and assume a sophisticated strategic character, like in Middle Age and, even more, Renaissance patronage [35,36]. However, as the resources are generated outside the cultural sphere, cultural production here lives on external subsidies, and could not survive otherwise. In the patronage relationship, moreover, the wage of cultural producers is not truly part of a market transaction, but rather of a symbolic, mutual exchange of gifts between the patron and the artist [37], a practice that still survives in some cultural realms [38], and finds intriguing developments in new, culturally-mediated social platforms [39]. However, this model can support only a limited number of cultural producers who entirely depend upon the discretion of the patron and limited audiences. Both production of, and access to, culture are therefore severely limited by economic and social barriers.

With the massive social changes associated with the industrial (economic) revolution and with the concurrent bourgeois (political) revolutions that led to the birth of the modern nation states, we witness a widening of cultural audiences, made possible by a few concurrent circumstances [40]. First, with the bourgeois revolutions questioning the privileges of the ruling classes, access to culture is gradually legitimized as a universal right that is part of the very idea of citizenship [41]. Second, with the steady improvement of the living conditions of the working classes, there is a corresponding increase in the willingness to pay for cultural entertainment [42]. Access to cultural goods and opportunities, however, remains limited until the outbreak of the "cultural" industrial revolution in the decades around the turn of the 20th century, which creates the technological conditions for the full emergence of cultural mass markets [42]. Meanwhile, the modern nation states had concurrently been developing new forms of "public patronage," allocating public resources to support culture and the arts for the social benefit. Therefore, we can finally speak of cultural public policies, and of the corresponding cultural policy models [43], which articulate public initiative in the cultural field in a variety of country-specific forms: "facilitator," "patron," "architect," "engineer," "elite nurturer," etc. [44], allowing for considerable local diversity in terms of mission, organization, design, and effectiveness.

The current notion of cultural public policy is still rooted in the Culture 1.0 (pre-industrial) regime, however evolved, although the debate on its role and scope in industrially advanced societies has a long, complex history [45]. The patronizing role is no longer exclusively in the hands of single individuals (even when they incarnate political institutions, as for Renaissance Princes or modern Kings), but becomes a public function, although in ways and forms that are sensitive to the socio-economic history of European nation-states [46]. Culture, however, is still economically un-productive, absorbing resources generated in other sectors of the economy. With the "cultural" industrial revolution around

the turn of the 20th century, however, the technological possibility of cultural mass markets becomes real, through the introduction of modern rotary printing, photography and cinema, recorded music, and radio broadcasting [47]. The portfolio of cultural products dramatically expands, while being made available to much wider audiences, at increasingly affordable prices, and by means of new, tailor-made business models and strategies [48]. The transition to the Culture 2.0 regime is now possible, that is, the second socio-technical regime of value creation through culture finally emerges.

In the Culture 2.0 regime, audiences expand significantly, whereas cultural production is still severely controlled by entrance barriers as the access to productive technologies is difficult and financially expensive, such that would-be cultural producers are filtered by complex selection systems that differ across cultural sectors. Culture 2.0 is a new form of relationship between cultural production and the generation of economic value, dominated by the expansion of the cultural and creative industries [49]. Unlike Culture 1.0, in Culture 2.0 there are cultural and creative activities that produce economic value and become profitable, but they are a branch of a specific, minor sector of the economy if compared to the main manufacturing ones: the entertainment industry.

The idea of cultural mass production that became possible in the Culture 2.0 regime was far from universally welcomed in Europe [50], as it represented a direct challenge to the existing systems of control of cultural production, and of legitimization by the gatekeepers of publicly patronized resources [51]. From the European perspective of the time, cultural mass production could be regarded as a tool of mass manipulation [52]. However, in the USA, such concerns were less relevant due to the lack of an idealized, anti-commercial notion of culture nurtured by centuries of patronage and strategic gatekeeping by cultural elites. Quite to the contrary, the need to build up a compelling national narrative for the new global power found in the nascent cultural industry the ideal platform [53]. The enthusiastic adoption of the cultural industry in its heroic phase in the USA marks a departure from European culture, its intimidating highbrow rituals, and its defense of a paternalistic, publicly funded and monitored governance of cultural production.

The undisputed leadership of the USA on the cultural industry of the 20th century is a consequence of this crucial passage: the demise of market-oriented cultural production in Europe [54], despite that most of the technological innovations behind the cultural industry revolution were developed there, and despite its so far undisputed global leadership in the cultural sphere (a consequence of the 19th century colonial rule). The uncontested development of a mass-oriented cultural industry in the USA enabled the latter to seize the opportunity set forth by the rapid global growth of mass cultural markets, and to transform Europe itself in an export market for its own cultural content [55]. In Europe, cultural and creative industries flourished in all major fields—publishing, music, cinema, radio-television, design, fashion, and communication—but their relationship with the non-industrial fields of the cultural core [56], the ones that identify more with the European cultural tradition (visual arts, performing arts, and heritage) remained problematic. Moreover, the success parameters for European cultural industry are less directly identified with market performance with respect to the USA: gatekeepers approval and cultural stigma still play a major role, and for cultural producers "excessive" market success and recognition may be regarded by peers as a sign of capitulation of artistic excellence to the lure of "commercial" culture.

Only recently has Europe fully acknowledged the developmental potential of the cultural and creative industry [57], but the gap opened by decades of cautious suspicion as opposed to the pervasive U.S. control of the global market through decades of consistent strategies and investments cannot realistically be closed [58]. This recent (re-)discovery of the economic potential of cultural and creative industries in Europe, with creative industries gaining central importance for their connection to the tradition of historical European manufacture, may be seen as a mature development of the Culture 2.0 regime [59]. Public policies now increasingly focus upon audience development, but also upon entrepreneurial development in the cultural and creative sectors, due to a growing recognition of their economic impact [60]. However, Europe now faces the risk of overreaction from late adoption, excessively focusing upon the profitability of single sectors, and concentrating support toward

the best-performing production segments only, threatening the viability of the whole industry by disregarding the complex ecological relationships that tie the sectors together [61].

Designing appropriate policies for the cultural industries is a particularly difficult task in view of their specificities, and of the peculiarities of their entrepreneurial cultures, that in Europe have developed relatively late, and with difficulty [62]. To understand the industrial organization logic of cultural and creative sectors, standard economizing models of profit maximizing and instrumental rationality are partially misleading [63]. In the cultural and creative sphere, expressive rationality, intrinsic motivation, and social exchange are essential aspects, often leading to forms of interaction that are not mediated by markets [64]. Moreover, the global financial crisis, that since 2008 has severely hit Europe, has negatively influenced Europe's capacity to support its cultural and creative industries at the scale that would be required by global competition [65], and especially so in view of the huge investments carried out by emerging global leaders such as China [66]. If this can be seen as a limitation, it also paved the way to new forms of experimentation in cultural production, that rather than pushing the industrial dimension, have focused upon community involvement and upon bottom-up participation. This turn reflects the emergence of a yet another regime of cultural production where Europe can play a true leadership role if it is ready enough to acknowledge its potential and to embrace it consistently: despite the short-lived history of Culture 2.0, a new wave of social and technological innovation is already mounting and preparing the emergence of yet another socio-technical regime of value creation that we call Culture 3.0 and which is still in its early stage.

Culture 3.0 is characterized by a wave of social and technical innovations that, unlike Culture 2.0 at the turn of the 20th century, is no longer focused upon expanding the demand (audience) side, but is driven by a structural transformation of the production side. The technologies behind the birth of the cultural industry (radio, television, cinema, photography, recorded music, industrial printing) are all centered upon the massive, and cheap, reproduction of content. They make access to cultural content easier and affordable. The new wave of innovation, instead, is making the production of content easy and affordable [67]. Today, digital gear for professional treatment of text, still and moving images, sound, and multimedia is available to everyone, easy to learn, cheap, and undemanding in terms of physical equipment, something that would have been unthinkable two decades ago [68]. Thus, if the Culture 2.0 "revolution" has been characterized by an explosion of the size of cultural markets, the Culture 3.0 "revolution" is characterized by the explosion of the pool of producers, making it increasingly difficult to draw a meaningful distinction between cultural producers and users themselves [69]. Producers and users are now interchanging roles in a spectrum of possibilities where access to contents produced by others, and circulation of own content to others, are naturally juxtaposed and generally occur through the same platforms [70].

In this new scenario, the role of cultural markets as distributional channels is challenged by the diffusion and expansion of digital platforms where communities of practice self-organize around production and sharing of content, and where members interact through non-market-mediated exchanges, a new possibility in-built in the architecture of digital online platforms, which still leaves ample space for free appropriation by profit-oriented platform providers [71]. The hallmark of the Culture 3.0 regime is the transformation of audiences (the target reference of cultural industry) into practitioners (with its consequently entangled notion of authorship and intellectual property). Access to cultural content loses its traditional passive, appreciative character and becomes a form of creative appropriation by users [72]. Access stimulates individuals to acquire skills to appropriate and manipulate cultural contents in personal ways [73]. Rather than just listening to stories, there is an urge to participate in the narration, to negotiate the unfolding of the story, and likewise for any other form of cultural production. Also, cultural content production and dissemination becomes socially pervasive and ceases to be confined in the entertainment sphere, to become part of the texture of everyday life, as reflected by consumption practices [74]. It is also important to stress how the notion of participation implied by Culture 3.0 cannot be subsumed into the more familiar notion of prosumerism [75], where bottom-up production of content tends to be market-mediated, whereas in Culture 3.0 the mediation

of the market is not an essential element of participation. For this reason, prosumerism is more typical of an advanced stage of the Culture 2.0 regime than of the Culture 3.0 one [76,77]. However, in this transitional phase in which mature Culture 2.0 forms and early Culture 3.0 ones coexist and interact, it is not uncommon to observe hybrid situations in which elements of prosumerism and of active cultural participation mingle in a variety of ways [73,78]. In fact, the notion of prosumerism has also been used, in the absence of a full-fledged alternative paradigm, to categorize what would more properly be seen as a form of plain active cultural participation [79].

Culture 3.0 irreversibly transforms what previously was a separate macro-sector of the economy, the cultural and creative industry, into a web of layered, pervasive structural relations among all sectors of the economy and society. Its understanding requires a sophisticated, systemic representation of the structural interdependencies between the cultural and creative fields, which are already mutually interdependent, and the other spheres. This change of perspective has especially important consequences for a strategically effective approach to policy design.

## 3. The Strategic Importance of Active Cultural Participation

A signal of a widely-felt need to expand the traditional Culture 2.0 focus on the sectorial growth of cultural and creative industries in new directions is the increasing attention paid to the effects of cultural and creative production in terms of positive creative spillovers toward other sectors [80]. Arguments about the spillover effects of culture and creativity have been so far rather un-systematic, without a well-defined conceptual background, often failing to make a convincing case for policymakers. Reasoning in terms of the Culture 2.0–3.0 transition may help elucidating why and how cultural spillovers matter for the general economy.

The key point is shifting the focus from the economic outcomes of cultural activity to the behaviors that cause them. To understand the effects of culture outside of the cultural sphere, we should consider how cultural access changes the behavior of individuals and groups [81], fostering active cultural participation, the cornerstone of the Culture 3.0 regime. The active character of cultural participation goes beyond the passive absorption of cultural stimuli, motivating individuals to make use of their skills to contribute to the process: not simply hearing music, but playing; not simply reading texts, but writing, and so on. By doing so, individuals challenge themselves to expand their capacity of expression, to re-negotiate their expectations and beliefs, to reshape their own social identity. We can consider this behavioral dynamic as a knowledge-intensive form of the capability building process highlighted by Amartya Sen [82], supplemented by research insights on the vocational socio-psychological dimension of learning [83]. Clearly, capability building is already enabled, and significantly so, in the passive cultural access mode that is typical of Culture 1.0 and 2.0, but the active component added by Culture 3.0 makes it more deeply ingrained into individual motivational systems and social attitudes, and helps re-contextualize the importance of cultural access beyond the leisure-entertainment sphere, as a pillar of everyday practices in all areas of human activity. As already emphasized, capability building and skills acquisition is not merely an individual activity, but a highly social one, and crucially depends upon the social environment [84]. Moreover, in social contexts marked by strong social incentives toward active cultural participation, individuals are more likely to be interested in active socio-political participation, and vice versa.

The Culture 3.0 regime also entails an alternative approach to the financial sustainability of cultural production and participation. Whereas in Culture 1.0, such sustainability is ensured by the patron's provision, be it in terms of personal funds or of public resources, such as in the case of public patronage, and whereas in Culture 2.0 it is rather ensured by the spending capacity of the audience that purchases cultural and creative products on the market, in Culture 3.0, we witness the emergence of new forms of financing that leverage upon the community structure itself, as in the case of crowdfunding schemes [85–87]. One should not, however, consider crowdfunding in its currently explored forms as the final and characteristic forms of financial sustainability of the Culture 3.0 regime, as it is likely that this and other forms will further develop in the near future. The Culture 3.0 regime is

in its early phase, and therefore we need to eschew the temptation of crystallizing its current features as mature expressions of such a regime. The next few years will certainly provide rich material for further analysis and conceptualization in this vein as well as in many others.

One thing that can be stated with confidence, however, is the increasing future emphasis on active cultural participation in its many forms and meanings. Through active participation, individuals are not simply exposed to cultural experiences, but are encouraged to explore and customize the rules that generate them; they learn to experiment with the "source code" that is behind the generation of cultural meaning. Active participation, on the other hand, fosters interest and curiosity toward exploring cultural expressions from others: a classical virtuous social circle of capability building, human development, and social cohesion. In the Culture 3.0 context, individuals organize their cultural interests as intermittent runs of expression and reception, i.e., moments in which they are active and "transmitting" and moments in which they are passive and "receiving," as equally necessary aspects of cultural participation. The acquisition of cultural skills motivates them to develop capacity for expression, raises the level of attention, critical filters toward received contents, prompts further willingness to transmit new contents, and so on, paving the way to new forms of open innovation and co-creation [88], to more constructive uses of social media platforms [89], to new knowledge-intensive and experience-intensive socio-economic practices [90], etc., a social efflorescence of which we are currently witnessing just the early developmental steps.

Some of the positive systemic effects of cultural access can also be generated within a traditional mode of passive reception, e.g., within the passive audience mode, but by confining ourselves into this (obsolete) perspective, we are unable to appreciate the ongoing process, but only some details. There are at least eight different areas where cultural participation can cause significant macroeconomic effects that are not limited to the direct economic impact of the cultural and creative industries on GDP and jobs, and which can benefit in turn from strategic complementarities with the cultural and creative sectors. We briefly survey them in the next section. As we will see, they provide the basis for an innovative rethinking of the aims and scope of cultural policies in a Culture 3.0 regime.

On the other hand, not all forms of cultural access have an unambiguously positive effect. There is ample evidence that digitally-mediated access to content can be a source of a vast range of pathologies and behavioral disorders, such as internet addiction [91], sedentary behaviors and obesity associated to excessive screen time [92], sleep [93] and attention [94] disorders, depression and social phobia [95], and so on. Likewise, digital access and participation have caused the emergence of a whole range of new social issues or of the amplification of old issues at a new, unprecedented scale. Examples abound, such as fake news and news manipulation and the consequent crisis of social "objectivity" [96], online bullying and shaming of people with different opinions and views [97], and the diffusion of pseudoscience [98] and conspiracy [99] theories. Digital media are clearly not the only ones that can provoke such negative effects, as shown, for instance, by the large literature on TV-related disturbances [100,101]. Equally serious concerns might be raised by future digital platforms and environments such as immersive virtual and augmented reality and/or artificial intelligence. As a matter of fact, however, all new cultural media have raised concerns and sparked fears at the time of their introduction and diffusion. What is needed is a balanced assessment of the potential and threats, and a careful design, testing and implementation of targeted therapeutic approaches [102] and capability building strategies [103], in the context of a comprehensive public health strategy to prevent and minimize negative effects and to enable people and communities to successfully adapt to the new scenario. This is what the human kind has always done when facing challenging environments [104], and adaptation to increasingly complex digital environments is no exception in this regard.

## 4. The Power of Cultural Participation: A 8-Tiers Approach

A detailed discussion of the theoretical foundations of the structural interdependencies that we present in this section is outside the scope of the present paper, which aims at sketching a first, raw picture of the social and economic impacts of cultural participation as the key driver of the Culture

3.0 socio-technical regime of value creation. The reader will find more detailed accounts, analysis, and data in the provided references. The eight tiers that we present and discuss in this paper have been chosen as the ones for which research activity, policy design and practice (or at least conceptual development) are significant enough to warrant their inclusion in a first list of areas of interest to assess the potential social and economic impacts of cultural participation. The list is by no means exhaustive and it is possible that further areas will add up in the future. For this reason, one should regard this analysis as a first exploration.

Thinking of the spillover effects of culture, a first area which has been the object of exploration is innovation, not simply within the cultural and creative sectors, but in the economy as a whole [105], and there is an interesting literature that sheds some light upon this important functional link [106]. Here, the effect of active cultural participation may be especially appreciated. Direct involvement in, and active experience of the rules of, creative content production enables individuals to learn how innovative meanings and practices can be constructed, and how they can challenge and de-structure previous beliefs, prejudices, and attitudes [107]. The more such activity is socially pervasive, the more the socio-cognitive effects of cultural participation upon attitudes toward innovation and change become relevant and visible. As argued by Phelps [108], massive bottom-up capability building is the most effective route to the creation of an innovation-driven economy and society. As innovativeness has not simply to do with research and development (R&D) labs distilling new ideas, but with the deployment of effective social transmission, translation, and implementation of new ideas into business practices through the cooperation of a myriad of social and economic actors (one may then speak of "innovation systems" [109–111]), it is impossible to dismiss the importance of achieving and strengthening a favorable societal orientation toward innovation. Likewise, the implications of the latter in terms of enhancement of several dimensions of competitiveness are widely agreed upon. Through its (still underrated) impact upon orientations toward innovation, active cultural participation might bring about indirect macroeconomic impacts, which could in principle measure up to the direct economic turnover of the cultural and creative macro-sector, although an appropriate measurement approach in this field has not been fully developed yet.

Cultural participation may then be thought of as a driver of endogenous economic growth [112,113] in ways that are complementary to the extensively studied education-driven ones. Despite supporting evidence is still fragmentary, mainly due to lack of specific research, it may be interesting to consider a comparison between the rankings of EU countries in terms of their innovative capacity measured by the 2017 European Innovation Scoreboard metric [114], and of the Index of Cultural Practice as measured by the Eurobarometer [115] survey, the latest available source for this indicator. Each ranking has been divided into three performance classes (top, average, and bottom). For innovation, the top performance class corresponds to innovation leaders plus strong innovators according to the Innovation Scoreboard classification; the average class to moderate innovators, and the bottom class to modest innovators according to the same classification. For culture, the top performance class corresponds to countries whose combined amount of very high plus high percentage levels of cultural practice totals 20 or higher; the average performance class to countries whose corresponding combined percentage lies between 10 and 20, and the bottom performance class to countries whose corresponding combined percentage lies below 10. The following classification of EU countries then emerges (Table 2).

**Table 2.** EU 28 performance classes in cultural practice and innovation. Source: [114,115].

| | |
|---|---|
| Top performance in both innovation and cultural practice | Sweden<br>Denmark<br>The Netherlands<br>U.K.<br>Luxembourg<br>Finland<br>Slovenia |
| Top performance in innovation and average performance in cultural practice | Germany<br>Belgium<br>Austria<br>Ireland<br>France |
| Top performance in cultural practice and average performance in innovation | Latvia<br>Lithuania<br>Estonia |
| Average performance in both innovation and cultural practice | Spain<br>Malta<br>Czech Republic<br>Poland<br>Slovak Republic<br>Croatia |
| Average performance in innovation and bottom performance in cultural practice | Cyprus<br>Portugal<br>Greece<br>Italy<br>Hungary |
| Bottom performance in both innovation and cultural practice | Bulgaria<br>Romania |

It is interesting to notice how, despite the two indicators apparently measuring completely different phenomena, there is a clear association among variables, which establishes a distinctive pattern across EU countries. No top performing country on one dimension is a bottom performer on the other, and vice versa. Moreover, a clear geographical pattern emerges, with the leading group consisting of Northern European countries with the addition of Slovenia; the next best group hosts Central European countries with the addition of Ireland and the three Baltic States; finally, the other groups in decreasing order of performance consist of different mixes of Mediterranean and Eastern European countries. Clearly, many intervening factors may be at work here, and no causal inference can be drawn from such data. Nevertheless, such evidence is in principle compatible with a possible role of active cultural participation as a stimulator of societal innovation thinking [116,117], and even more fundamentally, as a social platform of pre-innovation. In this perspective, it would be interesting to investigate whether the top-performing countries for cultural practice are characterized by socio-cognitive environments that, as an effect of a sustained, society-wide acquisition of specific cognitive capabilities through cultural participation, also provide a more favorable context for the diffusion of innovation, as compared to countries with lower levels of cultural practice. This hypothesis calls for a substantial amount of future research, and in case it is corroborated, would open a new line of both scientific and policy design work on the cross effects of cultural and innovation strategies at the national and regional levels.

A second important link points to the politically critical area of welfare. There is an impressive amount of evidence that cultural participation may have significant effects on life expectation [118], but more recent research seems to suggest that the impact is equally significant in terms of self-reported psychological well-being [119–121]. In particular, it turns out that cultural participation is the second predictor of psychological well-being after (presence/absence of) major diseases, and in this regard,

its impact is comparable to that of income, and significantly stronger than that of variables such as place of residence, age, gender, or occupation. The effect is particularly remarkable for the seriously ill and the elderly, where psychological well-being gaps between subjects with high versus low cultural access are huge. Moreover, the effect of social relations on the well-being consequences of cultural participation is relevant: a given level of cultural participation has a bigger impact on individual well-being in social contexts with high cultural participation than in low-participation ones [122].

Another relevant channel of positive spillovers from cultural participation might then relate to cultural welfare. If cultural participation strongly affects the well-being perception of the ill and the elderly, and provided that welfare treatment costs are a major public finance burden in the EU, suitable culturally-focused prevention strategies, if causing even a small reduction in the rates of hospitalization and in the resort to treatment across such categories, could entail significant savings of public resources. Such savings could be used to fund the program itself and be partially relocated to other socially valuable uses, while substantially improving quality of life of critically disenfranchised citizens [123]. Some preliminary evidence in this regard [124] shows how, based on Italian census data, higher levels of cultural participation have a positive impact on discharge rates from mental illness treatment. Once again, there is a new area of cultural policy action with potentially significant macroeconomic effects, and in addition, one that can disclose new kinds of careers and opportunities for cultural professionals.

A third important link regards sustainability. The increasing emphasis on the social dimensions of sustainability, as highlighted by Agenda21, has sparked a reflection on whether socially transmitted behaviors, habits, and customs may influence the effectiveness of resource-saving programs and strategies. In this respect, however, attention has been mainly devoted to traditional forms of social mobilization [125]. However, again, cultural participation may have an important indirect role in fostering social mobilization and awareness about the social consequences of individual behaviors related to environmentally critical resources. For instance, working on data from the Italian Multipurpose Survey from Italy's National Institute of Statistics (ISTAT), Crociata et al. [126] have proven that there is a strong association between cultural participation and effectiveness of differentiated waste recycling. Moreover, the social dynamics of recycling behavior seems to be sensitive to proximity effects [127,128], so that there can be a potential for combined action of cultural policies improving cultural participation, and the socio-spatial transmission of pro-social (environmentally responsible) behaviors. Once again, the likely reason is that the acquisition of competences and skills from cultural practice may spill over significantly in terms of individual capacity of successfully classifying and stocking different types of waste, and more generally in terms of individual awareness of the social value of, and motivation for, embracing environmental responsibility in everyday choices.

A fourth important link is to social cohesion, also in view of the recognition of culture as the fourth pillar of sustainable development [129]. There is again ample evidence of how certain types of cultural projects may be effective for juvenile crime prevention, pro-social vocational orientation, or conflict resolution [130–132]. We are currently already beyond the exploratory phase in this field, so that some of the most successful projects are now providing the basis for full-fledged policy approaches, as in the case of musical education and juvenile orchestras [133]. As far as music is concerned, it has been proven that joint music-making in early childhood is effective for the promotion of pro-social behavior [134], and therefore musical education can legitimately be regarded as a pillar of a new generation of social cohesion strategies. One relevant effect of active cultural participation on social cohesion is in terms of human development, for instance by driving the self-esteem in subjects of infants and youth at high social risk of deviance onto a constructive, rather than self-destructive, developmental path. Another, equally relevant one concerns building a capability basis for intercultural dialogue and exchange [135], a theme that in Europe's current socio-political context acquires an unprecedented importance. In this regard, the indirect effect of cultural participation is creating the basic trust conditions for dialogue

through appreciation of cultural diversity and the overcoming of negative social stereotyping [136], often linked to ethnicity factors [137].

There have been strategic approaches to cultural infrastructure building that have explicitly addressed the social cohesion dimension, as in the case, e.g., of the Maisons Folie network of cultural facilities created by the Région Nord-Pas de Calais in the context of the Lille 2004 European Capital of Culture program [138]. The most successful *Maisons* have become spaces of multi-cultural interaction and exchange in socially critical areas, facilitating mutual knowledge and acquaintance of people belonging to different, and often mutually segregated, ethnic communities. The indirect effects of cultural participation on social cohesion stem from the fact that increased participation provides individuals and groups with new skills to conceptualize and understand diversity, and to reprogram their behavior from defensive hostility to communication, while at the same time uncovering new possibilities for personal development [139]. Looking at the costs of inter-ethnic and inter-cultural social conflict across Europe, this area qualifies as one of the most promising and urgent in terms of a reformulation of the cultural policy agenda, and of the corresponding macro-impact.

A fifth link is to new entrepreneurship models. There is a clear perception that the cultural and creative field may be a powerful incubator of new forms of entrepreneurship [140,141], and the rapid growth of the online content industries is setting the stage for a new entrepreneurial culture with a strong generational identification [142]. At the EU level, this scenario is being taken seriously enough [143], but the development of creative entrepreneurship still lags behind, if compared to the attention and resources devoted to entrepreneurship development and support in other sectors of the economy [144]. Making space for a new, successful generation of creative entrepreneurs in Europe is essential to secure the future competitiveness of European cultural and creative productions, and to build the premises for a European leadership in the emergent knowledge economy [145]. Moreover, these new forms of entrepreneurship could significantly improve the employability of graduates from the humanities, whose appeal to employers in more traditional spheres of innovative entrepreneurship is generally considered weaker than that of quantitative and technology majors [146]. However, innovative culture-related forms of entrepreneurship might prove important in tackling the new societal challenges of employability and shorter worktimes in the fourth industrial revolution context, as well as the new, unprecedented issues of designing social environments characterized by pervasive man–machine interaction [147].

The sixth, further major link is with lifelong learning and the development of a learning society. The connection between effectiveness of lifelong learning and intelligence, meant as the development of capacities allowing the successful adaptation to, and the selection and shaping of, the environmental context, has been well established [148]; again, there is a clear relationship between the evolution of this form of intelligence and acquired cultural capital [149], an effect that may be regarded as a consequence of strong evolutionary selection pressures [150]. The association between active cultural participation and lifelong learning is thus a very natural one, and unlike others, is not particularly surprising. In fact, one might even think of active cultural participation as a specific form of lifelong learning [151]. It is however an open point to check whether, and to what extent, there is a strong, stable association between breadth and effectiveness of lifelong learning programs and (active) cultural access figures [152]. Research on this topic would be of great interest, not to speak of its implications in terms of synergies between educational and cultural policies, and of corresponding endogenous growth mechanisms. As lifelong learning takes a central place in EU long-term strategies [153], it could be of interest to launch innovative programs that exploit the strategic complementarities between lifelong learning and cultural communities of practice [154], as experimentations on advanced platforms of educational services and of cultural and creative production at the same time.

A seventh link is with soft power. Starting from the seminal work of Nye [155], today there is a strong awareness of the potential of cultural and creative production in contributing to increase the visibility, reputation, and influence of countries and regions at all levels of international relationships, from the political to the economic [156], and to the social [157]. The effective deployment of soft power

may open up new markets to national and local products through the identification and emulation dynamics which are typical of post-industrial consumption [158], may attract more visitors [159], talents and investments [160], and may stimulate new, sophisticated strategies of value creation through branding and marketing tools [161]. The Monocle Institute for Government soft power index [162,163] reveals how, at the beginning of the current decade, EU countries stably occupy 6–7 among the 10 top positions in the global soft power ranking, but the scenario is rapidly evolving and many non-European contenders are challenging the historical incumbents such as major European countries, USA, and Japan; for example, South Korea's *Hallyu* [164,165], or Australia [166], Canada [167], and New Zealand [168]. As with the lifelong learning link, the relationship between soft power and cultural and creative production (and participation) is so strong and direct that it does not need extensive justification. What is less mechanical, however, is finding out effective ways of mainstreaming a country or region's cultural and creative contents to global cultural and economic platforms [169]. In this field, a primary role is played by national cultural diplomacy networks (British Council, Alliance Française, Goethe Institut, IFA, etc.). At the EU level, after a long period of neglect of European-focused forms of soft power [170], there has been a revamping of interest in cultural diplomacy [171], aimed at repositioning Europe in the emerging scenario of strongly multipolar soft power [172]. This is therefore another area where investing in cultural production and participation will likely cause relevant indirect macro-effects on Europe's competitive potential, visibility, and socio-political influence.

Finally, an eighth link can be traced to local identity. In recent times, considerable emphasis has been put on the role of new, spectacular cultural facilities in the catering for global visibility of urban or regional milieux [173], and more generally on the role of culture in re-defining the social and symbolic foundations of place and of its development [174]. This is probably one of the best understood indirect macroeconomic effects of cultural production and participation, but it is worth remarking how such an effect has been often misread as the last version of a commodified economy of mass spectacle [175]. Quite the contrary, the developmental potential of a culturally-rebuilt local identity lies in the capacity to stimulate new, inclusive dynamics of the production of cultural content and new modes of cultural access by the local community [176], as a consequence of the new opportunities created by the attraction of outside resources, as it has been for instance the case with the already cited NewcastleGateshead urban renewal strategy [177]. The crucial developmental impact of culture on local identity is to enable the community to reweave a long-term view of its development, and to elaborate visions and make choices accordingly. One of the major factors of crisis of contemporary Europe is the overwhelming influence of very short-term concerns on the public agenda, which paves the way to populism and instrumental conflictual local narratives [178], also due to oversimplified approaches to community participation and involvement in local regeneration processes [179]. In this respect, for instance, serious gaming may become a very practical and useful tool to invite residents to new forms of active, playful cultural participation allowing them to look at their own local reality through the eyes of other ethnic groups and/or from a totally different socio-economic perspective than their familiar one [180], or to be fully engaged in the co-design of public spaces and facilities [181]. In this sphere, the controversy upon the effectiveness and focus of European cohesion policy [182] makes it particularly evident how necessary it is to pour new energy into the civic foundations of European societies as a basis to revitalize local identities and to contrast the idea of Europe as a remote technocracy, not in sync with the lives, concerns and issues of European citizens [183]. Rather than helping marginal territories to regain confidence and energy, and contrary to stated intentions and goals, European policy discourses on local identity have de facto been so far unable to counter nostalgic or self-segregating narratives of ethnicity and particularism [184], as well as vicious circles of local identity impoverishment and stereotyping, finalized to tourist attraction [185]. A major rethinking is called for, in terms of responsible re-appropriation of community assets [186]. A new generation of participatory development projects based upon bottom-up creation of culturally mediated social capital might be particularly effective in this respect [187–189]. Rather than breaking new ground,

in this case the role of active cultural participation may be that of refocusing already ongoing programs and initiatives [190].

## 5. Conclusions: Culture 3.0 and the Future of Cohesion Policies in Europe

The Culture 3.0 framework presented in this paper is an original theoretical construct that cannot be found in the previous literature, although it systematizes a vast amount of previous research and analysis, as discussed above. It should be seen as a conceptual canvas to stimulate future research in a more and more systematic exploration of the effects of cultural participation on a variety of social and economic domains whose policy relevance has already been acknowledged, and that could benefit from such effects to effectively enlarge their own strategic menu. This also amounts to advocating a bigger role for culture in the policy agenda not in terms of simple advocacy of culture for culture's sake, but also in terms of culture's proven capacity to expand the scope of other, more recognized policy areas. To assess how grounded such a new form of advocacy really is, we need a substantial amount of interdisciplinary research, that for some tiers is already well on its way, whereas for others is still to be properly formulated and translated into a full-fledged research program. The more such research yields interesting confirmative results on the strength and significance of the links between cultural participation and the corresponding spheres of social and economic impact, the more relevant the Culture 3.0 framework will be for future policy design, and vice versa. The output of future research in this vein will therefore be either a source of support or of limitation of the framework's scientific and policy relevance by confirming or questioning its fruitfulness in generating interesting research hypotheses and providing a basic for effective policy design.

Our eight-tiered classification of the indirect developmental effects of culture finds its full sense within a Culture 3.0 regime, where active cultural access and participation becomes the social norm and the natural orientation of knowledge economies and societies. It provides a first list of possible areas of indirect impact of cultural participation in the creation of social and economic value, but such a list could even be partial and amenable to further enlargement in the future. This is not to say, of course, that the direct macroeconomic effect of the growth of cultural and creative industries should become less relevant in the new context. Quite the contrary, as we have argued, there is a strong complementarity between direct economic impacts and indirect ones, as they concur to increase individual participation and access to cultural opportunities, and stimulate further culturally-related capability building.

The advent of Culture 3.0 lays the premise for a profound rethinking of the sense and scope of cultural policy in the decades to come. In Culture 1.0, cultural policy is basically the channel for the implementation of public patronage. In Culture 2.0, it is a tool to improve the financial sustainability and the market drive in the production of cultural and creative contents. In Culture 3.0, however, cultural policy becomes much more than a mere sectorial policy and qualifies to be considered as a major policy pillar for the economy and the society as a whole. In this perspective, the role of European institutions, such as Europeana [191,192], whose mission is to make European cultural heritage accessible and usable to all citizens through smart digitalization, and therefore to foster active cultural participation through a straightforward Culture 3.0 logic, goes much beyond a mere sectoral dimension and can be regarded as a pilot experiment of a new generation of cultural institutions that make massive bottom-up participation their main focus. As shown through the eight-tiered classification, cultural participation opens up new, unprecedented possibilities of economic and social value creation in so many different spheres that fall outside culture's conventional domain of action and impact. Such a new perspective has been explicitly recognized by the New Agenda for Culture of the European Commission, which explicitly indicates the health, innovation, social cohesion, and soft power tiers (the latter re-defined in terms of cultural diplomacy) as a key orientation of the EU future policy, and more generally emphasizes the key strategic role of cultural crossovers as a full-fledged internalization of what could previously be regarded as spillover (i.e., unintentional and unplanned) effects into a coherent and cohesive policy design paradigm which purposefully pursues them [193].

This means, in particular, that culture may cross paths with practically all the major policy themes of today: from innovation to welfare, from inter-cultural dialogue to sustainability, and many more. However, if this shift of perspective is not appropriately realized by policymakers, this amounts to failing to acknowledge a key nexus of the emerging socio-economic organization made possible by the ubiquitous production of cultural and creative contents. In European programming terms, this calls for empowering cultural policies with new, key roles in the design and deployment of more context-specific cohesion strategies [194], and as an innovative platform for smart specialization [195]. Learning to integrate cultural policies into the traditional policy toolbox and finding for them an appropriate space in the policy agenda priorities are therefore key challenges for the policy making of both the near and the not-so-near future.

It should also be noted that the Culture 3.0 paradigm is not denying the importance of more conventional forms of culture-driven development such as, for instance, cultural tourism. It is simply arguing that it should not be taken as the main driver of regional culture-led development, as it could be done in a mature Culture 1.0 perspective, but rather as a complementary sector which generates economic value as a consequence of the main drivers. A culturally thriving milieu can also attract cultural tourism, but the vice versa is not true, in the sense that large tourist flows without a strong, lively base of local cultural production quickly transform the milieu into a tourist-dependent theme park [196]. The best way to create social and economic value through culture is in terms of expressive, not instrumental rationality. The value of culture is tightly linked to its crucial capacity to produce, preserve, and transmit meaning generatively, that is, as a self-catalytic process of human flourishing, capability and skills creation, and equitable development [197].

Will Europe manage to seize the opportunity? The signals are contradictory so far. As we have just noticed, the Culture 3.0 perspective is finding space in the EU strategic thinking on the role of culture in future policies. However, having to face the urgencies posed by the many economic and social criticalities of today, there is a constant risk that the EU marginalizes in practice the role of cultural policy rather than upgrading it to the new level, and that would be a sign that there is still a significant gap in terms of strategic vision and conceptual awareness of the revolutionary implications of Culture 3.0. At the moment, it is difficult to anticipate which side will prevail. If the new conception of cultural policy making will not be able to inform the strategic policy vision for the next 2021–2027 policy cycle, it seems reasonable to conjecture that a full-fledged cultural participation-driven concept of cultural policy making will eventually flourish elsewhere, as it already happened with the emergence of Culture 2.0. Furthermore, there are many interesting candidates in this respect. The future scenario is open, and the race has already begun.

## References

1. Miles, S.; Paddison, R. The rise and rise of culture-led urban regeneration. *Urban Stud.* **2005**, *42*, 833–839. [CrossRef]
2. Sacco, P.L.; Tavano Blessi, G.; Nuccio, M. Cultural policies and local planning strategies: What is the role of culture in local sustainable development? *J. Arts Manag. Law Soc.* **2009**, *39*, 45–64. [CrossRef]
3. Sacco, P.L.; Ferilli, G.; Tavano Blessi, G.; Nuccio, M. Culture as an engine of local development processes: System-Wide Cultural Districts. I: Theory. *Growth Chang.* **2013**, *44*, 555–570. [CrossRef]
4. Sacco, P.L.; Ferilli, G.; Tavano Blessi, G.; Nuccio, M. Culture as an engine of local development processes: System-Wide Cultural Districts. II: Prototype cases. *Growth Chang.* **2013**, *44*, 571–588. [CrossRef]
5. Bonet, L.; Donato, F. The financial crisis and its impact on the current models of governance and management of the cultural sector in Europe. *ENCATC J. Cult. Manag. Policy* **2011**, *1*, 4–11.

6. Rohter, L. In Europe, where art is life, ax falls on public financing. *The New York Times*. 24 March 2012. Available online: http://www.nytimes.com/2012/03/25/world/europe/the-euro-crisis-is-hurting-cultural-groups.html (accessed on 18 August 2018).

7. Fabiani, J.L. Cultural governance and the crisis of financial capitalism. *Cult. Unbound J. Curr. Cult. Res.* **2014**, *6*, 211–221. [CrossRef]

8. Lagerqvist, M. Reverberations of a crisis: The practical and ideological reworkings of Irish State heritage work in economic crisis and austerity. *Herit. Soc.* **2016**, *9*, 57–75. [CrossRef]

9. CSES. *Study on the Contribution of Culture to Local and Regional Development—Evidence from the Structural Funds. Final Report*; Centre for Strategy and Evaluation Services: Kent, UK, 2010.

10. Foord, J. Strategies for creative industries: An international review. *Creat. Ind. J.* **2008**, *1*, 91–113. [CrossRef]

11. EY. *Creating Growth. Measuring Cultural and Creative Markets in the EU*; Ernst & Young: Paris, France, 2014.

12. Evans, G.; Foord, J. European funding of culture: Promoting common culture or regional growth? *Cult. Trends* **1999**, *9*, 53–87. [CrossRef]

13. Boix, R.; Capone, F.; De Propris, L.; Lazzeretti, L.; Sanchez, D. Comparing creative industries in Europe. *Eur. Urban Reg. Stud.* **2016**, *23*, 935–940. [CrossRef]

14. Benito, B.; Bastida, F.; Vicente, C. Municipal elections and cultural expenditure. *J. Cult. Econ.* **2013**, *37*, 3–32. [CrossRef]

15. Horrigmo, A.M.J. Why study the spread of culture-led development strategies? *Reg. Fed. Stud.* **2012**, *22*, 553–575. [CrossRef]

16. KEA. *The Economy of Culture in Europe*; KEA European Affairs: Brussels, Belgium, 2006.

17. Nathan, M.; Pratt, A.; Rincon-Aznar, A. *Creative Economy Employment in the EU and the UK. A Comparative Analysis*; NESTA: London, UK, 2015.

18. EC. *Mapping the Creative Value Chains. A Study of the Economy of Culture in the Digital Age*; European Commission: Luxembourg, 2017; Available online: https://publications.europa.eu/en/publication-detail/-/publication/01c92f2a-45ad-11e7-aea8-01aa75ed71a1 (accessed on 18 August 2018).

19. Miles, S. 'Our Tyne': Iconic regeneration and the revitalization of identity in Newcastle Gateshead. *Urban Stud.* **2005**, *42*, 913–926. [CrossRef]

20. Munzner, K.; Shaw, K. Renew who? Benefits and beneficiaries of *Renew Newcastle*. *Urban Policy Res.* **2015**, *33*, 17–36. [CrossRef]

21. Clark-Jenkins, A. Newcastle's culture budget is dead—Long live its culture fund? *The Guardian*. 8 March 2013. Available online: http://www.theguardian.com/culture-professionals-network/culture-professionals-blog/2013/mar/08/newcastle-arts-cuts-culture-fund (accessed on 18 August 2018).

22. Pickford, J. Arts and culture spending crunch prompts new ways of working. *Financial Times*. 9 March 2014. Available online: http://www.ft.com/cms/s/0/0ee78dfe-a08e-11e3-a72c-00144feab7de.html#axzz42njBbmZe (accessed on 18 August 2018).

23. DCSY—The Finnish Department of Cultural, Sport and Youth Policy. *Strategy for Cultural Policy*; Ministry of Education: Helsinki, Finland, 2009. Available online: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/76674/opm45.pdf?sequence=1 (accessed on 27 October 2018).

24. MECS—Dutch Ministry of Education, Culture and Science. *Culture at a First Glance*; Directorate-General of Culture and Media: The Hague, The Netherlands, 2016. Available online: https://www.government.nl/topics/international-cultural-cooperation/documents/publications/2017/04/21/culture-at-a-first-glance (accessed on 27 October 2018).

25. DCMS—UK Department of Media, Culture and Sports. *The Culture White Paper*; DCMS: London, UK, 2016. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/510798/DCMS_The_Culture_White_Paper__3_.pdf (accessed on 27 October 2018).

26. DMC—The Danish Ministry of Culture. *The International Cultural Panel. Strategy 2017–2020*; DMC: Copenhagen, Denmark, 2016. Available online: https://english.kum.dk/uploads/tx_templavoila/International_Cultural_Panel_Strategy_2017-2020.pdf (accessed on 27 October 2018).

27. McKinsey. *Global Media Report 2015. Global Industry Overview*; McKinsey & Company: London, UK, 2015.

28. PwC. *Global Entertainment and Media Outlook 2018–2022*; PwC: London, UK, 2017.

29. PwC. *Cities of Opportunity: The Urban Rhythm of Entertainment and Media*; PwC: London, UK, 2015.

30. Los, B.; McCann, P.; Springford, J.; Thissen, M. The mismatch between local voting and the local economic consequences of Brexit. *Reg. Stud.* **2017**, *51*, 786–799. [CrossRef]

31. Dissanayake, E. *Art and Intimacy. How the Arts Began*; University of Washington Press: Seattle, WA, USA, 2000.

32. Hauser, A. *The Social History of Art*, 3rd ed.; Routledge: London, UK, 1999; Volume 1.

33. Wilson, P. *The Athenian Institution of the Khoregia. The Chorus, the City and the Stage*; Cambridge University Press: Cambridge, UK, 2000.

34. Bowditch, P.L. *Horace and the Gift Economy of Patronage*; University of California Press: Berkeley, CA, USA, 2001.

35. Pommier, E. *L'invention de l'art dans l'Italie de la Renessaince*; Gallimard: Paris, France, 2006.

36. Settis, S. *Artisti e Committenti fra Quattro e Cinquecento*; Einaudi: Turin, Italy, 2010.

37. McLean, P.D. *The Art of the Network. Strategic Interaction and Patronage in Renaissance Florence*; Duke University Press: Durham, NC, USA, 2007.

38. Velthuis, O. *Talking Prices. Symbolic Meanings of Prices on the Markets for Contemporary Arts*; Princeton University Press: Princeton, NJ, USA, 2005.

39. Bergquist, M.; Ljungberg, J. The power of gifts: Organizing social relationships in open source communities. *Inf. Syst. J.* **2001**, *11*, 305–320. [CrossRef]

40. Gillis, J.R. *The Development of European Society 1770–1870*; Houghton Mifflin: Boston, MA, USA, 1977.

41. Duncan, C. Art museums and the ritual of citizenship. In *Exhibiting Cultures: The Poetics and Politics of Museum Display*; Karp, I., Lavine, S.D., Eds.; Smithsonian Institute: Washington, DC, USA, 1991; pp. 88–103.

42. Sassoon, D. *The Culture of the Europeans. 1800 to the Present*; Harper Press: London, UK, 2006.

43. Hillman-Chartrand, H.; McCaughey, C. The arm's length principle and the arts: An international perspective—Past, present and future. In *Who's to Pay for the Arts? The International Search for Models of Support*; Cummings, M., Schuster, J.M.D., Eds.; ACA Books: New York, NY, USA, 1989; pp. 43–80.

44. Craik, J. *Re-Visioning Arts and Cultural Policy. Current Impasses and Future Directions*; Australian National University e-Press: Canberra, Australia, 2007.

45. Goodwin, C.D. Public support of the arts in the history of economics: An introduction. *Hist. Political Econ.* **2005**, *37*, 399–411. [CrossRef]

46. Dubois, V. Cultural policy regimes in Western Europe. In *International Encyclopedia of Social and Behavioral Sciences*; Elsevier: Amsterdam, The Netherlands, 2014.

47. May, L. *Screening Out the Past: The Birth of Mass Culture and the Motion Picture Industry*; Oxford University Press: Oxford, UK, 1980.

48. Hirsch, P.M. Processing fads and fashions: An organization-set analysis of cultural industry systems. *Am. J. Sociol.* **1972**, *77*, 639–659. [CrossRef]

49. Hesmondhalgh, D. *The Cultural Industries*; Sage: London, UK, 2002.

50. Biltereyst, D.; Maltby, R.; Meers, P. (Eds.) Cinema, audiences and modernity: An introduction. In *Cinema, Audiences and Modernity. New Perspectives on European Cinema History*; Routledge: London, UK, 2012; pp. 1–16.

51. Bourdieu, P. *Distinction. A Social Critique of the Judgement of Taste*; Routledge & Kegan Paul: London, UK, 1984.

52. Adorno, T.; Horkheimer, M. The culture industry: Enlightenment as mass deception. In *Dialectic of Enlightenment*; orig. 1944; Continuum Press: New York, NY, USA, 1993.

53. Robinson, D. *From Peep Show to Palace. The Birth of American Film*; Columbia University Press: New York, NY, USA, 1996.

54. Thompson, K. The rise and fall of film Europe. In *"Film Europe" and "Film America". Cinema, Commerce and Cultural Exchange 1920–1939*; Higson, A., Maltby, R., Eds.; University of Exeter Press: Exeter, UK, 1999; pp. 56–81.

55. Ulf-Møller, J. Hollywood's "Foreign War": The effect of national commercial policy on the emergence of the American film hegemony in France, 1920–1929. In *"Film Europe" and "Film America". Cinema, Commerce and Cultural Exchange 1920–1939*; Higson, A., Maltby, R., Eds.; University of Exeter Press: Exeter, UK, 1999; pp. 181–206.

56. Throsby, D. The concentric circles model of the cultural industries. *Cult. Trends* **2008**, *17*, 147–164. [CrossRef]

57. Howkins, J. *The Creative Economy. How People Make Money from Ideas*; Allen Lane: London, UK, 2001.

58. Martel, F. *Mainstream. Enquéte sur Cette Culture qui Plait a Tout le Monde*; Flammarion: Paris, France, 2010.

59. Pratt, A. Policy transfer and the field of cultural and creative industries: Learning from Europe? In *Creative Economies, Creative Cities: Asian-European Perspective*; Kong, L., O'Connor, J., Eds.; Springer: Heidelberg, Germany, 2009; pp. 9–23.

60. Flew, T.; Cunningham, S. Creative industries after the first decade of debate. *Inf. Soc.* **2010**, *26*, 113–123. [CrossRef]

61. Throsby, D. Modelling the cultural industries. *Int. J. Cult. Policy* **2008**, *14*, 217–232. [CrossRef]

62. Hearn, G.; Roodhouse, S.; Blakey, J. From value chain to value creating ecology. *Int. J. Cult. Policy* **2007**, *13*, 419–436. [CrossRef]

63. Markusen, A.; Nicodemus, A.G.; Barbour, E. The arts, consumption, and innovation in regional development. In *Creative Communities*; Rushton, M., Landesman, R., Eds.; Brookings Institution Press: Washington, DC, USA, 2013; pp. 36–59.

64. Potts, J.D.; Cunningham, S.D.; Hartley, J.; Ormerod, P. Social network markets: A new definition of the creative industries. *J. Cult. Econ.* **2008**, *32*, 166–185. [CrossRef]

65. Cooke, P.; De Propris, L. A policy agenda for EU smart growth: The role of creative and cultural industries. *Policy Stud.* **2011**, *32*, 365–375. [CrossRef]

66. Keane, M. *China's New Creative Clusters. Governance, Human Capital and Investment*; Routledge: London, UK, 2011.

67. Manovich, L. The practice of everyday (media) life: From mass consumption to mass cultural production? *Crit. Inquiry* **2009**, *35*, 319–331. [CrossRef]

68. Sperlich, R. The mixed blessing of autonomy in digital cultural production: A study on filmmaking, press photography and architecture in Austria. *Eur. J. Commun.* **2011**, *26*, 133–146. [CrossRef]

69. Potts, J.D.; Hartley, J.; Banks, J.; Burgess, J.; Cobcroft, R.; Cunningham, S.; Montgomery, L. Consumer co-creation and situated creativity. *Ind. Innov.* **2008**, *15*, 459–474. [CrossRef]

70. van Dijck, J. Users like you? Theorizing agency in user generated content. *Media Cult. Soc.* **2009**, *31*, 41–58. [CrossRef]

71. Postigo, H. The socio-technical architecture of digital labor: Converting play into YouTube money. *New Media Soc.* **2016**, *18*, 332–349. [CrossRef]

72. Valtysson, B. Access culture: Web 2.0 and cultural participation. *Int. J. Cult. Policy* **2010**, *16*, 200–214. [CrossRef]

73. Winter, C. How media prosumers contribute to social innovation in today's new networked music culture and economy. *Int. J. Music Bus. Res.* **2012**, *1*, 46–73.

74. McCracken, G. Culture and consumption: A theoretical account of the structure and movement of the cultural meaning of consumer goods. *J. Consum. Res.* **1986**, *13*, 71–84. [CrossRef]

75. Kotler, P. Prosumers: A new type of consumer. *Futurist* **1986**, *20*, 24–28.

76. Örnebring, H. The consumer as producer—Of what? User-generated tabloid content in the Sun (UK) and Aftonbladet (Sweden). *J. Stud.* **2008**, *9*, 771–785.

77. Kaplan, A.M.; Haenlein, M. Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horizons* **2010**, *53*, 59–68. [CrossRef]

78. Olin-Scheller, C.; Wikström, P. Literary prosumers: Young people's reading and writing. *Educ. Inquiry* **2010**, *1*, 41–56. [CrossRef]

79. Duncum, P. Youth on YouTube: Prosumers in a peer-to-peer participatory culture. *Int. J. Arts Educ.* **2011**, *9*, 24–39.

80. Bakhshi, H.; McVittie, E.; Simmie, J. Creating Innovation. Do the Creative Industries Support Innovation in the Wider Economy? NESTA: London, UK, 2008.

81. Brown, A.S.; Novak-Leonard, J.L.; Gilbride, S. *Getting in on the Act: How Art Groups Are Creating Opportunities for Active Participation*; James Irvine Foundation: San Francisco, CA, USA, 2011.

82. Sen, A. *Development as Freedom*; Anchor Books: New York, NY, USA, 2000.

83. Billett, S. Searching for authenticity—A sociocultural perspective of vocational skills development. *Vocat. Asp. Educ.* **1994**, *46*, 3–16. [CrossRef]

84. Greenfield, P.M.; Keller, H.; Fuligni, A.; Maynard, A. Cultural pathways through universal development. *Annu. Rev. Psychol.* **2003**, *54*, 461–490. [CrossRef] [PubMed]

85. Bannerman, S. Crowdfunding culture. *Wi J. Mob. Cult.* **2012**, *6*, 4. Available online: http://wi.mobilities.ca/wp-content/uploads/2012/12/sbannermanwi_2012_06_04.pdf (accessed on 27 October 2018).

86. Hills, M. *Veronica Mars*, fandom, and the 'affective economics' of crowdfunding poachers. *New Media Cult.* **2015**, *17*, 183–197. [CrossRef]

87. Josefy, M.; Dean, T.J.; Lumina, S.A.; Fitza, M.A. The role of community in crowdfunding success: Evidence on cultural attributes in funding campaigns to "Save the local theater". *Entrep. Theory Pract.* **2017**, *41*, 161–182. [CrossRef]

88. Tapscott, D.; Williams, A.D. *Wikinomics. How Mass Collaboration Changes Everything*; Portfolio: New York, NY, USA, 2006.

89. Kozary, B. Making social media sociable. *Prototypr.io*. 23 March 2018. Available online: https://blog.prototypr.io/making-social-media-sociable-f5d8d461d026 (accessed on 12 October 2018).

90. Pine, B.J.; Gilmore, J.H. *The Experience Economy*; Harvard Business Press: Cambridge, MA, USA, 2011.

91. Young, K.S. Internet addiction. A new clinical phenomenon and its consequences. *Am. Behav. Sci.* **2004**, *48*, 402–415. [CrossRef]

92. Vandelanotte, C.; Sugiyama, T.; Gardiner, P.; Owen, N. Associations of leisure-time internet and computer use with overweight and obesity, physical activity and sedentary behaviors: Cross-sectional study. *J. Med. Internet Res.* **2009**, *11*, E28. Available online: https://www.jmir.org/2009/3/e28/ (accessed on 27 October 2018). [CrossRef] [PubMed]

93. Van den Bulck, J. Television viewing, computer game playing, and internet use and self-reported time to bed and time out of bed in secondary-school children. *Sleep* **2004**, *27*, 101–104. [CrossRef] [PubMed]

94. Yoo, H.J.; Cho, S.C.; Ha, J.; Yune, S.K.; Kim, S.J.; Hwang, J.; Chung, A.; Sung, Y.H.; Lyoo, I.K. Attention deficit hyperactivity symptoms and Internet addiction. *Psychiatry Clin. Neurosci.* **2004**, *58*, 487–494. [CrossRef] [PubMed]

95. Yen, J.Y.; Ko, C.H.; Yen, C.F.; Wu, H.Y.; Yang, M.J. The comorbid psychiatric symptoms of Internet addiction: Attention deficit and hyperactivity disorder (ADHD), depression, social phobia, and hostility. *J. Adolesc. Health* **2007**, *41*, 93–98. [CrossRef] [PubMed]

96. Marchi, R. With Facebook, blogs, and fake news, teens reject journalistic 'objectivity'. *J. Commun. Inquiry* **2012**, *36*, 246–262. [CrossRef]

97. Patton, D.U.; Eschmann, R.D.; Butler, D.A. Internet banging: New trends in social media, gang violence, masculinity and hip hop. *Comput. Hum. Behav.* **2013**, *29*, A54–A59. [CrossRef]

98. Cone, E.J. Ephemeral profiles of prescription drug and formulation tampering: Evolving pseudoscience on the Internet. *Drug Alcohol Depend.* **2006**, *83*, S31–S39. [CrossRef] [PubMed]

99. Douglas, K.M.; Sutton, R.M. The hidden impact of conspiracy theories: Perceived and actual influence of theories surrounding the death of Princess Diana. *J. Soc. Psychol.* **2008**, *148*, 210–222. [CrossRef] [PubMed]

100. Paavonen, E.J.; Pennonen, M.; Roine, M.; Valkonen, S.; Lahikainen, A.R. TV exposure associated with child disturbances in 5- to 6-years old children. *J. Sleep Res.* **2006**, *15*, 154–161. [CrossRef] [PubMed]

101. Tucker, L.A.; Tucker, J.M. Television viewing and obesity in 300 women: Evaluation of the pathways of energy intake and physical activity. *Obesity* **2011**, *19*, 1950–1956. [CrossRef] [PubMed]

102. De Leo, J.A.; Wulfert, E. Problematic internet use and other risky behaviors in college students: An application of problem-behavior theory. *Psychol. Addict. Behav.* **2013**, *27*, 133–141. [CrossRef] [PubMed]

103. Voogt, J.; Erstad, O.; Dede, C.; Mishra, P. Challenges to learning and schooling in the digital networked world of the 21st century. *J. Comput. Assisted Learn.* **2013**, *29*, 403–413. [CrossRef]

104. Henrich, J. *The Secret of Our Success. How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter*; Princeton University Press: Princeton, NJ, USA, 2015.

105. KEA. *The Impact of Culture on Creativity*; KEA European Affairs: Brussels, Belgium, 2009.

106. Bakhshi, H.; Lee, N.; Mateos-Garcia, J. Capital of culture? An econometric analysis of the relationship between arts and cultural clusters, wages, and the creative economy in English cities. In *Creative Communities*; Rushton, M., Landesman, R., Eds.; Brookings Institution Press: Washington, DC, USA, 2013; pp. 190–215.

107. Gruenfeld, E. Thinking creatively is thinking critically. *New Dir. Youth Dev.* **2015**, *125*, 71–83. [CrossRef] [PubMed]

108. Phelps, E. *Mass Flourishing. How Grassroots Innovation Created Jobs, Challenge, and Change*; Princeton University Press: Princeton, NJ, USA, 2013.

109. Carlsson, B.; Jacobsson, S.; Holmén, M.; Rickne, A. Innovation systems: Analytical and methodological issues. *Res. Policy* **2002**, *31*, 233–245. [CrossRef]

110. McElroy, M.W. Social innovation capital. *J. Intell. Cap.* **2001**, *3*, 30–39. [CrossRef]

111. Boschma, R.A. Proximity and innovation: A critical assessment. *Reg. Stud.* **2005**, *39*, 61–74. [CrossRef]

112. Sacco, P.L.; Segre, G. Creativity, cultural investment and local development: A new theoretical framework for endogenous growth. In *Growth and Innovation of Competitive Regions. The Role of Internal and External Connections*; Fratesi, U., Senn, L., Eds.; Springer: Berlin, Germany, 2009; pp. 281–294.

113. Bucci, A.; Sacco, P.L.; Segre, G. Smart endogenous growth: Cultural capital and the creative use of skills. *Int. J. Manpower* **2014**, *35*, 33–55. [CrossRef]

114. EIS. *European Innovation Scoreboard 2017*; European Commission: Brussels, Belgium, 2017.

115. Eurobarometer. *Cultural Access and Participation*; Special Eurobarometer 399; European Commission: Brussels, Belgium, 2013.

116. Root-Bernstein, R. The art of innovation: Polymaths and the universality of the creative process. In *International Handbook on Innovation*; Shavinina, L.V., Ed.; Elsevier: Amsterdam, The Netherlands, 2003; pp. 267–278.

117. Root-Bernstein, R.; Lamore, R.; Lawton, J.; Schweitzer, J.; Root-Bernstein, M.; Roraback, E.; Peruski, A.; Vandyke, M. Arts, crafts, and STEM innovation: A network approach to understanding the creative knowledge economy. In *Creative Communities*; Rushton, M., Landesman, R., Eds.; Brookings Institution Press: Washington, DC, USA, 2013; pp. 97–117.

118. Koonlaan, B.B.; Bygren, L.O.; Johansson, S.E. Visiting the cinema, concerts, museums or art exhibitions as determinant of survival: A Swedish fourteen-year cohort follow-up. *Scand. J. Public Health* **2000**, *28*, 174–178. [CrossRef]

119. Grossi, E.; Sacco, P.L.; Tavano Blessi, G.; Cerutti, R. The impact of culture on the individual subjective well-being of the Italian population: An exploratory study. *Appl. Res. Qual. Life* **2011**, *6*, 387–410. [CrossRef]

120. Grossi, E.; Tavano Blessi, G.; Sacco, P.L.; Buscema, M. The interaction between culture, health, and psychological well-being: Data mining from the Italian culture and well-being project. *J. Happiness Stud.* **2012**, *13*, 129–148. [CrossRef]

121. Wheatley, D.; Bickerton, C. Subjective well-being and engagement in arts, culture and sport. *J. Cult. Econ.* **2017**, *41*, 23–45. [CrossRef]

122. Tavano Blessi, G.; Grossi, E.; Sacco, P.L.; Pieretti, G.; Ferilli, G. The contribution of cultural participation to urban well-being. A comparative study in Bolzano/Bozen and Siracusa, Italy. *Cities* **2016**, *50*, 216–226. [CrossRef]

123. Noice, T.; Noice, H.; Kramer, A.F. Participatory arts for older adults: A review of benefits and challenges. *Gerontologist* **2014**, *54*, 741–753. [CrossRef] [PubMed]

124. Crociata, A.; Agovino, M.; Sacco, P.L. Cultural access and mental health: An exploratory study. *Soc. Indic. Res.* **2014**, *118*, 219–233. [CrossRef]

125. Schmidt, L.; Gil Nave, J.; Guerra, J. Who's afraid of Local Agenda 21? Top-down and bottom-up perspectives on local sustainability. *Int. J. Environ. Sustain. Dev.* **2006**, *5*, 181–198. [CrossRef]

126. Crociata, A.; Agovino, M.; Sacco, P.L. Recycling waste: Does culture matter? *J. Behav. Exp. Econ.* **2015**, *55*, 40–47. [CrossRef]

127. Agovino, M.; Crociata, A.; Sacco, P.L. Location matters for pro-environmental behavior: A spatial Markov chains approach to proximity effects in differentiated waste collection. *Ann. Reg. Sci.* **2016**, *56*, 295–315. [CrossRef]

128. Crociata, A.; Agovino, M.; Sacco, P.L. Neighborhood effects and pro-environmental behavior: The case of Italian separate waste collection. *J. Clean. Prod.* **2016**, *135*, 80–89. [CrossRef]

129. UCLG. *Culture: Fourth Pillar of Sustainable Development*; Agenda 21 for Culture, United Cities and Local Governments: Barcelona, Spain, 2010.

130. Hollinger, D.M. Instrument of Social Reform: A Case Study of the Venezuelan System of Youth Orchestras. Ph.D. Dissertation, Arizona State University, Tempe, AZ, USA, 2006.

131. Washington, D.M.; Beecher, D.G. Music as social medicine: Two perspectives on the West-Eastern Divan Orchestra. *New Dir. Youth Dev.* **2010**, *125*, 127–140. [CrossRef] [PubMed]

132. Buendìa, F.C. More carrots than sticks: Antanas Mockus's civic culture policy in Bogotá. *New Dir. Youth Dev.* **2010**, *125*, 19–32. [CrossRef] [PubMed]

133. Majno, M. From the model of *El Sistema* in Venezuela to current applications: Learning and integration through collective music education. *Ann. N. Y. Acad. Sci.* **2012**, *1252*, 54–64. [CrossRef] [PubMed]

134. Kirschner, S.; Tomasello, M. Joint music making promotes pro-social behavior in 4-year-old children. *Evol. Hum. Behav.* **2010**, *31*, 354–364. [CrossRef]

135. Crosbie, V. Capabilities for intercultural dialogue. *Lang. Intercult. Commun.* **2014**, *14*, 91–107. [CrossRef]

136. Amin, A. Ethnicity and the multicultural city: Living with diversity. *Environ. Plan. A* **2002**, *34*, 959–980. [CrossRef]

137. Madon, S.; Jussim, L.; Keiper, S.; Eccles, J.; Smith, A.; Palumbo, P. The accuracy and power of sex, social class, and ethnic stereotypes: A naturalistic study in person perception. *Personal. Soc. Psychol. Bull.* **1998**, *24*, 1304–1318. [CrossRef]

138. Paris, D.; Baert, T. Lille 2004 and the role of culture in the regeneration of Lille Métropole. *Town Plan. Rev.* **2011**, *82*, 29–44. [CrossRef]

139. Phinney, J.S. Understanding ethnic diversity. The role of ethnic identity. *Am. Behav. Sci.* **1996**, *40*, 143–152. [CrossRef]

140. Scott, A.J. Entrepreneurship, innovation, and industrial development: Geography and the creative field revisited. *Small Bus. Econ.* **2006**, *26*, 1–24. [CrossRef]

141. Eikhof, D.R.; Haunschild, A. Lifestyle meets market: Bohemian entrepreneurs in creative industries. *Creat. Innov. Manag.* **2006**, *15*, 234–241. [CrossRef]

142. Mason, M. *The Pirate's Dilemma: How Youth Culture Is Reinventing Capitalism*; Free Press: New York, NY, USA, 2008.

143. OMC—Open Method of Coordination Group. *The Role of Public Policies in Developing Entrepreneurial and Innovation Potential of the Cultural and Creative Sectors*; European Union: Luxembourg, 2018; Available online: https://publications.europa.eu/en/publication-detail/-/publication/5d33c8a7-2e56-11e8-b5fe-01aa75ed71a1/language-en/format-PDF/source-68820857 (accessed on 27 October 2018).

144. Lange, B. Professionalization in space: Social-spatial strategies of culturepreneurs in Berlin. *Entrep. Reg. Dev.* **2011**, *23*, 259–279. [CrossRef]

145. Mould, O.; Vorley, T.; Roodhouse, S. Realizing capabilities—Academic creativity and the creative industries. *Creat. Ind. J.* **2009**, *1*, 137–150. [CrossRef]

146. Cunningham, S. The humanities, creative arts, and the innovation agenda. In *Innovation in Australian Arts, Media and Design: Fresh Challenges for the Tertiary Sector*; Haseman, B., Wallace, S.A., Wissler, R., Eds.; Post Pressed: Flaxton, Australia, 2004; pp. 221–232.

147. Makridakis, S. The forthcoming Artificial Intelligence (AI) revolution: Its impact on societies and firms. *Futures* **2017**, *90*, 46–60. [CrossRef]

148. Sternberg, R.J. The concept of intelligence and its role in lifelong learning and success. *Am. Psychol.* **1997**, *52*, 1030–1037. [CrossRef]

149. DiMaggio, P. Cultural capital and school success: The impact of status culture participation on the grades of US high school students. *Am. Sociol. Rev.* **1982**, *47*, 189–201. [CrossRef]

150. Herrmann, E.; Call, J.; Hernandez-Lloreda, M.V.; Hare, B.; Tomasello, M. Humans have evolved specialized skills of social cognition: The cultural intelligence hypothesis. *Science* **2007**, *317*, 1360–1366. [CrossRef] [PubMed]

151. Sherman, A. Toward a creative culture: Lifelong learning through the arts. *Generations* **2006**, *30*, 42–46.

152. Crociata, A.; Odoardi, I.; Agovino, M.; Sacco, P.L. *A Missing Link? Cultural Capital as a Source of Human Capital. Evidence from Italian Regional Data*; Department of Economics, University of Chieti-Pescara: Pescara, Italy, 2017.

153. Jones, H.C. Lifelong learning in the European Union: Whither the Lisbon Strategy? *Eur. J. Educ.* **2005**, *40*, 247–260. [CrossRef]

154. Lave, J. Situated learning in communities of practice. In *Perspectives on Socially Shared Cognition*; Resnick, L.B., Levine, J.M., Teasley, S.D., Eds.; American Psychological Association: Washington, DC, USA, 1991; pp. 63–82.

155. Nye, J. *Soft Power. The Means to Success in World Politics*; Public Affairs: New York, NY, USA, 2004.

156. Froese, F.J.; Kishi, Y. Organizational attractiveness of foreign firms in Asia: Soft power matters. *Asian Bus. Manag.* **2013**, *12*, 281–297. [CrossRef]

157. Yun, S.H.; Kim, J.N. Soft power: From ethnic attraction to national attraction in sociological globalism. *Int. J. Intercult. Relat.* **2008**, *32*, 565–577. [CrossRef]

158. Jaffe, E.D.; Nebenzahl, I.D. *National Image and Competitive Advantage*, 2nd ed.; Copenhagen Business School Press: Copenhagen, Denmark, 2006.

159. Hollinshead, K.; Hou, C.X. The seductions of "Soft Power": The call for multifronted research into the articulative reach of tourism in China. *J. China Tour. Res.* **2012**, *8*, 227–247. [CrossRef]

160. Hill, C.; Beadle, S. *The Art of Attraction: Soft Power and the UK's Role in the World*; The British Academy: London, UK, 2014.

161. Solomon, T. The affective underpinnings of soft power. *Eur. J. Int. Relat.* **2014**, *20*, 720–741. [CrossRef]

162. McClory, J. *The New Persuaders: An International Ranking of Soft Power*; IfG: London, UK, 2010.

163. McClory, J. *The New Persuaders III: An International Ranking of Soft Power*; IfG: London, UK, 2013.

164. Dator, J.; Seo, Y. Korea as the wave of the future. The emerging dream society of icons and aesthetic experience. *J. Futures Stud.* **2004**, *9*, 31–44.

165. Huat, C.B.; Iwabuchi, K. (Eds.) *East Asian Pop Culture. Analysing the Korean Wave*; Hong Kong University Press: Hong Kong, China, 2008.

166. Reilly, B. Australia as a Southern hemisphere "soft power". *Aust. J. Int. Aff.* **2015**, *69*, 253–265. [CrossRef]

167. Potter, E.H. *Branding Canada: Projecting Canada's Soft Power through Public Diplomacy*; McGill-Queens University Press: Montreal, QC, Canada, 2009.

168. Butcher, A. Students, soldiers, sports, sheep and the silver screen: New Zealand's soft power in the ASEAN and Southeast Asia. *Contemp. South. Asia* **2012**, *34*, 249–273. [CrossRef]

169. Ang, I.; Isar, Y.R.; Mar, P. Cultural diplomacy: Beyond the national interest? *Int. J. Cult. Policy* **2015**, *21*, 365–381. [CrossRef]

170. Kouri, M. EU integration and cultural diplomacy in times of crisis: The case of Greece. *J. Arts Manag. Law Soc.* **2014**, *44*, 218–233. [CrossRef]

171. EC. *New European Cultural Diplomacy Platform Launched*; European Commission: Brussels, Belgium, 2016; Available online: http://ec.europa.eu/dgs/fpi/announcements/news/20160401_1_en.htm (accessed on 18 August 2018).

172. Plagemann, J. *Cosmopolitanism in a Multipolar World: Soft Sovereignity in Democratic Regional Powers*; Palgrave Macmillan: New York, NY, USA, 2015.

173. Plaza, B. On some challenges and conditions for the Guggenheim Museum Bilbao to be an effective economic re-activator. *Int. J. Urban Reg. Res.* **2008**, *32*, 506–517. [CrossRef]

174. Evans, G. Creative cities, creative spaces and urban policy. *Urban Stud.* **2009**, *46*, 1003–1040. [CrossRef]

175. Gotham, K.F. Marketing Mardi Gras: Commodification, spectacle and the political economy of tourism in New Orleans. *Urban Stud.* **2002**, *39*, 1735–1756. [CrossRef]

176. Ferilli, G.; Sacco, P.L.; Tavano Blessi, G. Beyond the rhetoric of participation: New challenges and prospects for inclusive urban regeneration. *City Cult. Soc.* **2016**, *7*, 95–100. [CrossRef]

177. Bailey, C.; Miles, S.; Stark, P. Culture-led urban regeneration and the revitalization of identities in Newcastle, Gateshead and the North East of England. *Int. J. Cult. Policy* **2004**, *10*, 47–65. [CrossRef]

178. Bornschier, S. The new cultural divide and the two-dimensional political space in Western Europe. *West Eur. Politics* **2010**, *33*, 419–444. [CrossRef]

179. Dargan, L. Participation and local urban regeneration: The case of the New Deal for Communities (NDC) in the UK. *Reg. Stud.* **2009**, *43*, 305–317. [CrossRef]

180. Valdez Young, A. Play before plan: Games for the public and planners to value the street. *J. Urban Technol.* **2015**, *22*, 97–119. [CrossRef]

181. Poplin, A. Digital serious game for urban planning: "B3—Design your marketplace!". *Environ. Plan. B* **2014**, *41*, 493–511. [CrossRef]

182. Farole, T.; Rodriguez-Pose, A.; Storper, M. Cohesion policy in the European Union: Growth, geography, institutions. *J. Common Mark. Stud.* **2011**, *49*, 1089–1111. [CrossRef]

183. Stie, A.E. *Democratic Decision Making in the EU: Technocracy in Disguise?* Routledge: London, UK, 2013.

184. Philippou, S.; Theodorou, E. The 'europeanisation' of othering: Children using 'Europe' to construct 'others' in Cyprus. *Race Ethn. Educ.* **2014**, *17*, 264–290. [CrossRef]

185. Canavan, B. Send more tourists! Stakeholder perception of a tourism industry in late stage decline: The case of the Isle of Man. *Int. J. Tour. Res.* **2013**, *15*, 105–121. [CrossRef]

186. Zhu, Y. Performing heritage: Rethinking authenticity in tourism. *Ann. Tour. Res.* **2012**, *39*, 1495–1513. [CrossRef]

187. Sommer, D. *The Work of Art in the World. Civic Agency and Public Humanities*; Duke University Press: Durham, NC, USA, 2014.

188. Ferilli, G.; Sacco, P.L.; Noda, K. Culture driven policies and revaluation of local cultural assets: A tale of two cities, Otaru and Yubari. *City Cult. Soc.* **2015**, *6*, 135–143. [CrossRef]

189. Ferilli, G.; Sacco, P.L.; Tavano Blessi, G.; Forbici, S. Power to the people: When culture works as a social catalyst in urban regeneration processes (and when it does not). *Eur. Plan. Stud.* **2017**, *25*, 241–258. [CrossRef]

190. van Oorschot, W. Culture and social policy: A developing field of study. *Int. J. Soc. Welf.* **2007**, *16*, 129–139. [CrossRef]

191. Purday, J. Think culture: Europeana.eu from concept to construction. *Bibliotek Forschung und Praxis* **2009**, *33*, 170–180.

192. Verwayen, H.; Fallon, J.; Schellenberg, J.; Kyrou, P. *Europeana Impact Playbook*; Europeana Foundation: Den Haag, The Netherlands, 2017; Available online: https://pro.europeana.eu/what-we-do/impact (accessed on 27 October 2018).

193. EC. *A New European Agenda for Culture*; European Commission: Brussels, Belgium, 2018; Available online: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0267&from=EN (accessed on 18 August 2018).

194. Fratesi, U.; Wishlade, F.G. The impact of European Cohesion Policy in different contexts. *Reg. Stud.* **2017**, *51*, 817–821. [CrossRef]

195. McCann, P.; Ortega-Argilés, R. Smart specialization, regional growth, and applications to European Union cohesion policies. *Reg. Stud.* **2015**, *49*, 1291–1302. [CrossRef]

196. Russo, A.P. The 'vicious circle' of tourism development in heritage cities. *Ann. Tour. Res.* **2002**, *29*, 165–182. [CrossRef]

197. Scitovsky, T. *The Joyless Economy: The Psychology of Human Satisfaction and Consumer Dissatisfaction*; Oxford University Press: New York, NY, USA, 1992.

# Sustainable Activity of Cultural Service Consumers of Social Media Users—Influence on the Brand Capital of Cultural Institutions

**Łukasz Wróblewski [1],\*, Katarzyna Bilińska-Reformat [2] and Mateusz Grzesiak [3]**

[1]  Department of Management and Production Engineering, WSB University,
    41-300 Dąbrowa Górnicza, Poland

[2]  Department of Marketing Management and Tourism, University of Economics in Katowice,
    40-287 Katowice, Poland; katarzyna.bilinska-reformat@ue.katowice.pl

[3]  Department of Management, WSB University, 41-300 Dąbrowa Górnicza, Poland; mgrzesiak@wsb.edu.pl

\*  Correspondence: lwroblewski@wsb.edu.pl; Tel.: +48-692-344-057

**Abstract:** In the second decade of the 21st century, social media changed the nature of communication and cooperation between participants of the culture services market. They became, among other things, an important marketing instrument in the area of contact with the customers of the cultural offer. However, despite their growing importance in various areas of activity of organisations in the cultural sector, the issue of building the cultural institution's brand equity by social media users is relatively seldom raised. Research on the impact of online consumer activity on brand equity is at an early stage of development. Therefore, this article is an attempt to fill the research gap in this area. The article presents the results of a survey that was conducted in 2018 on a group of 1021 consumers of cultural services, who at the same time regularly used social media. The statistical analysis carried out and the research results obtained prove that the 3C sustainable system (3C means: consumer Consumption, Contribution, Creation) developed by the authors, concerning the activity of consumers of cultural services in social media, stimulates the consumer-based brand equity (CBBE). Statistically significant relations have been observed in particular for CBBE components that are related to the awareness of a cultural institution's brand and for the relationship related to the perception of its quality.

**Keywords:** consumer-based brand equity; social media; cultural institutions; factor analysis; CBBE; 3C Sustainable System

## 1. Introduction

The development of new trends on the Internet caused, on the one hand, an increase in the social engagement of Internet users, and on the other, the development of various types of web application solutions that are based on the ideological and technological foundations of Web 2.0 [1]. What makes these solutions—referred to as social media—stand out from other media is the fact that the message transmitted through them goes from the sender to the recipient, after which feedback may occur and the recipient has the opportunity to answer the sender in real time [2,3]. What is more, it is the users themselves that are very often the active creators of social media. Therefore, these media, in the 21st century, play an increasingly important role, not only in manufacturing companies, but they are also successfully used by entities in the cultural sector. Thanks to them, managers of cultural institutions can [4,5]:

(i)    strengthen the awareness of cultural institution brands,

(ii)   strengthen the perception of the brand's quality and build its positive image,

(iii)  build loyalty towards cultural institutions,

(iv)    follow the trends visible on the market, and

(v)     gain knowledge about their surroundings (consumers, competitors, donors, etc.).

The research conducted by the authors of the study, which were carried out in cultural institutions in the Euroregion Śląsk Cieszyński in 2015 and 2016 [6,7] shows that, in recent years, the range of social media used has increased in the marketing activities of cultural institutions. This is evidenced by the high percentage of Polish and Czech cultural institutions, which for at least one year, but not more than five years, have a profile not only on Facebook (66.5%), but also Twitter (48.5%), Instagram (32%), and YouTube (15.5%). This should therefore be seen as a response of the cultural institutions to new trends in consumer behaviours that are associated with the virtualization of the consumer's method of gaining information or a decision-making process relating to purchases in the cultural sector. It can be assumed that this will also translate into the growing activity of Polish consumers of culture services in social media (consumption, contribution, and creation of content), and thus these media will become a key instrument for building the brand equity of cultural institutions.

In cultural institutions, social media open new communication channels that give them direct access to consumers and opinion-forming centres [8]. However, it should be emphasised that social media are more than just communication tools. They allow for a new mode of action, which requires new information flows. These, in turn, have an impact, not only on the communication or distribution of services [9], but, what is very important, they also have a significant impact on building the brand equity of cultural institutions. Therefore, the recognition and classification of consumer behaviour on the Internet has become justified.

The first attempt to systematise consumer behaviour regarding brands in social media was made by G. Shao. In his approach, consumption, co-participation, and brand content creation were among those behaviours [10]. This approach was extended and refined in the research and findings of D.G. Muntingi et al. [11]. For the purpose of this study, it is the Muntingi approach (the so-called COBRA model—consumer's online brand-related activities) that has been adapted to the needs of assessing the activity of consumers of cultural services in social media. Similarly, as in the COBRA model, a solution was proposed—the so-called 3C sustainable system—based on three components of activity of culture services consumers. The customers are not the passive side in the act of exchange. In the model the sustainable assumption has been made, that the consumer is also creating values and contributes to the culture. Such assumption is connected with the paradigm of relationship marketing as well with sustainable paradigms. It is quite likely that the struggle for a sustainable future will transform many facets of "our" society, from politics and economics to cultural values, and, possibly, human rights. The presented model is sustainable because is defined by an equilibrium point from different aspects, not just by the number of its elements. In the case of our research, we have focused on three aspects, which are connected with relationship paradigm in marketing actions of cultural organisations. In the opinion of the authors, the activity of consumers of culture in social media should be sustainable, i.e., take place at the level of three "Cs":

(i)     Consumption—requiring only the passive reception of content related to a specific cultural institution's brand, placed online by other Internet users or employees of cultural institutions (e.g., viewing photos, videos, viewing ratings, and comments about cultural institutions, reading discussions about events organised by the institution on social networks [12]);

(ii)    Contribution—contributing to the creation of content related to the cultural institution's brand, by participating in discussions about events organised by the institution on fan pages, writing comments about cultural institutions or adding content related to them (e.g., photos, graphics, videos) on blogs and fan pages etc;

(iii)   Creation—consisting in creating and publishing content about cultural institutions that will be later consumed or contributed by others (e.g., running blogs dedicated to specific cultural institutions, publishing reviews of events organised by the institution, creating and posting videos, photos, graphics, or sound files that are related to a specific cultural institution.

The sustainable activity of consumers of services of cultural institutions takes place at three different levels (3C sustainable system), and, in the opinion of the authors, positively influences the brand equity of cultural institutions. That is why it has become the subject of scientific research in 2018 that was conducted by authors this article.

Before discussing the concept of the brand equity of cultural institutions, we should determine whether a cultural institution can be a brand. Products, not cultural entities, are most often referred to in the context of brand equity. In the opinion of the authors, however, there is no doubt in this matter. If, for example, we were to ask a representative group of Poles which cultural institutions operating in the world have the strongest brands, then probably the names of such institutions as the Louvre Museum, the Royal Opera House or the New York Philharmonic would be mentioned. A strong and well-known brand of a cultural institution, which has a positive association, means that millions of people trust it and its offer enjoys a great and unflagging interest, which, in turn, translates into brand equity and further positive financial results of the organisation. W. Olins writes about activities strengthening the power of a cultural institution's brand, citing the "Polishing the Diamond" report that was issued by a team of English experts. Olins claims that the brand is of key importance to the activities of a cultural institution [13], which is why it is fully justified to use the term "cultural institution's brand". The consumer-based brand equity (CBBE) of a cultural institution, in line with the findings of B. Yoo and N. Donthu, will therefore be the difference in consumer behaviour towards cultural institutions with an established position (recognisable brand) and a little-known institution that occurs in a situation where both institutions have the same marketing support and they have the same characteristics [14] (p. 1). In the opinion of K.L. Keller, CBBE means knowledge about the brand, consisting of brand awareness and image [15] (pp. 1–22). In turn, according to D.A. Aaker, it is a set of assets and liabilities that are related to the brand, its name, and mark, which can be attached or subtracted from the total value of the service for a cultural institutions and its clients [16] (p. 1). Among these assets, Aaker includes:

(i) Brand awareness—the strength with which the brand of a cultural institution is present in the mind of the consumer, and therefore which refers to the ability of the consumer to recognise or recall a specific brand in a given category of institutions or products [17],

(ii) Brand associations—everything that, according to the consumer, concerns the cultural institution's brand [17]. They are related to creating the image of a cultural institution's brand in the mind of the consumer, the type of institution, product category, conditions in which the consumer operates, awareness of the existence of cultural institutions and brand features, marks, and symbols [18],

(iii) Perceived brand quality—consumer perception of the general quality of the cultural institution's service or belief in its superiority in comparison with the alternative services of other organisations. It is a very hard to explain a feeling about a brand, based on the traits of services that are related to the cultural institution's brand, such as reliability and efficiency [14],

(iv) Brand loyalty—consumer attachment to the cultural institution's brand. Loyalty reflects the likelihood of the consumer switching to another cultural institution, for example, when the price of its services or brand features changes [14],

(v) Other assets—in particular, patents, trademarks, and relations occurring in distribution channels.

When considering the fact that the last component of brand equity (other assets) is not related to the consumer's perspective (referring to the organisation—cultural institution), only the first four components will be taken into account in the presented research, as is commonly done in research on the CBBE. Studies carried out so far also prove that brand awareness and brand associations can be combined into one dimension [14], which is why they will be considered jointly in the article. It is also acceptable to treat the components of the CBBE as a single variable referred to as the overall brand equity.

The first reference to the concept of the CBBE related to brand equity in online commerce and services can be found in 2006. At that time, the first attempt was made to measure the CBBE taking into account the specificity of the Internet [19] (pp. 799–825). So far, however, there are no references of this

concept regarding the sphere of culture, and therefore there are no studies indicating the possibilities of its application in cultural institutions. Research on the impact of online consumer activity on the brand equity of cultural institutions is still at a very early stage of development. Therefore, this article is an attempt to fill the research gap in this area.

## 2. Materials and Methods

Three research hypotheses were put forward for the purposes of the study:

**Hypothesis 1 (H1).** *3C sustainable system positively affects brand awareness/association with the brand of a cultural institution.*

**Hypothesis 2 (H2).** *3C sustainable system has a positive impact on the perception of the brand quality of a cultural institution.*

**Hypothesis 3 (H3).** *3C sustainable system has a positive impact on loyalty to the cultural institution's brand.*

To verify the hypotheses, confront the theoretical construction with the empirical model developed on the basis of data—in 2018, a survey was conducted on a group of 1021 Polish consumers of cultural services, who at the same time regularly use social media. In this article, the 3C sustainable system has been treated as a single latent variable, consisting of consumption, contribution, and creation, and we expect it to correlate and exert a positive influence on the consumer-based brand equity (CBBE) of a cultural institution.

In order to examine the impact of the 3C sustainable system (activity of Polish consumers of cultural services in social media) on the CBBE (consumer-based brand equity), data collected using a standardised online survey were used. 1837 respondents took part in the survey. The sample largely reflects the profile of the group of Polish internet users who use social media in Poland—according to the Gemius study. Apart from research agencies, during our research we were also taking under consideration research conducted by M. Grzesiak and described in his book [8] (pp. 51–56). He is presenting in his work deep characteristics of young generations in Poland and in US. We can also find the detailed portrait of polish e-commerce users in work of M. Jaciow and R. Wolny [20] (pp. 57–96, pp. 100–112).

As a result of the verification, incomplete questionnaires, and those with errors, as well as questionnaires filled in by respondents who replied that they have never used social media, were rejected. This ultimately gave 1021 correctly filled-out questionnaires. Women accounted for 68.3% of the sample, men for 31.7%. The majority of respondents (34.6%) were young people aged 29–38 and 19–28 (34.1%). The largest group were respondents with higher education (69.7%), 27.1% of respondents were people with secondary education (Table 1).

In order to capture the online activity of respondents in social media (dimensions of the 3C sustainable system), they were asked to respond to 15 statements on the seven-level Likert scale, ranging from the "very rarely" to "very often". The components and individual elements of the 3C sustainable system used to measure the activity of Polish consumers of cultural services in social media are presented in Table 2.

Statements used to measure brand awareness of cultural institutions, perception of brand quality of cultural institutions and loyalty to the brand of cultural institutions—the CBBE system (nine statements) were taken from the source literature and also adapted to the seven-point Likert scale, ranging from the answer "strongly disagree" (1) to "strongly agree (7). The awareness of the existence of the brand of a cultural institution and the perceived brand quality of a cultural institution was measured with the help of six statements that were proposed by B. Yoo et al. [14,21], A.F. Villarejo-Ramos, and M.J. Sánchez-Franco [22]. To measure brand loyalty, we used three statements by G. Walsh et al. [23] (Table 3).

**Table 1.** Personal details of respondents.

| Personal Details | | Percent | Personal Details | | Percent |
|---|---|---|---|---|---|
| Sex | Female | 68.3 | Profession | Pupil | 3.6 |
| | Male | 31.7 | | Student | 13.7 |
| Age | Up to 18 years | 2.2 | | Manual worker | 11.5 |
| | From 19 to 28 years | 34.1 | | Office workers | 66.4 |
| | From 29 to 38 years | 34.6 | | Pensioner/retired | 2.3 |
| | From 39 to 48 years | 19.4 | | Unemployed | 2.5 |
| | From 49 to 58 years | 7.1 | Place of permanent residence | Rural areas | 16.1 |
| | Over 58 years | 2.7 | | Town up to 50,000 residents | 17.7 |
| Education | Primary | 0.1 | | Town from 50,000 to 150,000 residents | 17.7 |
| | Lower secondary | 1.8 | | Town from 150,000 to 500,000 residents | 16.8 |
| | Basic vocational | 1.3 | | City over 500,000 residents | 31.6 |
| | Secondary | 27.1 | Financial situation | Very bad | 1.3 |
| | | | | Bad | 2.3 |
| | | | | Average (neither good nor bad) | 36.8 |
| | Higher | 69.7 | | Good | 45.7 |
| | | | | Very good | 14 |

Data source: Collected by this research.

**Table 2.** Components of the consumer Consumption, Contribution, Creation (3C) sustainable system used to measure the activity of Polish consumers of cultural services in social media.

| No. | Component 1 Consumption of Content on the Internet | Component 2 Contribution of Content on the Internet | Component 3 Creation of Content on the Internet |
|---|---|---|---|
| 1 | I look at the official website of the indicated cultural institution (statement 1.1) | I post comments on the social profile of the indicated cultural institution (statement 2.1) | I write reviews of events (cultural offers) of the indicated cultural institution (statement 3.1) |
| 2 | I look at the social profiles (e.g., fan page on Facebook) (statement 1.2) | I "like" posts of the indicated cultural institution posted on the fan page (statement 2.2) | I publish photos from events of the indicated cultural institution (statement 3.2) |
| 3 | I read posts published by the indicated cultural institution on social networking sites (statement 1.3) | I "like" photos, videos and other content of the indicated cultural institution posted on the fan page (statement 2.3) | I share posts about the designated cultural institution (statement 3.3) |
| 4 | I read other people's comments about the indicated cultural institution posted on social media platforms (statement 1.4) | I "like" pages (fan pages) related to the indicated cultural institution (statement 2.4) | I share videos about the indicated cultural institution (statement 3.4) |
| 5 | I look at photos, videos and other content related to the indicated cultural institution (statement 1.5) | I share with other Internet users posts related to the indicated cultural institution (statement 2.5) | I place content related to the indicated cultural institution on blogs (statement 3.5) |

Data source: Collected by this research.

The analyses employ a combination of exploration and confirmatory statistics. First of all, the analysis of the reliability of the components of the 3C sustainable system was used to measure the activity of Polish consumers of culture services in social media [24]. It was carried out using SPSS software and the *Reliability Analysis* module. As the analytical model, Cronbach's alpha internal consistency model, based on the average correlation between the scale positions, was chosen [25]. Cronbach's alpha coefficient is used to assess the reliability of the measuring tool. The value of the coefficient exceeding a level of 0.7 is assumed to be acceptable values—in the analysed case, it was 0.945. The results of evaluating the reliability of the measurement tool for the 15 components (statements) of the 3C system therefore indicate that it is highly reliable for the "Consumption" component (Cronbach's alpha coefficient 0.881), the "Contribution" component (0.925), and the "Creation" component (0.906), which is why the authors predicted that this system can be considered as sustainable. All of the items describing

components of the 3C sustainable system used to measure the activity of Polish consumers of cultural services in social media are strongly correlated with the total scale.

**Table 3.** Components of the consumer-based brand equity (CBBE) system used to measure brand awareness/associations with the cultural institution's brand, perception of the quality of the cultural institution's brand and loyalty to the cultural institution's brand.

| No. | Component 4 Brand Awareness/Associations with the Cultural Institution's Brand | Component 5 Perceived Quality of the Cultural Institution's Brand | Component 6 Loyalty to the Cultural Institution's Brand |
|---|---|---|---|
| 1 | I easily recognise the indicated cultural institution among other similar organisations (statement 4.1) | The cultural offer of the indicated institution is of good quality (statement 5.1) | I regularly use the offer of the indicated cultural institution (statement 6.1) |
| 2 | I have good memories related to the indicated cultural institution (statement 4.2) | The offer of the indicated cultural institution is of better quality than of other similar organisations (statement 5.2) | I would recommend the indicated cultural institution to my friends (statement 6.2) |
| 3 | It is well known what distinguishes the indicated cultural institution (statement 4.3) | The offer of the indicated cultural institution is one of a kind (statement 5.3) | The cultural offer of the indicated institution is chosen by me in the first place (statement 6.3) |

Data source: Collected by this research.

## 3. Results

Most respondents declared that they most often use the services of cultural institutions, such as the cinema (53.1%), library (20.2%), and theatre (8.5%). The respondents usually use these cultural institutions once a month (35.6%)—Table 4.

**Table 4.** Frequency of using the services of cultural institutions by respondents.

| Question/Answer Variant | | Percent |
|---|---|---|
| How often do you use the services of the aforementioned cultural institution? | Once a year | 2.0 |
| | Two, three times a year | 25.6 |
| | Once a month | 35.6 |
| | Two, three times a month | 24.1 |
| | Once a week | 8.3 |
| | Two, three times a week | 4.5 |
| | Total | 100.0 |

Data source: Collected by this research.

All of the respondents use social media (Facebook, Twitter, Instagram). As definitely the most popular device for viewing content on the Internet, the respondents have indicated mobile phones (smartphone—96%). A desktop computer (27.2%), a portable computer (laptop—17%), and a tablet (notebook—18.3%) are also popular—Table 5.

**Table 5.** Tools used to view content on the Internet.

| Question/Answer Variant | | Percent |
|---|---|---|
| What devices do you use to view content on the Internet? | Desktop computer | 27.2 |
| | Laptop | 17.0 |
| | Tablet (notebook) | 18.3 |
| | Mobile phone (smartphone) | 96.0 |
| | Smart TV | 8.4 |
| | Other | 0.5 |

Data source: Collected by this research.

In total, the brands of 387 different cultural institutions were analysed, belonging to such categories as: cinema (53.1%), library (20.2%), theatre (8.5%), community centre (6.6%), museum (4.2%), philharmonic (2.3%), art gallery (1.4%), and opera and operetta (0.9%).

Exploratory factor analysis was carried out using the Principal Component Analysis (PCA, Variable Selection) and orthogonal Promax rotation using SPSS software [22]. The adequacy coefficient of the Kaiser-Meyer-Olkin sample (KMO) was 0.931, while the Barrett sphericity test proved to be significant ($\chi^2$ = 13057,836, $p < 0.001$). The KMO measure indicates whether the variables were correctly presented in the sample. Its high level (0.931), exceeding the value of 0.5, indicates the validity of using the factor analysis. The possibility of applying this analysis was also confirmed by the p-value value, which is below 0.001—the hypothesis about the correlation matrix being an identity matrix was rejected, therefore there are correlations between the analysed variables indicating the existence of unobservable factors. The obtained results indicated their suitable matching with the data—however, two of the scales used were eliminated from the analysis. For variable (1.1), no value was displayed, because it is lower than 0.5 (this level of presentation of the result was indicated in the assumptions of the analysis). This variable is poorly correlated with both factors. In addition, an indirect analysis indicated that the variable (2.1) should also be removed.

When considering the degree of the explanation of the variability of the input set of variables, we managed to detect two factors explaining over 67% of the information for the set of 13 observable variables (Table 6).

**Table 6.** Factor loading matrix—a reduced model.

| Structure Matrix | | | |
|---|---|---|---|
| Statement | | Component | |
| Statement (No.) | Content | 1 | 2 |
| (2.3) | [I "like" photos, videos and other content of the indicated cultural institution posted on the fan page] | 0.970 | 0.622 |
| (2.2) | [I "like" posts of the indicated cultural institution posted on the fan page] | 0.964 | 0.622 |
| (2.4) | [I "like" pages (fan pages) related to the indicated cultural institution] | 0.923 | 0.643 |
| (1.3) | [I read posts published by the indicated cultural institution on social networking sites] | 0.764 | 0.596 |
| (1.2) | [I look at the social profiles (e.g., fan page on Facebook)] | 0.691 | 0.521 |
| (1.4) | [I read other people's comments about the indicated cultural institution posted on social media platforms] | 0.670 | 0.531 |
| (1.5) | [I look at photos, videos and other content related to the indicated cultural institution] | 0.657 | |
| (3.4) | [I share videos about the indicated cultural institution] | 0.646 | 0.932 |
| (3.3) | [I share posts about the designated cultural institution] | 0.670 | 0.920 |
| (3.5) | [I place content related to the indicated cultural institution on blogs] | 0.527 | 0.819 |
| (2.5) | [I share with other Internet users posts related to the indicated cultural institution] | 0.727 | 0.768 |
| (3.2) | [I publish photos from events of the indicated cultural institution] | 0.564 | 0.718 |
| (3.1) | [I write reviews of events (cultural offers) of the indicated cultural institution] | | 0.628 |

Data source: Collected by this research.

The results from Table 6 show that 13 variables (statements) from all input variables have been assigned to the relevant factors. The composition of the factors is as follows:

(i)     Factor 1: (2.3), (2.2), (2.4), (1.3), (1.2), (1.4), (1.5), and

(ii)    Factor 2: (3.4), (3.3), (3.5), (2.5), (3.2), (3.1).

Using Promax's oblique rotation to ensure the occurrence of a relationship between the factors, this relationship is shown at the level of 0.687, which means a strong positive relationship. An increase in the level of one factor increases the level of the other one.

In the next part, an analysis of the reliability of components that are used to measure the components of the CBBE system was carried out (awareness of a cultural institution's brand, perception of the quality of a cultural institution's brand, and loyalty to a cultural institution's brand). This analysis was carried

out (similarly to the 3C sustainable system) using SPSS software and the *Reliability Analysis* module. All of the assumptions are analogous to the 3C sustainable system discussed above. Testing the reliability of the measurement tool indicates its acceptable level (0.751), exceeding the value of 0.7. The variables used in the analysis are moderately strongly correlated with the total scale. Analysing the questions as a whole, it was noticed that questions (6.1), (6.2), and (6.3) are poorly correlated with the total scale and their removal increases the Cronbach's alpha value. However, taking into account that all three questions define loyalty to the cultural institution's brand, it was decided not to eliminate them from further analysis. All nine variables were left.

As in the case of the 3C sustainable system, exploratory factor analysis was carried out with respect to the components of the CBBE system while using the Principal Component Analysis (Variable Selection) and orthogonal Promax rotation in SPSS software. In this case, the adequacy coefficient of the Kaiser-Meyer-Olkin sample (KMO) was 0.782, while the Barrett sphericity test proved to be significant ($\chi^2 = 4472.921$, $p < 0.001$).

The obtained results indicated their matching with the data—none of the used scales were eliminated in the analysis. Considering the degree of explanation of the variability of the input set of variables, it was possible to detect three factors explaining over 65% of the information for the full set of 9 observable variables (Table 7).

**Table 7.** Factor loading matrix—a full model.

| Structure Matrix | | | | |
|---|---|---|---|---|
| **Statement** | | **Component** | | |
| **Statement (No.)** | **Content** | **1** | **2** | **3** |
| (4.2) | I have good memories related to the indicated cultural institution | 0.922 | 0.465 | −0.012 |
| (4.3) | It is well known what distinguishes the indicated cultural institution | 0.870 | 0.514 | −0.023 |
| (4.1) | I easily recognise the indicated cultural institution among other similar organisations | 0.832 | 0.379 | −0.010 |
| (5.2) | The offer of the indicated cultural institution is of better quality than of other similar organisations | 0.438 | 0.871 | 0.046 |
| (5.1) | The cultural offer of the indicated institution is of good quality | 0.605 | 0.743 | 0.048 |
| (5.3) | The offer of the indicated cultural institution is one of a kind | 0.304 | 0.713 | 0.028 |
| (6.3) | The cultural offer of the indicated institution is chosen by me in the first place | −0.035 | 0.054 | 0.786 |
| (6.2) | I would recommend the indicated cultural institution to my friends | −0.038 | −0.032 | 0.773 |
| (6.1) | I regularly use the offer of the indicated cultural institution | 0.042 | 0.088 | 0.653 |

Data source: Collected by this research.

Analysing the results from Table 7, it was observed that all input variables have been assigned to the relevant factors. The composition of the factors is as follows:

(i) Factor 1: (4.2), (4.3), (4.1),
(ii) Factor 2: (5.2), (5.1), (5.3), and
(iii) Factor 3: (6.3), (6.2), (6.1).

The results of the analysis show that it was possible to generate three factors that clearly correspond to the components of the CBBE system used to measure brand awareness/associations with the brand of a cultural institution, the perceived quality of cultural institution's brand and loyalty to the cultural institution's brand. Factor loadings are high, showing a very strong correlation between observable input

variables and hidden factors. A moderately strong correlation was observed between factor 1 (brand awareness/associations with the brand) and factor 2 (brand quality perception), while dependencies are very weak between the remaining pairs of factors, which rather suggests their independence.

In order to test the research hypotheses established and the conceptual model, latent variables were placed in the structural equation model (SEM). The SEM analysis was based on a factor model estimated using the PCA (Variable Selection) in correspondence to the obtained results, which did assume the elimination of two variables (1.1, 2.1). The 3C sustainable system that was used to measure the activity of Polish consumers of cultural services in social media was analysed as a second-order factor consisting of first-order latent variables (consumption, contribution, and creation). On the other hand, the CBBE system that was used to measure the brand equity based on the consumer consisted of three latent variables (brand awareness/associations with the cultural institution's brand, perceived quality of the institution's brand, and loyalty to the cultural institution's brand). The results obtained have shown that the conceptual model has achieved the appropriate matching levels—Figure 1. Statistically significant relations were marked with the symbol (*) and standard regression coefficients were given in brackets.
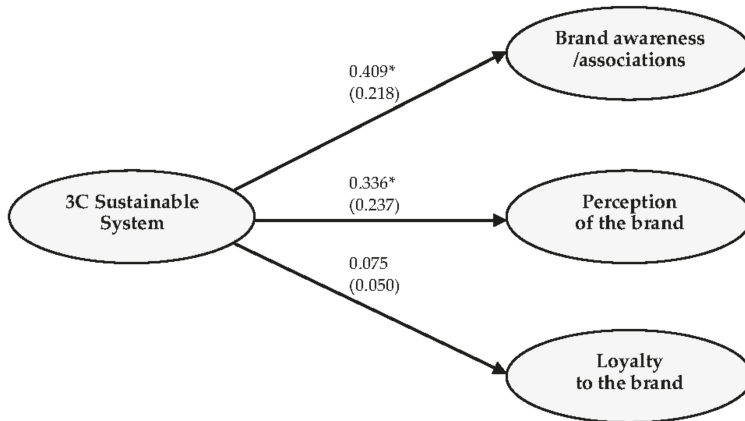


**Figure 1.** Theoretical construct: 3C Sustainable System versus CBBE components.

The results presented in Figure 1, obtained for the reduced model based on the PCA method, indicate that the positive impact of the 3C sustainable system used to measure the activity of Polish consumers of culture services in social media was found on the components of the CBBE system used to measure brand equity, however statistical significance (*) was confirmed only for the relation of the 3C sustainable system and the CBBE component "brand awareness/associations with the brand", and for the relation between the 3C sustainable system and the CBBE component "brand quality perception". The relations are positive, which means that the 3C sustainable system acts as a stimulant for the CBBE system components. Thus, along with the increase in the activity of consumers of cultural services in social media, the level of brand equity that is based on the consumer increases. The strength of impact is measured using the standardised regression coefficient—this impact is weak but comparable. However, for the relationship with loyalty to the brand, this impact is negligible, which is related to the lack of relevance for this relationship. Table 8 presents selected indicators for matching the theoretical construct to empirical data.

**Table 8.** Goodness of fit indices of the structural equation model (SEM) model.

| Name of the Indicator | Value of the Indicator | Comment |
|---|---|---|
| CMIN/df | 1.634 | Quotient of the chi-square index and the number of degrees of freedom; an acceptable level of measure that indicates a good model fit: less than 5.0; the estimated model is acceptable. |
| RMR | 0.095 | Root mean square residual; an acceptable level of measure that indicates a good model fit: less than 0.1; the estimated model is acceptable. |
| GFI | 0.980 | Goodness of fit index; an acceptable level of measure that indicates good model fit: above 0.9; the estimated model is acceptable. |
| AGFI | 0.964 | Adjusted goodness of fit index; an acceptable level of measure that indicates good model fit: above 0.9; the estimated model is acceptable. |
| CFI | 0.995 | Confirmatory fit index; an acceptable level of measure that indicates good model fit: above 0.9; the estimated model is acceptable. |
| RMSEA | 0.025 | Root mean square error of approximation; an acceptable level of measure that indicates a good model fit: less than 0.08; the estimated model is acceptable. |
| PCLOSE | 1.000 | Proximity index; acceptable level: above 0.05; the estimated model is acceptable. |

Data source: Collected by this research.

The index values that are presented in Table 8 confirm that the theoretical model is well matched to the empirical data.

Commenting on the final results of the SEM analysis carried out using the PCA method and referring them to the stated research hypotheses, it was found that:

(i) Hypothesis 1: the 3C sustainable system positively affects brand awareness/associations with the cultural institution's brand—the null hypothesis proclaiming no influence was rejected, therefore Hypothesis 1 was confirmed

(ii) Hypothesis 2: the 3C sustainable system positively affects the perception of the cultural institution's brand—the null hypothesis proclaiming no influence was rejected, therefore Hypothesis 2 was confirmed

(iii) Hypothesis 3: the 3C sustainable system positively affects brand loyalty—there are no grounds to reject the null hypothesis stating that there is no relationship, therefore Hypothesis 3 has not been confirmed.

Summing up the results of the research that is based on the reliability analysis, factor analysis and SEM analysis, it should be stated that the 3C sustainable system stimulates the CBBE system components. Statistically significant relationships have been observed for components that are related to brand awareness/associations with the cultural institution's brand and for the relationship related to the perception of quality of the cultural institution's brand. However, no statistically significant relationship has been demonstrated for the impact of the 3C sustainable system on loyalty to the cultural institution's brand.

## 4. Discussion

In the second decade of the 21st century, significant qualitative changes have been occurring, resulting in new opportunities to strengthen the brand equity of cultural institutions. Websites, Facebook profiles, or YouTube channels are becoming the foundation of building long-term relationships, creating the image of a cultural institution and the primary source of information about the organisation, its activities and

offer. This is also confirmed by the results of the research, which are presented in the article. As the authors of the study show, the activity of consumers of cultural institutions on the Internet, in particular, in social media, stimulates the brand's awareness/associations with the brand of a cultural institution and the perception of its quality. Research that was conducted by M. Sobocińska [26] (p. 214), however, shows that not all managers of cultural institutions are fully aware of these facts. Although almost all Polish cultural institutions subjected to the study (the study covered 451 institutions) have their own website (99.1%), only 77.4% of them have a Facebook profile. Managers of the cultural institutions in Poland, mentioned creating the image of the cultural institution, developing relationships with consumers of culture, and advertisement of the cultural institution as the main goals of using social media. This was indicated by 71.2%, 51.3%, and 44.9% of the respondents, respectively. All three responses are therefore related to the consumer-based brand equity (CBBE), because they have a significant impact on brand awareness, the perception of its quality or loyalty to the cultural institution's brand. Table 9 presents the most important goals—indicated by the surveyed managers of 451 entities in the cultural sector in Poland—in the use of social media in the cultural sector.

**Table 9.** Objectives for the use of social media in various types of cultural institutions.

| Social Media | Total | Museums | Art Galleries | Cinemas | Theatres and Musical Institutions | Publishers | Cultural Centres and Other Cultural Institutions |
|---|---|---|---|---|---|---|---|
| Creating the cultural institution's image | 71.2 | 78.7 | 63.5 | 66.2 | 76.1 | 56.3 | 68.5 |
| Shaping relationships with consumers of culture | 51.3 | 50.0 | 53.8 | 52.9 | 59.1 | 50.0 | 37.0 |
| Advertising of a cultural institution | 44.9 | 52.1 | 51.9 | 35.3 | 40.9 | 43.8 | 44.4 |
| Supporting sales of cultural goods and services | 30.9 | 7.4 | 19.2 | 35.3 | 46.6 | 50.0 | 46.3 |
| Acquisition of information for the needs of managing the cultural institution | 30.4 | 26.6 | 30.8 | 30.9 | 30.7 | 37.5 | 33.3 |
| Engaging consumers of culture in the process of creating the offer | 27.4 | 30.9 | 25.0 | 29.4 | 22.7 | 18.8 | 31.5 |
| Searching for ideas for changes in the offer | 17.2 | 20.2 | 9.6 | 23.5 | 11.4 | 12.5 | 22.2 |

The results do not add up to 100% because respondents were able to select three answers. Data source: [26] (p. 209).

Sobocińska's research also shows that social media are gaining importance in Poland and are becoming a more important tool in the cultural institutions' communication with the market [26]. Studies conducted by Pew Research Center on 1244 non-governmental organisations operating in the US prove that American cultural institutions mainly use social media in their activities, such as: Facebook (99%), Twitter (74%), YouTube (67%), Flickr (38%), LinkedIn (31%), Wikipedia (27%), Vimeo (23%), Foursquare (20%), Yelp (19%), and Google+ (17%) [27]. Out of the surveyed organisations, 12.2% have four profiles in social media, 11.9% have three profiles, 11.3%—five profiles, 11.1%—two profiles, and 10.6% as many as six [27] (p. 27). It is worth noting that every fourth organisation publishes content on social media several times a day (25%), and every fifth one—once a day (20%). In addition, 28% publish content several times a week, and 16%—once a week. Similarly to Sobocińska's research, it follows that the role of social media in the coming years will be even more significant [26].

The research that was conducted by the authors shows that statistically significant relations have been observed in particular for components related to the awareness of a cultural institution's brand and for the relationship related to the perception of its quality. However, no statistically significant relationship has been demonstrated for the impact of the 3C sustainable system on loyalty to the cultural institution's brand. Therefore, we should think about what has a significant impact on this state of affairs. The mere consumption of content, tracking ("liking") the profile of a cultural institution on a website such as Facebook can be very beneficial to users, and at the same time does not bind the Internet user to any obligation towards the cultural institution. The research conducted for MuseumNext in April 2011 on 500 residents of the United Kingdom shows that people who follow the profile of a cultural institution in social media do it mainly because they want to [27]:

(i)    provide support in the promotion of this institution (47%),

(ii)   impress their friends by visiting this institution (38%),

(iii)  obtain promotional online discounts or see announcements about upcoming exhibitions (35%),

(iv)   identify with the opinions or style represented by a given cultural institution in social media (31%),

(v)    visit a given cultural institution (20%), and

(vi)   inform their friends that they value cultural institutions (11%).

Profiles of cultural institutions in social media can be attractive in themselves for the users of these media, which makes them willingly consume content about the cultural institution, and often even share their opinions about it (contribution). The first two components of the 3C sustainable system (consumption and contribution) do not usually involve a large intellectual effort for the user of social media, which is why this activity can be observed most often. The third component of the 3C sustainable system—the creation of content that is related to a cultural institution in social media requires the Internet users to be much more involved than just consumption of content or contribution. It also often requires specialist knowledge and appropriate skills (e.g., preparation of appropriate graphics or a short film), which is why this type of involvement occurs in the Internet space less frequently than the aforementioned consumption or contribution. The mere consumption of content or contribution probably have a big impact on the brand's awareness and even the perception of its quality, but it seems that in the process of building loyalty to the cultural institution's brand, the creation of content online, which as mentioned above, occurs much less frequently than the other two components of the 3C sustainable system, is the most important.

The reasons for the activity of consumers of culture services on social media can be found in the economic, psychological, and social regularities of consumer behaviour on the market of culture services. Among them, we should indicate, for example, the effect of demonstration (the tendency to be similar to others) or the "halo" effect (positive assessment of a given product or service if it has at least one advantage with a significant intensity) [28]. However, the most important thing is to pay attention to the fact that social media users are happy to inform their friends about any of their activities related to a given cultural institution, because they want to feel that they participate in something important, want to impress others with their lifestyle and raise their social status [2,26]. On the other hand, if they see that their friends are involved in a cultural event, they also want to participate, for example, in order not to stand out from others. In addition, there is a snowball effect in social media [29]. This is the process of a "viral" increase in the number of people that are involved in a given event, thanks to the fact that they were persuaded by others who had been persuaded to it earlier [30,31]. So, if, for example, users intend to take part in a symphonic concert, they encourage their friends to do it, and those in turn their friends, etc. Thanks to this kind of effect, based on the activity of consumers of cultural services in social media, it is possible to actively and steadily develop the brand equity of cultural institutions, in particular, brand awareness and its perceived quality.

However, when reaching for social media in the process of building the brand equity of a cultural institution, it should be remembered that they are governed by slightly different laws than typical marketing communication tools. The particularly important ones are: openness, transparency, informality, and equality of users. An important implication of these characteristics is a willingness for sincere dialogue with users. Institutions need to be aware that interactions with the community (often anonymous) can be both positive and negative, which can affect the brand equity in both positive and negative ways. The latter interactions, criticising the cultural institution, the initiatives and subjects presented, are especially difficult. Examples include harassing comments to certain posts made by artists appearing on social networks, or often non-related comments on film materials that are posted on YouTube. In addition, there still remains the rational and substantive criticism of the published content and of the activities to which it relates, which often cannot be simply ignored. Its existence requires the cultural institution to determine appropriate guidelines in such cases. Of course there is also the option to disable commenting, but this takes away invaluable feedback, thanks to which the

institution can not only build the brand equity but also improve its operations and adapt them to the needs of its customers [32].

## 5. Conclusions

In summary, the development of social media contributes significantly to changes in the forms of satisfying the needs and the participation of individuals in social life, including in culture. This is reflected by the development of the information society and a society based on knowledge. This state of affairs creates new opportunities for the creation of the brand equity of cultural institutions. These opportunities are accompanied by a change in the roles that are played by the consumer of culture. Thanks to the use of modern technologies, through the use of new media, he is no longer only a consumer of content related to cultural institutions included in social media, but through its contribution and creation, he is also an active participant in the processes of creation and dissemination. Managers of cultural institutions should be fully aware of this, especially since, as the authors of the article have discussed, the activity of consumers of cultural services in social media significantly influences the brand equity of cultural institutions.

In this place, it must be also indicated that the obtained results of the conducted survey, due to the sampling method applied (in the survey, non-random sampling methods were used—targeted selection), provides knowledge about only the Polish respondents' opinions. Additionally, it is worth to underline, that the costumer behaviour may be different when they interact with different "types of culture", because their backgrounds could be different and this fact could "re-direct" them to some cultural product rather than others. In the future, in-depth qualitative and quantitative research is planned on a much larger sample of online consumer of cultural services in countries of Central Europe.

## References

1. Kaplan, A.M.; Haenlein, M. Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horiz.* **2010**, *53*, 59–60. [CrossRef]
2. Mazurek-Łopacińska, K.; Sobocińska, M. Media społecznościowe w procesach komunikacji przedsiębiorstwa z rynkiem. *Mark. Zarz.* **2017**, *1*, 343–352. [CrossRef]
3. Mazurek-Łopacińska, K.; Sobocińska, M. Marketing communication in the light of challenges brought about by virtualisation and interactivity. *Econ. Bus. Rev.* **2016**, *2*, 65–76. [CrossRef]
4. Killian, G.; McManus, K. A Marketing Communications Approach for the Digital Era: Managerial Guidelines for Social Media Integration. *Bus. Horiz.* **2015**, *58*, 539–549. [CrossRef]
5. Correia, T.J.F.; Mateus, A.; Leonor, S. Marketing Communications Model for Innovation Networks. *Int. J. Innov.* **2015**, *3*, 43–53. [CrossRef]
6. Wróblewski, Ł. *Marketing Strategiczny w Sektorze Kultury Euroregionu Śląsk Cieszyński*; CeDeWu: Warsaw, Poland, 2016.
7. Wróblewski, Ł. *Culture Management. Strategy and Marketing Aspects*; Logos Verlag: Berlin, Germany, 2017.
8. Grzesiak, M. *Personal Brand Creation in the Digital Age. Theory, Research and Practice*; Palgrave Pivot: Warsaw, Poland, 2018.
9. Smith, P.R.; Zook, Z. *Marketing Communications: Integrating Offline and Online with Social Media*; Kogan Page Publishers: London, UK, 2011.
10. Shao, G. Understanding the Appeal of User-Generated Media: A Uses and Gratification Perspective. *Internet Res.* **2009**, *19*, 15. [CrossRef]
11. Muntinga, D.G.; Moorman, M.; Smit, E.G. Introducing COBRAs: Exploring motivations for brand-related social media use. *Int. J. Advert.* **2011**, *30*, 13–46. [CrossRef]

12. Schivinski, B.; Brzozowska-Woś, M. Badanie aktywności online polskich konsumentów dotyczącej marek. *E-mentor* **2015**, *2*, 77–85. [CrossRef]

13. Olins, W. *O Marce*; Instytut Marki Polskiej: Warsaw, Poland, 2004.

14. Yoo, B.; Donthu, N. Developing and validating a multidimensional consumer-based brand equity scale. *J. Bus. Res.* **2001**, *52*, 1–14. [CrossRef]

15. Keller, K.L. Conceptualizing, measuring, and Managing Customer-Based Brand Equity. *J. Mark.* **1993**, *57*, 1–22. [CrossRef]

16. Aaker, D.A. *Managing Brand Equity: Capitalizing on the Value of a Brand Name*; The Free Press: New York, NY, USA, 1991.

17. Aaker, D.A. Measuring brand equity across products and markets. *Calif. Manag. Rev.* **1996**, *38*, 102–120. [CrossRef]

18. Aaker, D.A.; Joachimsthaler, E. *Brand Leadership. Building Assets in an Information Economy*; The Free Press: New York, NY, USA, 2000.

19. Christodoulides, G.; de Chernatony, L.; Furrer, O.; Shiu, E.; Abimbola, T. Conceptualising and Measuring the Equity of Online Brands. *J. Mark. Manag.* **2006**, *22*, 799–825. [CrossRef]

20. Jaciow, M.; Wolny, R. *Polski E-Konsument: Typologia, Zachowania*; Helion: Gliwice, Poland, 2011.

21. Yoo, B.; Donthu, N.; Lee, S. An examination of selected marketing mix elements and brand equity. *J. Acad. Mark. Sci.* **2000**, *28*, 1–14. [CrossRef]

22. Villarejo-Ramos, A.F.; Sánchez-Franco, M.J. The impact of marketing communication and price promotion on brand equity. *J. Brand Manag.* **2005**, *12*, 431–445. [CrossRef]

23. Walsh, G.; Mitchell, V.W.; Jackson, P.R.; Beatty, S.E. Examining the antecedents and consequences of corporate reputation: A customer perspective. *Br. J. Manag.* **2009**, *20*, 187–203. [CrossRef]

24. Aczel, A.D.; Sounderpandian, J. *Statystyka w Zarządzaniu*; Wydawnictwo PWN: Warsaw, Poland, 2017.

25. Timm, N.H. *Applied Multivariate Analysis*; Springer: Heidelberg, Germany, 2002.

26. Sobocińska, M. *Uwarunkowania i Perspektywy Rozwoju Orientacji Rynkowej w Podmiotach Sfery Kultury*; Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu: Wrocław, Poland, 2015.

27. Thomson, K.; Purcell, K.; Rainie, L. Arts Organizations and Digital Technologies. *Pew Res. Center* **2013**, *1*, 26.

28. Wróblewski, Ł.; Dziadzia, B.; Dacko-Pikiewicz, Z. Sustainable Management of the Offer of Cultural Institutions in the Cross-Border Market for Cultural Services—Barriers and Conditions. *Sustainability* **2018**, *10*, 3253. [CrossRef]

29. Social Media Audiences and the Museum. Available online: https://www.museumnext.com/2010/07/museums-can-use-social-media (accessed on 10 March 2018).

30. Pacholski, M.; Słaboń, A. *Słownik Pojęć Socjologicznych*; Wydawnictwo Akademii Ekonomicznej w Krakowie: Kraków, Poland, 2001.

31. Jakubiec, M.; Kurowska-Pysz, J. *Jakość Kształcenia Zawodowego na Pograniczu Polsko-Czeskim Jako Determinanta Konkurencyjności Przedsiębiorstw*; Wydawnictwo Naukowe Akademii Techniczno-Humanistycznej w Bielsku-Białej: Bielsko-Biała, Poland, 2013.

32. Kopera, S.; Najda-Janoszka, M.; Wszendobył-Skulska, E. Kanał YouTube jako przykład wykorzystania mediów społecznościowych w procesie transferu wiedzy do biznesu turystycznego. *Folia Turist.* **2014**, *32*, 55–72.

# Moving Urban Sculptures towards Sustainability: The Urban Sculpture Planning System in China

**Zhe Liu [1,2], Pieter Uyttenhove [2] and Xin Zheng [1,*]**

[1]   School of Architecture, Southeast University, Nanjing 210096, China; 230159002@seu.edu.cn
[2]   Department of Architecture and Urban Planning, Ghent University, 9000 Ghent, Belgium;
      Pieter.Uyttenhove@UGent.be
*   Correspondence: przheng@163.com; Tel.: +86-139-051-83943

**Abstract:** Following the continuous development characterized by large-scale constructions, Chinese urban development has shifted to the promotion of refined urban space quality. Urban sculpture, an important part of public arts, has been receiving increased attention in China as an important carrier for highlighting urban characteristics, culture, and history within cultural policies. As a type of cultural capital, it offers innovative methods to address the issues of economic, social, and environmental sustainability, in particular cultural sustainability. Interdisciplinary theories of urban planning are creatively applied to guide, coordinate, and improve the sustainable production of urban sculptures in China. This research was initiated to: (1) Illustrate how urban sculptures are produced through an urban planning system in the context of China; (2) explain what kind of influencing factors in relation to sustainability exist, mainly within the framework of planning strategies and cultural policies; and (3) put forward sustainable planning strategies to produce urban sculptures. To answer the above inquiries, we reviewed more than 100 articles, plans, and government documents, and we conducted several semi-structured interviews. The article argues that urban planning strategies and policies have been conceived as strategic instruments by the Chinese municipal governments to realize sustainable development of urban sculptures. Our findings would enrich knowledge on geographic studies of public art planning through the contextualized analysis of a Chinese urban sculpture planning system. It also fills the gap in the literature on the sustainability of urban sculptures by approaching the perspectives of planning strategies and cultural policies.

**Keywords:** Urban sculpture planning system; public art; sustainable urban sculpture development; cultural policy; management; heritage; public participation; China

## 1. Introduction

Ancient Chinese sculpture has flourished with a long history, boasting a splendid civilization. However, the actual placement of sculptures in urban public spaces began in the Republican era (1911–1949), as the concept of government authority-oriented memorial sculptures was imported from the West. Consequently, the wars and political movements stagnated the construction of urban sculptures. Since the 1980s, the construction of urban sculptures has been revived and has begun to develop dramatically. Since the economic reform in 1978, Chinese cities experienced a historic period of transition from a planned economy to market economy [1]. The industrial structure of several Chinese cities shifted from the traditional economy of manufacturing to a consumption-based economy, especially the cultural consumption industry. The conflict between the development of urban construction and the protection of urban features is always a problem faced during the process of urban development, especially in a post-socialist context [2]. The importance of art has gradually been granted within social policies in the economy, politics, and culture [1,3].

The concept of an "urban sculpture" emphasizes the notion of "urban" and highlights its interactive nature with the surrounding urban environment. This specific definition was put forward in 1985: "Urban sculptures refer to the sculptures those built on roads, squares, green spaces, residential areas, scenic spots, public buildings, and other event venues within the urban planning areas" [4]. Internationally, urban sculptures are usually categorized as public art (Table 1). Public art refers to permanent or temporary works of art that are located in places accessible to the public, including a variety of spatial forms, material media, and expressions. Public art refers to the art form that public institutions have used public funds to place them in public spaces, and the art itself often emphasizes its public nature [5–7]. Although China has gradually begun to pay attention to diversified public art installations, urban sculpture has occupied a more important position in the production of Chinese public arts in the past few decades. It can be seen from the plans, official documents, and policies that they are focusing more on urban sculptures than other kinds of public arts (see more in Appendix A). Urban sculpture can, therefore, be seen as a kind of contextualized production of public art in China that corresponds to its international context.

**Table 1.** Products or activities of public arts.

| Type of Product or Activity | |
|---|---|
| **Tangible** | **Intangible** |
| *Sculpture*, Painting, monument, building, multimedia, or other permanent or temporary physical work of art | Event, performance, or gathering (temporary activity); oral history or cultural expressions passed on from generation to generation |

Source: Based on the report of "The role of the arts and culture in planning practice" [8].

Public art has been utilized as a strategy for sustainable urban living by many cities and regions [9] (p. 9). It is generally recognized to respond to a number of urban issues in environment, economic, social, and cultural development [10–12]. Extensive researchers have claimed the benefits of public art on the improvement of the quality of the environment [13]; activation of living communities [1]; city marketing [14]; promotion of tourism [15]; development of sustainable tourism [16]; strengthening social equity [13]; enhancement of social cohesion [17]; improvement of urban image [17]; formation of urban identity [18]; economic, social, and physical urban regeneration [19,20]; vandalism reduction [21]; rehabilitation of post-industrial sites [16]; development of a "sense of place" [13]; and construction of a cultural landscape [22], etc. There are three pillars of sustainability: Ecological, economic, and social, with culture included as the fourth pillar [23–25]. Katriina Soini and Joost Dessein elaborate "culture in sustainability" and recognizes cultural capital in different forms as arts, heritage, knowledge, and cultural diversity [24]. Excellent urban sculptures can respond to the issues of sustainable urban development in the above four pillars, especially culture sustainability [26].

The definition of "sustainable development" adopted here is based on the 1987 report of the World Commission on Environment and Development (also known as the Brundtland Report) that it "meets the needs of the present without compromising the ability of future generations to meet their own needs" [27,28]. As for the notion of "sculpture sustainability", it is usually examined from the perspectives of "ecological arts" and "environmental arts" [26,29–32]. A lot of academic improvements have been made in achieving the maximum use of original materials and modern environmentally friendly materials in the design of sculptures, such as low-carbon materials and recyclable materials [33–37]. However, few studies have examined "sculpture sustainability" from the perspective of planning strategies and cultural policies. Sustainability is defined as a development model that includes certain policies that are adopted to reduce energy consumption and pollution, promote cohesion for the harmonious development of people and cities, and encourage efficient landscape design [38,39]. Problems of unsustainable development should not be merely spontaneous social products, but planning should be utilized as a means guided by policy makers and stakeholders to avoid unsustainable outcomes [38]. We can therefore see that planning strategies and policies are

actually important determinants of whether urban development can be sustainable. As for sculpture sustainability, planning strategies and policies also play important roles. Policy making is regarded as an important factor in the production of public art, as discussed in studies by several researchers, such as Cartiere and Willis [7], Chang [40], Miles [41], Selwood [10], and Senie and Webster [42]. Martin has also demonstrated how different cultural policies have shaped the divergent public-art productions [43]. Pollock and Paddison have pointed out that it is better to embed the public art within institutional structures [44]. "Cardiff Public Art Strategy" also states that the development and integration of public art should be actively encouraged throughout the planning policy framework [45] (p. 13). All these research and practices have provided a robust conceptual basis for this article. However, few researchers have unpacked how planning strategies can be utilized, and what kinds of policies can be utilized in order to promote the sustainability of urban sculptures. It is, therefore, crucial to fill the research gap of sculpture sustainability from the perspective of planning strategies and policies.

Most of the current studies written in English on public art planning focus on European-American contexts. These studies rarely focus on Asian contexts, which are characterized by different social structures and management [4]. In particular, urban sculpture and its planning systems in China have not been comprehensively examined. Chinese cities have applied urban planning theory creatively in the field of urban sculpture [46]. Urban sculpture planning is formulated to take all aspects of sustainable development factors into account. Examples of the factors include ensuring that the overall planning and arrangements take into consideration the required conformation with the dynamic urban space development, as well as making sure that the development focus of urban sculpture correlates with the major urban heritage preservation and cultural landscape construction projects. In the practices of international regions and cities, planning has also been utilized as a tool to lead to the long-term production of public art, as playing a full role to the coordination role of planners to endeavor to strengthen the effects of promoting the healthy development of culture and economy, such as the "Fort Worth Public Art Master Plan" [47], "Louisville Public Art Master Plan", and "Enhancing Singapore's City Landscape: The Public Sculptures Masterplan 2002" [48], etc. We can see, therefore, that some issues of sculpture sustainability are not unique to China. The investigations into Chinese urban sculpture planning systems could also present local experiences for global issues in other countries and regions. China was chosen as the main research object because it has an urgent need for a sustainable development model, following the rapid and large-scale development of urban sculptures, which is reflected in the sharp increase in the number of urban sculptures. Taking Shanghai as an example, the number of urban sculptures has increased from 1500 pieces in 2003 to 3500 in 2015, and many of these are large-scale, fixed sculptures. As a result of this concentrated and explosive development, several unsustainable issues have arisen. Faced with these problems, how can we realize the human-centered principle of intergenerational equilibrium to meet the needs of contemporary people and leave room for our future generations? How can we achieve harmonious development of sculpture and dynamic development of urban space? How can we achieve ultimate cultural and social sustainability through the continuous development of urban sculptures? How can we make urban sculpture develop in a long-term and healthy way? These questions are all related to urban sculpture sustainability.

Consequently, this article differs dramatically from the existing literature, not only because of the different perspectives, but also because of the geographic areas in which it was conducted. The main purpose of this article is to put forwards sustainable principles from the perspectives of planning strategies using the case studies that mainly focus on a Chinese context. For this purpose, our research questions are the following: (1) How are urban sculptures produced through planning systems in China's context? (2) What kind of influencing factors are related to sustainability, predominantly within the framework of planning strategies and policies? (3) What kind of principles for planning strategies and policies could be utilized to move urban sculptures towards sustainability? Our findings will be valuable to both policy makers and other urban actors, such as urban planners, artists, and architects,

in crafting strategies for the sustainable production of urban sculptures by improving planning efforts. Moreover, the results will also add to the knowledge of geographic studies of public art planning through the contextualized analysis of Chinese urban sculpture planning systems.

## 2. Materials and Methods

We first conducted a comprehensive search of scientific publications from the China National Knowledge Infrastructure (CNKI-http://www.cnki.net/) and Web of Science Direct, using different search terms and combinations, as shown in Table 2. As urban sculpture is an important part of public arts in international contexts, the term of "public art" was also used to make sure related studies could be included. Following the searches, we eliminated the repetitive studies in different databases to make sure the data was not covered more than once in the analysis. As a significant proportion of urban sculpture planning research is not published in peer-reviewed journals, we also used Google Scholar to get more articles by an extensive subjective search. As was previously stated, one of our aims was to describe the development history so we did not define the time limit to get as much information as much as possible (-May 31, 2018). In addition, planning and policy documents were collected from open sources, such as local official planning bureau websites, and from personal contacts with unpublished documents.

**Table 2.** Keywords for the search in the academic databases.

| Search Terms |
| --- |
| Q1: "urban sculpture planning*" |
| Q2: "urban sculpture" and "planning" |
| Q3: "public art planning*" |
| Q4: "public art" and "planning" |

Source: Drawn by the author.

In the database of Web of Science, we obtained 31 studies of peer-reviewed scientific papers and conference papers. We obtained another 95 studies of peer-reviewed articles, 31 newspaper articles, and 26 theses of PhDs and Masters from the CNKI database. We then verified the relevance of these studies through article titles, keywords, and abstracts, resulting in 126 articles in two languages (English; Chinese), which specifically dealt with urban sculpture planning of China. Another 31 urban sculpture planning and policy documents were also included in this research. Because urban sculpture planning studies are closely related to actual practices, the studies were also checked by the standards whether it contained cases for specific cities. The 37 studies with cases were the core materials for the review. To make some comparative studies, another 31 foreign (including Asia, European, Australian, American cities) public art master plans and related literature were collected through searching "public art master plan" on Google and Google Scholar.

Each paper was examined according to the following descriptive attributes in the established analysis framework of this research, as listed in Table 3. This framework was formulated based on preliminary fast literature reviews with the main research objectives in mind. Initially, some aspects were targeted to gather basic information, such as when, where, why, by whom, and how the research and practice took place. According to the framework, related literature materials were reviewed one by one. As a result, the targeted inquiries could be conducted according to the analysis and a summary of the information reviewed, such as the status quo of urban sculpture development in Chinese cities, the problems of urban sculptures' development before planning and strategies of planning, and also the different strategies utilized in the planning practices to move sculptures towards sustainability.

**Table 3.** Aspects for literature examination.

| Aspects | Attributes |
|---|---|
| ● *Planning development over time* | |
| Related information about the planning documents | Who, why, when, how, where (city) the plans were formulated and implemented |
| ● *Current situation of urban sculpture development* | |
| Distribution | Overall layout of the current sculptures |
| Number of sculptures | For current situation |
| Artistic quality | The information carried by urban sculptures, such as cultural metaphor and historical connotation; the relationship between sculptures and social, historical, and physical environment; it is usually reflected in the characteristics of sculptures, such as theme, size, color, etc. |
| Physical quality | Current problems of materials, sources, or energy consumption |
| Management | Participator, financial factor, legislative condition |
| ● *Methodological approaches for planning* | |
| Planning from different levels | Master plan, district-level plan and detailed plan |
| Overall layout of the sculpture | Distribution structure of corridor, cluster, and nodes, etc. |
| Planning bases | Related urban planning systems: Master plan, urban design, subject plan, green space system, etc. |
| Selection of sculpture characteristics | Theme, size, type, color, material, color, etc. |
| Urban space related with sculptures | Public spaces of different functions based on land use type |
| Guidance principles | Different guidelines in relation to different levels |
| Heritage and culture | How to embed cultural and historical elements in sculptures |
| Vision and goal | The goal or vision anticipated on the plans |
| Implementation strategy | Participators, such as government, leader, planner, architects, artists, citizens, etc., how to broaden the participation; Methods of public participation |

Source: Drawn by the author.

Other qualitative methods were also utilized in this study, such as semi-structured interviews with key actors of government officials in the Municipal Urban Planning Bureau, artists, urban planners, architects, landscape architects, residents, etc. These interviews were mainly designed as supplementary materials to identify the effects brought by sculpture planning documents and policies to the cities in relation to sustainability. The interviews were structured by several questions of "why, how, what". For example, why is the sculpture planning important for the sustainability of sculptures? (the "why"); how does the urban sculpture planning contribute to the sustainability of sculptures? (the "how"); and what actual effects does the planning and policy have after the implementation? (the "what"). The descriptive method was also utilized in this research to study the development of the urban planning system in China based on the literature examination.

## 3. Situating Urban Sculptures within Chinese Cultural Policies and Urban Planning Systems

Urban sculpture, as an important part of cultural strategies, varies with different social and political contexts [43,49]. Cultural policy "refers to the institutional supports that channel both aesthetic creativity and collective ways of life . . . Cultural policy is embodied in systematic, regulatory guides to action that are adopted by organizations to achieve their goals" [43,50]. Before the Chinese economic reform (1978), the development of urban sculpture was influenced largely by political factors, with commemorative urban sculptures in realistic styles, such as statues of historical celebrities, peasants,

and soldiers (Figure 1). The sculptures were regarded as a political tool of maintaining social order, which could produce monuments to stimulate civic identities and nationalism. Since 1980s, urban sculpture was utilized by Chinese cities as a driver of local economies, local tourism, urban-upgrading, and sociocultural urban regeneration. The "National Urban Sculpture Planning Group" (chengshi diaosu guihua zu) was established with the approval of the Ministry of Culture and the Ministry of Construction in 1982. Subsequently, various cities and provinces across the country have set up special institutions to promote urban sculpture construction.



**Figure 1.** (**a**) The statue of Sun-Yat Sen, Nanjing, 1930; (**b**) the statue of peasants and soldiers, Nanjing, 1968. Source: Baidu picture.

In order to strengthen the construction and management of urban sculptures, the national regulation of the "Administration Regulations of Urban Sculpture Construction" (chengshi diaosu jianshe guanli banfa) was issued by the Ministry of Culture and Construction in 1993 [46]. It marked the point at which the construction of urban sculptures in China began to enter the track of legal systematic management. The cities of Seattle, Birmingham, Melbourne, and Singapore are all excellent examples of regenerating urban economies, beautifying city spaces, and fostering a sense of identity through arts and culture [40] (p. 1921). Thus, urban sculptures were also taken as new ways to increase urban economics and competitiveness because of its effects of imaging cities in post-socialist China. In order to integrate the urban sculpture construction into the management systems of urban planning, the Ministry of Construction has undertaken the role of guidance, which further clarified the function of construction management [51]. In 2005, the Ministry of Construction carried out the "Public Art-Percent Investment Policy Research (gonggong yishu baifenbi touzi zhengce yanjiu)" to conduct research and analysis on the public art policies, financial factors, and development trends of domestic and foreign cities [52]. In 2006, "Guiding Opinions on Urban Sculpture Construction (guanyu chengshi diaosu jianshede zhidao yijian)" (No.137 [2006]) has been issued to guide urban sculptures' construction from aspects of project establishment, site selection, design examination, etc. Based on the establishment of urban sculpture management agencies and the formulation of relevant regulations, urban sculpture construction has gradually been incorporated into urban planning systems throughout the country [53]. Urban sculpture planning is a suggestive document, which is linked to the original urban planning system, providing a platform for joint work of professional practitioners from different majors, including urban planning, art, landscape, architecture, municipal administration, transportation, etc. Song Chunhua, the Deputy Minister of Construction, in his speech at the Changchun sculpture construction conference, proposed that urban sculpture has already entered the "planning era (guihuashidai)" [54]. Urban sculpture plans are usually formulated as a part of overall master plans (chengshi zongti guihua) or a single special plan (zhuanxiang guihua) [55]. According to incomplete statistics, from 1996, more than 38 cities (See details in Appendix A) have compiled urban sculpture planning documents. Since the 1980s, more than 10,000 urban sculptures

in China have been constructed [56] (Table 4). The number of sculptures in many cities have increased significantly. However, due to the lack of corresponding planning, management regulations, operational mechanisms, and other policy measures, the urban sculpture construction of some cities has been under chaotic situations. Before the formulation of urban sculpture planning, most of the cities would do a thorough investigation on the development status of the urban sculptures, including the number, location, image, and some other details of the sculptures. This helped to summarize the problems existing in the current situation, and then solve them through corresponding methods during the formulation of sculpture planning documents. Through the analysis results of the literature review for the current situation of urban sculpture development (based on the framework in Table 2), the factors in relation to sustainability for the current situation could be conducted and classified into four aspects (Table 5). In addition, these four aspects are related to the values corresponding to sustainable urban development, such as environmental, cultural, economic, and social values [57,58].

**Table 4.** Number of sculptures in some Chinese cities.

| City | Beijing | Shanghai | Chongqing | Ningbo | Wuhan | Nanjing | Shanghai | Guangzhou | Xi'an |
|---|---|---|---|---|---|---|---|---|---|
| Number | 1836 | 1034 | 700 | 235 | 500 | 1046 | 3500 | 1245 | 572 |
| Year | 2004 | 2004 | 2004 | 2010 | 2012 | 2014 | 2015 | 2015 | 2017 |

Source: Drawn by the author according to the data from literature review.

**Table 5.** Influencing factors of urban sculptures in relation to sustainability.

| Value in Relation to Sustainability | Factor | Attributes |
|---|---|---|
| Economic and Environmental Value | Systematism | Smart site design of the sculptures in a collaborative system; creation of urban image; overall structure of distribution as a narrative system; marketing place |
| Cultural value | Regionalism | Urban identities; local distinctiveness; cultural heritage utilization (tangible and intangible); adaptive theme and characteristics of sculptures |
| Environmental Value | Life cycle Physical-life Artistic-life | Eco-friendly materials; renewable and low carbon resources; reduction of energy consumption Harmonious relationship of sculpture and environment; improvement of the environmental quality |
| Social value | Management | Intergenerational equilibrium; people oriented; resilient system; phased arrangement |

Source: Drawn by the author.

According to the above analysis, these current issues in relation to sustainability could be listed as follows:

- **Lack of systematic coordination.** Due to the market-oriented urban sculpture construction, the overall distribution of urban sculptures in many cities is uneven. Most artists usually work in their own independent fields without consideration of the relationships between these sculptures and other existing ones [59]. In particular, the lack of an overall arrangement for characteristics and themes of urban sculptures results in a singleness of form and the duplication of subject matter within the proposed site vicinity. This will not only lead to a waste of urban resources, gentrification of certain areas, and increasing disparities, but it can also be detrimental to the principles of equity balance. In addition to the fairness of the urban sculpture layout, urban sculptures should be given priority in areas in which they are relatively scarce [60].
- **Loss of cultural identity.** Affected by cultural globalization, China has also been influenced by Western art. There are too many similar sculptures emulated from the West, making it impossible to construct a unique urban cultural landscape [61,62]. The sculptures are mass-produced by

factories as industrial products without cultural meaning, formal sense, or taste in art [63]. The mass production of these urban sculptures aggravates the phenomenon of "thousands of cities with one appearance (qian cheng yi mian)". There is a lack of understanding of regional culture, especially in works responding to regional culture [64].

- **Reduction of life cycle.** The life span of urban sculptures includes both their physical life and artistic life [65]. Lack of research on sculptural materials and production techniques results in their reduction in the physical life span. Materials should withstand climatic conditions, such as sun, heat, and freezing as well as winter salt exposure. There is no corresponding policy to strengthen the protection of existing urban sculptures, so professional maintenance and repairs cannot be carried out [59]. What is more important is the abnormal shortening of the urban sculptures' art life, which is demonstrated by their disharmony with the surrounding environment. An inconsistency of characteristics, such as theme, site selection, and material, could result in relocation or dismantling only a short period after the sculpture was constructed [66]. These processes cause a waste of construction funds, manpower, and resources [65]. For Chinese cities, the urban space holding sculptures may change due to rapid urbanization. For example, the statue of Sun Yat-sen in Nanjing was moved due to the construction of the subway and the upgrading of the transportation system. The reason for this was a disjunction between the superior planning of the urban spatial development and the construction of urban sculptures, which cannot meet the long-term and short-term goals of urban development.

- **Non-standard management system.** Urban sculpture construction is based mainly on local management and lacks overall city coordination. The management levels of different districts are uneven and the division of responsibilities are not clear, as they lack unified mechanisms throughout the entire process of production. Many cities do not have a specific department to manage the construction of sculptures. Therefore, the construction of sculptures cannot be combined with several major projects in urban transformation, such as the regeneration of historical and cultural blocks. Contrary to the principle of intergenerational equilibrium, the spontaneous construction of sculptures in the short-term will lead to overdevelopment. Construction should satisfy the long-, medium-, and short-term goals, and be carried out in a planned and regulated manner [67]. In some cities, urban sculptures are often monopolized by a small number of governors and elites, meaning that the citizens cannot participate in the process, which goes against the principle of people-orientation [68,69].

In response to these issues, urban sculpture planning has been utilized as a tool of solution by several cities in China. It has been suggested that the drafting of the urban sculpture development plan should be gradually transferred to regional coordination, location confirmation, measurement control, and cultural guidance in the long run. Through these methods, Chinese urban sculptures will be pushed towards the path of sustainability. Furthermore, it has been proven that urban sculpture will become an indispensable part of the process of urban and social development in China [65].

## 4. Drafting Strategies for Urban Sculpture Planning from the Perspective of Sustainability

Although urban sculpture planning of each city has different focuses and methods in each city, it can be summarized and divided into four main aspects. Four strategies compose a theoretical framework of urban sculpture planning, which addresses the four issues in relation to sustainability (see Part 3). According to the analysis, this section proposes advices and guidelines for future planning, using excellent examples in practice and research.

### 4.1. Structure and Image

The Chinese urban sculptural planning system does not just focus on a single urban sculpture, but on urban sculptures as a narrative system of symbols. It emphasizes the distribution structure among the sculpture clusters from the overall city level. The development of urban sculptures has

infiltrated into various spaces of the city, as they are inextricably linked to urban transportation, green space systems, and other types of open spaces. This means that determining the spatial planning for the distribution of priority urban sculptures should be based on a comprehensive analysis of other existing urban planning systems. Urban sculpture planning in China's urban planning system usually includes: General urban planning, general urban design, green space system planning, and historical and cultural city preservation planning, etc. Taking Wuhan as an example, GIS (Geographic Information System) technology was utilized in the plan to sort out the spatial distribution structure of urban sculptures [70]. The road skeleton, urban landscape system, and urban green infrastructure, etc. were all superimposed to form the elements of an urban public space. Consequently, the overall structure of urban sculpture planning was formed by this open spatial structure.

The interactive relationship between urban sculptures and urban spaces can help to enhance the overall image of the city [20,71]. Kevin Lynch's theory of urban images presents five elements that people perceive as urban images: The path, the edge, the district, the node, and the landmark [72]. This theory was imported as guidelines for the formation of an overall image of urban sculptures in several cities in China. It has been considered that, if urban sculptures could be linked to these elements, the effects of promoting the city's image and people's perceptions could be enhanced dramatically. In other words, urban spaces that consider these five elements when building sculptures could create the highlights of the overall municipal layout. This cognitive theory and urban landscape system elements are the main basis of hierarchical positioning in urban public spaces from different levels of districts, corridors, landmarks, and nodes [73]. The famous international example of this is the 'Angel of the North' landmark, which plays an important role in changing the image of a "postindustrial" city into a "cultural" city [19]. The other example can be also seen in Cardiff, Atlanta, Reston, Santa Rosa, and Greeley, where their master plans recommend that public arts should be displayed in the sites corresponding to these five cognitive elements: "Path" of primary road, pedestrian, cycle networks, river, and rail corridors; "edge" of gateways; "district" of parks, education area; "node" of metro stations, town center, and government center; and also "landmarks". [45,74–77]. Nanjing, Suzhou, Mianyang, and Wuxi all utilized Kevin Lynch's five elements of perception to form main cognitive systems and they also took the traditional axis of Chinese landscape into consideration [78]. Spatial cognitive systems could help to construct an overall visual perception hierarchy of urban sculptures [78]. Harbin also considers these five elements, as they create a park and a large square as a core point, urban streets as links, and a general spatial layout of urban sculptures that is based on courtyards, street gardens, small gardens, city entrances, and important road intersections [79]. It can be seen that the core areas are composed of elements that include points, lines, and faces, as they are the guiding core points of urban space imagery that correspond to the five elements proposed by Kevin Lynch.

The above-mentioned structure and image formation should be based on a full understanding of the status quo of sculpture, the urban natural environment, and the humanistic environment. The preliminary work for the preparation of urban sculpture planning includes a basic survey of the distribution of current urban sculptures, specific themes, and features. Taking Nanjing as an example, a master distribution plan was made by locating current urban sculptures on the map and other analysis, such as themes' classification, was also formulated according to the investigation data. (Figure 2) A database of urban sculptures was also formulated using GIS technology. Standardized charts of urban sculpture survey included basic information, such as individual sculptures, photographs, designers, and other basic information. This information can be utilized to analyze different themes or districts of current urban sculptures systematically. "The urban sculpture current situation survey fully investigates and analyzes the status quo of urban sculpture and provides valuable digital basic data for the systematic management of urban sculptures. In the future, this information can also be reflected in the urban tourism systems" (Interviews with Wang Zhaozhao who is in charge of urban sculpture construction at the Nanjing Urban Planning Bureau, March 2017). The direction of priorities for future development can be determined by comparing the current distribution density of urban

sculptures with the planned structure and image, which can be determined by analysis of existing planning documents. Unsustainable issues of excessive concentration and duplication of themes in the process of urban sculpture development can be avoided from a macro level.
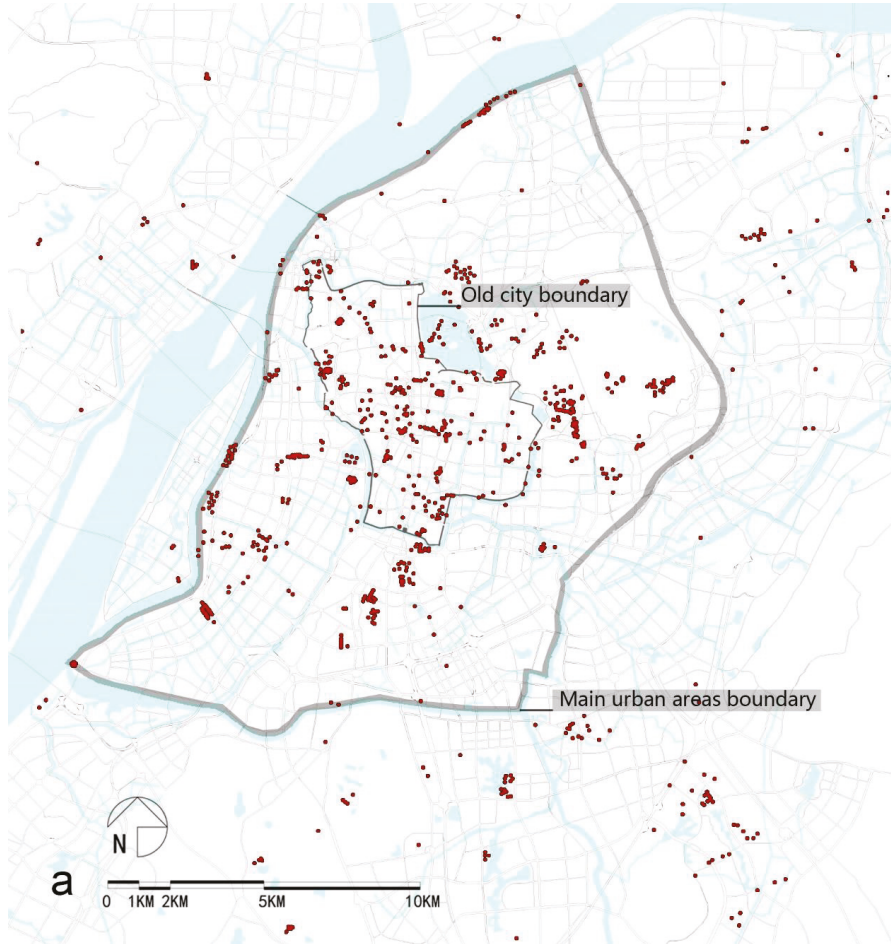


**Figure 2.** *Cont.*
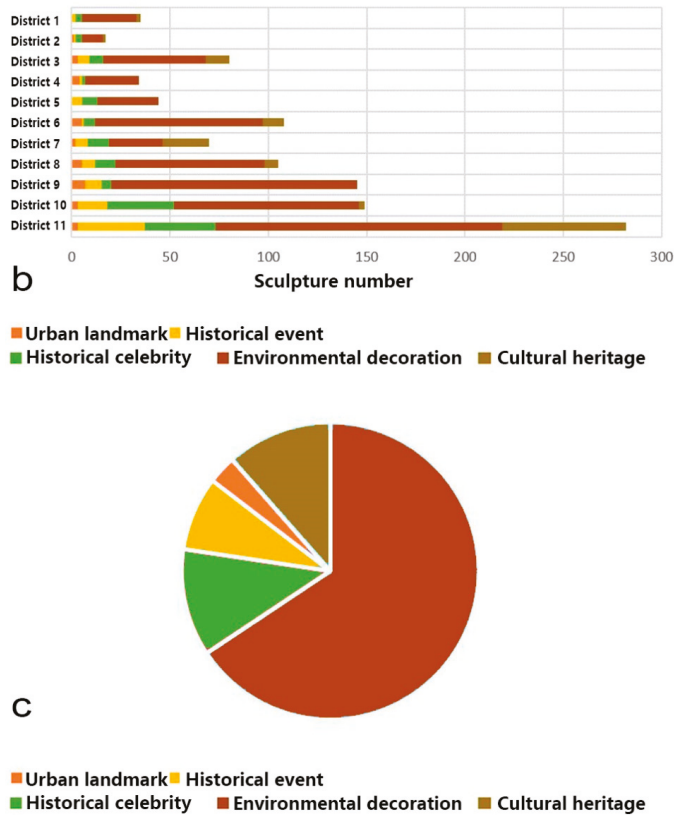
**Figure 2.** Examples of analysis in the Nanjing sculpture investigation. (**a**) Distribution of urban sculptures within main urban areas' boundaries and the old city's boundary (a red spot represents one piece of sculpture, about 1,069 pieces in total until 2015); (**b**) Analysis of sculptures located in 11 different administrative districts; (**c**) Analysis of different types of sculptures in Nanjing (classified according to investigation). Source: Drawn by the author according to the data from Nanjing Urban Planning Bureau [80].

Taking Shanghai as an example, the "Shanghai Urban Sculpture Master Plan" was compiled under the framework of the "Shanghai Master Plan". It takes urban public spaces within the administrative jurisdiction of Shanghai as the main planning scope. The plan determines the layout of key districts for urban sculptures from two different geographic levels of the city level (shiyu) and central city-level (zhongxin cheng). The city level determines the urban development structural axis, key urban areas, and industrial districts in the suburbs, and the key areas for the construction of urban sculptures; the level of central urban area determines the geometric patterns of 'one vertical, two horizontal, three rings, many hearts' (yizong, liangheng, sanhuan, duoxin). (Figure 3). "One vertical" represents the Huangpu riverside landscape axis; "two horizontal" means the Suzhou riverside landscape axis and the avenue from the east to the west; "third rings" are the inner ring, central ring, and the outer ring landscape axis; "many hearts" determine the business district, the municipal and sub-municipal business centers, historical and cultural areas, large-scale ecological green space, and other key areas as important districts of the sculpture landscape system [81]. "From the level of overall planning, urban sculpture planning does not only help to determine the layout of urban sculptures scientifically through sorting out urban spaces in other urban planning systems, but also make sculptures a holistic

narrative expression for specific city. At this point the city sculpture was successful" (Interview with deputy chief officers at the Nanjing Urban Planning Bureau, 2017).
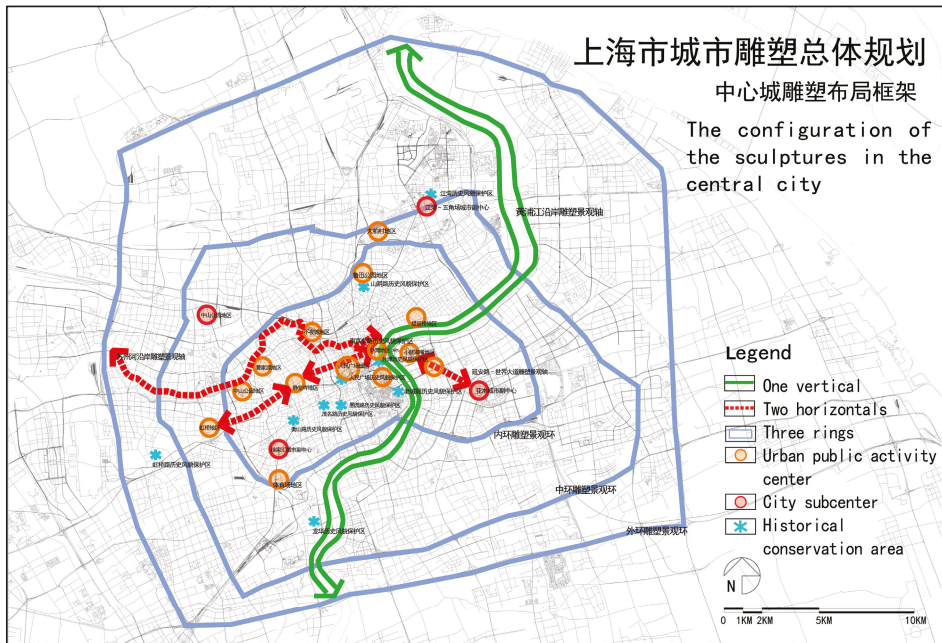


**Figure 3.** "The configuration of the sculptures in the central city" in the Master Plan of Sculptures in Shanghai, 2006. Source: Shanghai Municipal Planning Bureau [81] (Translated by the author).

*4.2. Identity and Heritage*

As illustrated by TC Chang, "contemporary public art has the power to inform place identity" [40]. "Identity in this context is a socio-spatial concept in that people themselves endow places with meaning, leading to identification with shared characteristics between groups within locality" [20]. Good urban sculptures can form a special "sense of place" by shaping regional culture [82], creating a cultural landscape, and inheriting the collective memory of the city [83], so as to give its residents or tourists a sense of identity. This is largely due to the local cultural information displayed in urban sculpture and the high degree of conformity between urban sculpture and the local environment. As suggested by Tim Hall and Iain Robertson, two elements are crucial to develop a sense of place through urban sculptures: The creation of artwork unique to sites, and the development of an awareness of the tradition and identity that is unique to a certain place [84]. The corresponding planning strategies of urban sculptures are mainly represented in the selection of the theme of the urban sculptures, based on both the regional cultural resources and the selection of the location, which often relates to historical events [37]. The construction of urban cultural landscapes and collective memories plays an important role in the transmission of urban historical culture through full use of urban history, city characteristics, and regional culture. Taking the urban sculpture planning of Xi'an as an example, a large amount of data was collected on historical contexts in the early stages of the planning work, including key historical figures, events, and the locations of historical events, and 116 typical historical subjects and events were selected. According to the time of the historical events, such as dynasties, the sculptures were arranged to form an "oriental city sculpture poem" of historical local characteristics [85]. "Manchester's Northern Quarter Public Art Scheme" is an international example of the adoption of this approach of reflecting the local identity through a study of local history on

Tib Street [20]. Other famous examples can also be seen in Virginia [86] and the "Power of Place" projects in Los Angeles [87]. The layout of urban sculptures in Xiangtan city took full account of the location of major historical events, trying to awaken people's memories and innermost feeling to carry forward this traditional history and culture. The planning process considered historical events, historical and cultural blocks (lishiwenhua jiequ), famous monuments, and celebrity relics as the main distribution focuses of urban sculptures. This analysis was mainly based on the historical and cultural city's planning documents of conservation. Several locations were selected, such as the Guandi Temple, Martyrs, and celebrities' former residences [88].

In addition, urban sculpture planning should also play an important role in the protection of urban heritage, which includes both physical and metaphysical aspects. This does not only mean the protection of existing heritage sculptures, it also means that urban sculptures could be used to rejuvenate historic districts and cultural blocks, by highlighting the history and heritage of a place [88,89]. McCarthy argues that "the use of historical associations can provide a valuable means of linking public art with local identity" [20]. In China, the construction of urban sculpture is usually incorporated into the regeneration of the historical and cultural blocks. For example, the Luwan District of Shanghai is rich in historical resources. Nearly one-quarter of the district has been categorized as a historic conservation area. During the planning process of urban sculptures, these resources are considered. Intangible historical and cultural resources are materialized in the form of sculptures by an emphasis on themes, such as historical events, folk culture, historical figures, literary arts, and historical buildings, for future developments. These main themes were formulated by examining important historical events, historical figures, and cultural relics of historic buildings [90]. Harbin has proposed to place sculptures at the historic sites, such as the locations of historical events, and places where outstanding historical figures lived and worked [79]. In the process of the renewal of historic districts, the important role of public art has been examined by several researchers, such as Beijing's 798 Historic District [3] and Shanghai's Red Town Urban Regeneration project [91]. Urban sculpture planning puts these kinds of projects on the agenda. A "culture-led" approach to regeneration and the mechanisms of its application are embedded in the regeneration policies and practices in UK, such as the famous example of the Tate Modern in London. This can also be seen in the Guggenheim in Bilbao [20]. It can be said that, especially in the post-industrial era, urban sculptures can help realize the transformation and revitalization of cultural centers from global experiences. However, one critical issue of equity should be recognized, as the public art could lead to gentrification in some circumstances. In addition, some researchers point out that the simple historical reflection may only lead to "nostalgia and the re-production of myths" [19,20].

In Chinese urban sculpture planning systems, the urban sculptures are actively advocated to be utilized to activate the historic street renewal project, inherit the historical context, and construct a tangible spatial form [64]. Many Chinese cities attempt to create more sculptures with themes of regional culture and historical information in sculpture planning. This also encourages a variety of sculptures to be built at the same time. Urban sculptures also provide a platform for sustainable education, presenting a unique form and interface for the continuation of ecological concepts. Through the experience of the sculpture, sustainable environmental ethics and the educational function of sustainable development can be realized [37]. Since Harbin is building an ecological city, the planning of the sculpture emphasizes the construction of related themes, such as ecological conservation [79].

*4.3. Space and Function*

One way of using art in urban sustainable development is realized through an interaction with the environment [17], "Public art may be defined as site-specific art in the public domain" [20]. Kwon has analyzed the specific form of site-specific public art, emphasizing the important connections between sculpture and the environment [92]. These interactions between urban sculptures and the environment have manifested itself in several ways. First of all, the urban sculptures should be environmentally friendly and fit with the natural environment [66]. When the environment surrounding the urban

sculpture project changes, the main structure of the original urban sculpture project should be tested and reinforced if necessary. In addition, urban sculptures should utilize their tangible forms to emphasize the surrounding environment, working together with the surrounding environment to enhance the quality of the space.

Interpreting the correlation and mutual restraint between urban sculptures and urban space on an artistic level can be regarded as urban sculpture planning's main basis for consideration. In other words, urban spaces with different locations, functions, history, and forms restrict the selection of specific attributes and the spiritual implications of the urban sculptures. Most plans guide the corresponding theme and specific attributes of urban sculpture according to the nature of the area. The planning of the urban sculptures ensures that the artistic life of urban sculptures is long-lasting, and the dynamic urban development, such as the nature of the land use, corresponds to the urban sculptures. Therefore, it is necessary to analyze the public spaces that may be associated with the urban sculptures and try to determine highly relevant urban spaces. By classifying these typical urban spaces, the corresponding principles of urban sculpture guidance are proposed in urban planning documents. Taking Tianjin as an example, typical urban spaces are divided into seven different types of spaces: Urban plazas and parks, residential areas, research and education spaces, culture and medical facilities, large commercial areas, and transportation stations [93]. For these different types of areas, corresponding guidelines for urban sculptures were put forward, including indicators, themes, size, form, material, color, and other elements. It is worth mentioning that Tianjin was the first city to put forward the specific indicator for urban sculptures in relation to its population. It is conceptualized that, until 2030, the number of sculptures will be no less than one piece per 10,000 citizens within the city boundary, and two pieces per 10,000 citizens within the central city area. This can also be seen in the "Public Art Master Plan of Fort Worth", in which it is suggested that public art should be integrated with the development of special spatial functions of the regional transit system that connects the growth centers and villages along commercial corridors [47].

Taking "urban sculpture planning in the central city of Beijing" (Beijing zhongxincheng chengshi diaosu guihua) as an example (Figure 4), it has defined a total of 125 key districts for the future construction of urban sculptures [94]. These districts are divided into six types based on their different functions: Historical conservation areas, large urban functional areas, urban special cultural areas, and centralized parks, green lands, strip green areas and waterfront, and urban road interfaces. Focusing on the cultural features and functional attributes of the key districts, the theme of the corresponding proposed urban sculpture was matched. The plan sets the requirements for urban sculptures in the form of detailed drawing guidance for different land functions. At the same time, there is moderate degree of flexibility to consider more detailed contents, such as the location, scale, and material of urban sculptures, in conjunction with the urban design of the region in the next step, and proposes more detailed guidelines for the design of urban sculptures at the site level as an artist's urban sculpture task manual. It also recommends that urban sculpture planning should be incorporated into the detailed guidelines for urban design, the implementation phases of key planning, and development initiatives. In this plan, it fully relies on the relevant contents of the central city control regulations and urban design guidelines to ensure the unity of planning [95]. Urban sculpture planning is integrated into the entire system of urban planning [66].
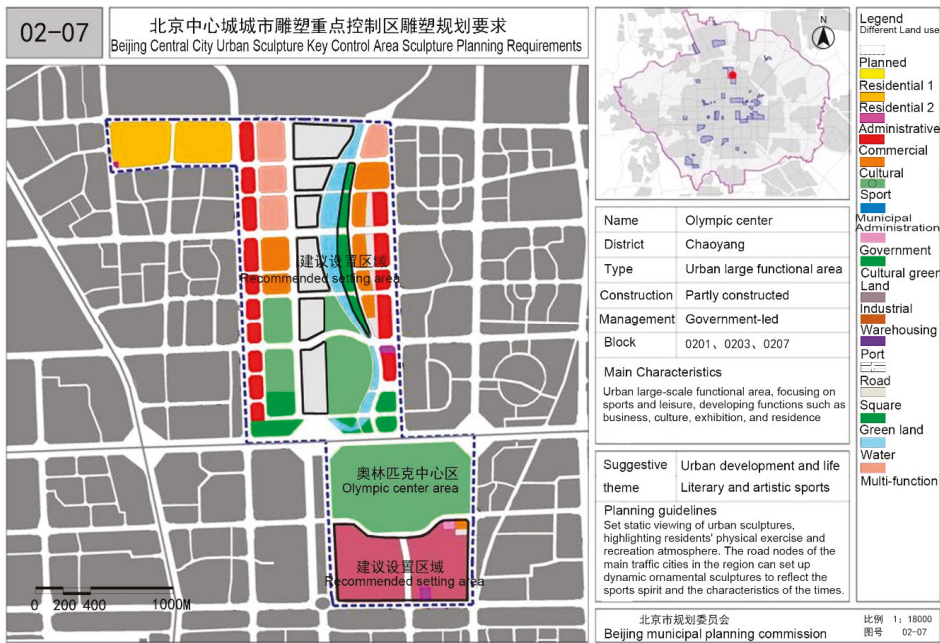
**Figure 4.** Beijing central city sculpture drawing guidelines. Source: Lin Tao [67]. (Translated by the author)

*4.4. Coordination and Management*

To ensure the implementation and management of urban sculpture planning, it is necessary to improve local policies, detailed rules of implementation, and corresponding operational mechanisms. The coordination function of the urban sculpture management system mainly includes the systematic design of specific implementation links, participating entities, fundraising, near-long-term planning, hierarchical divisions, and legislative trials. Urban sculpture construction management systems integrate the planning, selection, approval, construction, evaluation, conservation, and maintenance of the urban sculptures into a complete system [69]. In particular, different participators of the creative subject (artist and sculptor), the evaluation subject (evaluation commission composed of experts, scholars, and citizens), and the promotion subject (related government department) are integrated and managed by the system during the construction process [96]. The current mechanisms for the production in China is mainly influenced by the government, while community-led sculptures and urban sculptures promoted by non-government agencies are rare. Most urban sculptures are still influenced mainly by the opinions of the government and elite groups. Therefore, it is necessary to focus on developing a reasonable mechanism for public participation [55]. At the same time, multi-channel financing methods suitable for local administration should be explored, such as setting up public art funds, special funds for key projects, and private investments. Urban sculpture planning should be set up in a step-by-step, orderly, and reasonable way, in order to guide the cities' recent and long-term urban sculpture construction [97]. In the plan of Taizhou, different description methods were used to determine the relevant contents of the short-, middle-, and long-term sculpture planning projects. The short-term planning is relatively microscopic, focusing at the local sculpture placement, theme selection, and the guidance of related attributes and indicators. Long-term planning puts forward different requirements for key areas, such as commercial areas and residential areas, and takes principled guidance with regards to the main methods, referring to the description methods of the city's overall planning and sub-district planning [62]. The management system should also combine

legislation and regulations into the production of urban sculptures. The specific provision of the "Zhengzhou City Sculpture Management Measures" was set up according to the "People's Republic of China Urban and Rural Planning Law", "Copyright Law of the People's Republic of China", "Urban Design Management Measures", and other laws and regulations. The Yangpu District of Shanghai has tried to incorporate urban sculpture into the conditions of urban land transfer [98]. While ensuring the implementation of urban sculptures, this also provides a basis for subsequent planning management.

The development of urban sculptures should meet the requirements of intergenerational balance. Urban sculpture planning should have flexibilities, the ability to look to the future, be open to change, and sustain people's interest in urban sculptures over the decades [99]. Greater participation is generally agreed to be one of the central principles of sustainable development [17,100]. The initial formulation of urban sculpture planning was a result of the rapid and large-scale development of sculptures by local governments with a conscious promotion of public participation. Permanent offices are responsible for the planning, organization, coordination, and management of the city's urban sculptures. Art committees, which consist of sculptors, planners, architects, landscape architects, sociologists, and other experts, are responsible for the evaluation of the city's major urban sculptures and decision-making process. In this way, the establishment of specialized management institutions for urban sculpture will benefit the participation of all sections of society, which will be advantageous for the daily management of the urban sculptures, and also for the smooth implementation of sculpture planning [55]. The case of Manchester is very distinctive in its application of relatively loose, fluid, and flexible processes through innovative participation methods, such as the "Big Jam" open-forum sessions [20]. As McCarthy argues, the use of flexible processes are always conflicting with the provision of detailed frameworks and guidance [20] (p. 247). Also, "there needs to be a high degree of flexibility within the roles of artists to ensure an innovative and diverse approach" [20]. Therefore, sculpture planning should avoid excessive intervention and guidance.

## 5. Discussions and Conclusions

Above all, the study has summarized how the existing urban sculpture planning documents in China try to realize sustainability in terms of the framework of systematism, regionalism, integration into the surrounding urban space, and management. The planning documents can be divided into three different levels. The general plan proposes geometric patterns to help to realize the city image and the overall sculpture planning structures based on the legacy of existing sculptures. Sculptures of themes, which could highlight regional culture and history, are recommended in the detailed plans. In the planning, urban sculptures were creatively applied in urban renewal, cultural heritage protection, urban characteristics, and personalized expression. Urban sculptures also promote the sustainable development of urban space and the formation of an urban landscape. The management of urban sculpture planning provides a certain degree of flexibility, leaving space for artists to create, while also trying to build a multidisciplinary integration platform so that different fields of scholars can work together to provide suggestions of sustainable development for urban sculptures. It can be seen that the first three principles are all closely related to the 'co-production of sculptures and cities' [101] (p. 1). In other words, the way that the China's urban planning systems move urban sculptures towards sustainability are operated by and through positive interactions between arts and cities. They discuss the important guiding principles that are useful for the implementation of sculptures, such as the selection of sites and the selection of sculptures. As argued, one of the core principles for sustainability is "quality of life", and urban sculpture planning, as an important part of cultural policy that links art and the environment, can promote the core aim of sustainable urban development [17]. The fourth principle of 'coordination and management' can be seen as an institutional guarantee, which could guide the smooth implementation of planning.

This article argues that urban sculpture planning is formed under specific Chinese social structures, the political government, and cultural backgrounds through reviews of the urban sculpture planning development process in China. Some scholars state that urban sculpture planning is used

as an instrument to both boost urban entrepreneurialism and advance state authoritarianism in China [49,102]. Although urban sculpture planning largely originated from the leadership of local governments, it also involves experts, scholars, and citizens of various professions in its formulation process. Public art was an essential element of the early planning profession in the United States, which can be traced back to the collaboration of Frederick Law Olmsted with artists during the "City Beautiful Movement" [103]. This historical echo tells us that the urban sculptures were situated within the planning system globally. It is not just linked to the specific political factors of China. In other words, we argue that the appearance of urban sculpture planning in China is not simply due to the authoritarian mode of state, but the means and methods that are suitable for the sustainable production of urban sculptures and sustainable urban development. The main purpose of the planning is not only for realizing political and social control, but to cope with various problems that have emerged in the rapid development of urban sculpture construction.

Through the analysis of this article, it can be seen that China's urban sculpture planning has several special focuses in relation to sustainability. Firstly, the urban sculpture planning is usually examined from the city scale by incorporating urban sculptures within the framework of the whole urban planning systems and cultural policies in China. Secondly, it is conceptualized to make strategies based on the overall situation of urban sculptures in the city. Moreover, it is also a pioneering attempt to refine the guidance in urban sculptures through their relationships with the dynamic function of land use. These points were all examined specifically in this article through the main cases in Chinese contexts. However, some of China's challenges relating to sustainable development are not unique. For example, since the 1980s, a general consensus has already formed globally that urban regeneration can be realized through the use of public art [12,15,87,88]. Therefore, we have also adopted many excellent international examples and theories to help illuminate the conceptual framework of sustainable principles. All in all, although the urban sculpture planning system is formed with the special context of China, several principles towards sustainability are not unique. Thus, the planning principles put forward in this article also offer valuable insights into global issues relating to sculpture sustainability.

However, we must acknowledge that there are still several problems in the urban sculpture planning system. Currently, most of the Chinese urban sculpture plans have been made for upcoming urban sculptures instead of existing sculptures. Therefore, future research is required, in order to evaluate and recycle the existing sculptures [104]. We can also see the example of the "IXIA Public Art Think Tank" has conducted a very brief evaluation framework [57]. More studies should be carried out to evaluate existing sculptures. This article has taken a glimpse at the effectiveness of the urban sculpture planning through the method of interviews, but a more specific evaluation framework remains to be studied based on the current article.

The value of this exercise is threefold: (1) The study enriches the geographic research of internationalized sustainable public art planning in different regions through studies of the urban sculpture planning under the specific circumstances of China; (2) the notion of sustainable development of urban sculpture was proposed and expanded, especially from the perspective of planning strategies and cultural policies; and (3) in addition, sustainable principals for the development of sculptures in terms of the four aspects of systematism, regionalism, environmentalism, and management were proposed. Our findings enrich valuable knowledge on geographic studies of public art planning through the contextualized analysis of Chinese urban sculpture planning systems. Moreover, results will be valuable to both policy makers and other urban actors of urban planners, artists, and architects in crafting strategies about the sustainable production of urban sculptures through improving planning efforts. Although China's political, social, and economic conditions are unique, it does not only provide experiences for China's urban sculpture production, but also acts as a valuable reference to the development of urban sculptures in other regions and countries.

**Author Contributions:** Z.L. contributed to the conceptualization of the article and development of the conceptual framework. She also contributed to the collection and analysis of the literature and the manuscript writing.

## Appendix A.

Overview of urban sculpture plans in Chinese cities urban sculpture policy (a), urban sculpture planning document (b). Source: Based on a literature review on urban sculpture planning in Chinese cities (including literature, policies and planning documents).

| City | Year | Document Type and Title | Other Issues |
|------|------|------------------------|--------------|
| Beijing | 1988 | (a) Beijing Urban Sculpture Construction Planning Outline | |
| | 2003 | (a) Beijing Urban Sculpture Construction Development Plan(2004–2014) | |
| | 2008 | (a) Interim Regulations on Urban Planning and Construction in Beijing | |
| | 2009 | (b) Beijing City Center Urban Sculpture Planning | 1. Beijing urban sculpture construction planning principles; 2. Beijing urban sculpture theme; 3. Beijing urban sculpture layout; 4. Urban sculpture quality; 5. Urban sculpture planning and construction implementation measures; 6. Beijing urban sculpture planning project; including character statues, historical events, group sculpture, urban historical and cultural signs, national art sculpture park |
| Shanghai | 1996 | (a) Shanghai Municipal Sculpture Construction Management Measures | |
| | 2004 | (b) Shanghai Urban Sculpture Master Plan (2004–2020) | |
| Shenzhen | 1994/2004/2017 | (a) Shenzhen Special Economic Zone Urban Sculpture Management Regulations | |
| | 2002 | (a) Shenzhen Municipal Special Economic Zone Urban Sculpture Management Regulations | |
| | 1998 | (b) Urban Sculpture Planning | |
| | 1999/2012 | (b) Shenzhen Special Economic Zone Urban Sculpture Master Plan | |
| | 2002 | (b) Shenzhen City Center Sculpture Planning | |
| Guangzhou | 2001 | (b) Guangzhou Science City Urban Sculpture Planning | |
| | 2002/2015 | (b) Guangzhou City Sculpture Master Plan Revision | |
| | - | (b) Guangzhou Urban Sculpture System Planning (2015–2030) | Three types of shaft gallery, key area, node |
| Hangzhou | 2007 | (a) Hangzhou City Sculpture Construction Management Measures | |
| | 2008 | (b) Hangzhou City Sculpture Master Plan | |
| | 2011 | (b) Hangzhou City Sculpture Special Plan | |
| Kunshan | 2016 | (b) Kunshan Urban Sculpture Planning | |
| Changsha | 2004/2015 | (b) Changsha Urban Sculpture Planning (2004–2020) | "One heart, one garden, one axis, two belts, multiple points" urban sculpture overall layout [105] Historical and cultural sculpture area |

| City | Year | Document Type and Title | Other Issues |
|---|---|---|---|
| Wuxi | 2014 | (b) Taihu Urban Sculpture Planning | The selection of urban sculpture theme, the overall spatial layout of urban sculpture (urban gateway, major roads along the main public activity center and square, city park, scenic area, historic area, river and lakeside) |
| Mudanjiang | 2016 | (b) Mudanjiang City Sculpture Special Plan | |
| Nanning | 2005 | (a) Nanning Urban Sculpture Construction and Management Measures | |
| | | (b) Research on the Development Planning of Urban Sculpture in Nanning City | One belt, two rings, four axes, five gardens [82] |
| Xiangtan | 2010 | (b) Xiangtan City Master Plan- Sculpture Section | 1 linear layout 2 planar expansion layout 3 multi-point layout [88] |
| Wuhan | 2012 | (b) Main City Urban Sculpture and Square Planning | Vision: cultural city, city with sculptures One gallery, two belts, multiple groups [70] |
| Harbin | 2005 | (b) Harbin Urban Sculpture Planning | Two gardens, three points, four belts, five axes [79] |
| | 2010 | (b) Harbin Public Art Planning | One river, one island, two belts, sixteen districts, sixteen axes, sixteen gardens, Hundreds of points [106] |
| Xi'an | 2002 | (b)Xi'an Cityscape Sculpture System Planning | |
| | 2003 | (b) Xi'an Urban Sculpture System Planning | Two axes, three rings, sixteen district [107] |
| | 2014 | (b) Xi'an Urban Sculpture Planning | Two axes, three rings, eight radiation, sixteen zones [85] |
| | 2017 | (b) Xi'an Urban Sculpture Special Plan | Sculpture demonstration Street, 12 rent public center sculpture, 16 sculpture parks and 11 rent silk road theme sculptures |
| Suzhou | 2008 | (b) Suzhou City Sculpture Planning | One heart, two zones, two pieces [78] |
| Nanjing | 2017 | (b) Nanjing Urban Sculpture Planning | |
| Ningbo | 2011 | (b) Ningbo City Center City Sculpture Special Planning | |
| Wenzhou | 2008 | (b) Wenzhou Urban Sculpture Planning (2007–2020) | |
| Taizhou | 2004 | (b) Taizhou Urban Sculpture Planning | Six lines, one area, and multiple points. "One percent cultural policy" [62] |
| Yuyao | 2006 | (b) Yuyao Urban Sculpture Concept Planning | |
| Tianjin | 2007 | (a) Tianjin City Sculpture Management Measures | |
| | 2016 | (a) Interim Provisions on the Management of Urban Sculptures for Construction Projects in Tianjin Regulations [2016] No. 213 | |
| | 2017 | (b) Tianjin Urban Sculpture Master Plan (2017–2030) | |
| Changchun | 1996 | (b) Changchun City Master Plan (1996–2020) Sculpture Planning Section | One river, one line, two roads, two streets and parks [108] |
| | 2000 | (b) Changchun Urban Sculpture Planning (2000–2020) | |
| Qinhuangdao | 2014 | (b) Qinhuangdao Urban Sculpture Planning | |
| Huainan | 2006 | (b) Huainan Urban Sculpture Planning | Three groups, multi-center [109] |
| Tongling | 2007 | (b) Tongling City Urban Sculpture Planning (2003–2020) | Three cities, three hearts, five axes, one park, multiple nodes [107] |
| Panzhihua | 2005 | (b) Panzhihua Public Art Master Plan (2005–2020) | "T" shape structure pattern [110] |
| Mianyang | - | (b) Overall Urban Design of Mianyang City-Sculpture System Planning Section | one point, two belts, three axes, four zones |
| Luoyang | 2011 | (b) Luoyang City Sculpture System Planning (2011–2020) | Aim: Cultural sustainability [64] |

| City | Year | Document Type and Title | Other Issues |
|------|------|-------------------------|--------------|
| Fuzhou | 2012 | (b) Fuzhou City Sculpture Planning | One core, two new cities, three groups, three axes [111] |
| Urumqi | 2007 | (b) Urumqi Urban Sculpture Planning (2007–2020) | |
| Shenyang | 2003 | (b) Shenyang Urban Sculpture Master Plan | |
| Chongqing | - | (b) Chongqing Main City Urban Sculpture Planning | |
| Nanyang | - | (b) Nanyang City Landscape Sculpture Planning and Design | Five windows, two rings and two axes, city square, key section [112] |
| Xianyang | - | (b) Xianyang Urban Sculpture Planning System | Multi-center, five major areas, scattered groups [107] |

## References

1. Li, Z. Urban Construction Practice under the Guidance of Public Art: Taking Shanghai as an Example. In Proceedings of the China Urban Planning Annual Meeting 2016, Shanghai, China, 15–20 August 2016.

2. Chen, Y. Outline of City Sculpture. *Sculpture* **2002**, *S1*, 14–15.

3. Currier, J. Art and power in the new China: An exploration of Beijing's 798 district and its implications for contemporary urbanism. *Town Plan. Rev.* **2008**, *79*, 237–265. [CrossRef]

4. Urban Sculpture Construction Management Regulations Draft (Chengshidiaosu jiansheguanlitiaoli caoan). Association. 1985.

5. Hein, H. What is public art?: Time, place, and meaning. *J. Aesthet. Art Crit.* **1996**, *54*, 1–7. [CrossRef]

6. Julio, M.D.; Mitchell, W.J.T. *Art and the Public Sphere*; University of Chicago Press: Chicago, IL, USA; London, UK, 1992.

7. Cartiere, C.; Willis, S. *The Practice of Public Art*; Routledge: New York, NY, USA, 2008.

8. Association, A.P. The Role of the Arts and Culture in Planning Practice. 2016. Available online: https://www.planning.org/research/arts/briefingpapers/overview.htm (accessed on 1 June 2018).

9. Yencken, D.; Wilkinson, D. *Resetting the Compass: Australia's Journey towards Sustainability*; CSIRO: Collingwood, ON, Canada, 2000.

10. Selwood, S. *The Benefits of Public Art: The Polemics of Permanent Art in Public Places*; Policy Studies Institute: London, UK, 1995.

11. Miles, M.; Paddison, R. Introduction: The rise and rise of culture-led urban regeneration. *Urban Stud.* **2005**, *42*, 833–839. [CrossRef]

12. Zukin, S. *The Culture of Cities*, 1st ed.; Blackwell Publishers: Cambridge, MA, USA; Oxford, UK; Melbourne, Australia, 1995.

13. Landry, C. *The Art of Regeneration: Urban Renewal through Cultural Activity*; Comedia: Stroud, UK, 1996.

14. Evans, G. Measure for measure: Evaluating the evidence of culture's contribution to regeneration. *Urban Stud.* **2005**, *42*, 959–983. [CrossRef]

15. Markusen, A.; Gadwa, A. Arts and culture in urban or regional planning: A review and research agenda. *J. Plan. Educ. Res.* **2010**, *29*, 379–391. [CrossRef]

16. Márquez, B.; Fajardo, C. The impact of contemporary public sculpture on urban landscape: A project for environmental improvement and sustainability of the city of Granada. *Arte y Políticas de Identidad* **2014**, *21*, 265–278.

17. Darlow, A. Cultural policy and urban sustainability: Making a missing link? *Plan. Pract. Res.* **1996**, *11*, 291–302. [CrossRef]

18. Deutsche, R. Public art and its uses. In *Critical Issues in Public Art: Content, Context and Controversy*; Senie, H., Webster, S., Eds.; Icon Editions: New York, NY, USA, 1992; pp. 158–170.

19. Joanne, S.; Venda, P.; Ronan, P. Just art for a just city: Public art and social inclusion in urban regeneration. *Urban Stud.* **2005**, *42*, 1001–1023.

20. McCarthy, J. Regeneration of Cultural Quarters: Public Art for Place Image or Place Identity? *J. Urban Des.* **2006**, *11*, 243–262. [CrossRef]

21. Miles, M. Interruptions: Testing the rhetoric of culturally led urban development. *Urban Stud.* **2005**, *42*, 889–911. [CrossRef]

22. Du, H. Promoting construction of urban cultural landscape system by public art planning. *J. South China Univ. Technol. (Soc. Sci. Ed.)* **2014**, *6*, 94–98.
23. Point, N.C. Culture and Sustainability. Available online: https://www.nordiskkulturkontakt.org/wp-content/uploads/2017/09/Culture-and-sustainability_lores.pdf (accessed on 1 June 2018).
24. Soini, K.; Dessein, J. Culture-sustainability relation: Towards a conceptual framework. *Sustainability* **2016**, *8*, 167. [CrossRef]
25. Hawkes, J. *The Fourth Pillar of Sustainability: Culture's Essential Role in Public Planning*; Common Ground P/L: Melbourne, Australia, 2001.
26. Blanc, N.; Benish, B.L. *Form, Art and the Environment: Engaging in Sustainability*, 1st ed.; Routledge: Abingdon, UK, 2016.
27. Brundtland, G.H. *Our Common Future*; UN: Geneva, Switzerland, 1987.
28. Bianchini, F. Cultural planning for urban sustainability. In *City and Culture: Cultiral Processes and Urban Sustainability*; Nystrom, L., Ed.; Swedish Urban Environment Council: Stockholm, Sweden, 1999.
29. Sacha, K. *Toward Global (Environ) Mental Change—Transformative Art and Cultures of Sustainability*; Heinrich Böll Siftung: Berlin, Germany, 2004.
30. Herman, P.; Heike, S.; Vera, D. *Ecologcial Aesthetics: Art in Environmental Design: Theory and Practice*; Birkhäuser Architecture: Basel, Switzerland, 2004.
31. Carlson, A. *Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture*; Routledge: London, UK; New York, NY, USA, 2007.
32. David, V.; Prigann, H.; Strelow, H. *Ecological Aesthetics: Art in Environmental design: Theory and Practice*; Birkhäuser: Basel, Switzerland; Berlin, Germany; Boston, MA, USA, 2004.
33. Zheng, H.M. On low-carbon materials in landscape sculptures. *Chin. Landsc. Archit.* **2011**, *7*, 81–84.
34. Huo, M.L. Research on recycled materials in public art. *Appl. Mech. Mater.* **2013**, *329*, 71–74. [CrossRef]
35. Abidin, M.Z.; Rathi, M.R.M.; Jimel, C.; Wasli, Z.; Razali, N.M. Form and meaning: Metal feline public sculpture from recyclables materials at Kuching, Sarawak. In *Proceedings of the Art and Design International Conference (AnDIC 2016)*; Anwar, R., Mahamood, M., Md. Zain, D.H., Abd Aziz, M.K., Hassan, O.H., Abidin, S.Z., Eds.; Springer: Singapore, 2018; pp. 263–272.
36. Zhang, L. Study on environment art design based on recycled materials. In Proceedings of the World Automation Congress 2012, Puerto Vallarta, Mexico, 24–28 June 2012; pp. 1–4.
37. Fu, S.; Ding, K.; Liang, J. Study on ecological sustainability of sculpture. *Urban. Archit.* **2013**, *18*, 287–288.
38. Kropp, W.W.; Lein, J.K. Scenario analysis for urban sustainability assessment: A spatial multicriteria decision-analysis approach. *Environ. Pract.* **2013**, *15*, 133–146. [CrossRef]
39. Basiago, A.D. Economic, social, and environmental sustainability in development theory and urban planning practice. *Environmentalist* **1998**, *19*, 145–161. [CrossRef]
40. Chang, T.C. Art and soul: Powerful and powerless art in Singapore. *Environ. Plan. A Econ. Space* **2008**, *40*, 1921–1943. [CrossRef]
41. Miles, M. *Art, Space and the City*; Psychology Press: Hove, UK, 1997.
42. Senie, H.; Webster, S. *Critical Issues in Public Art. Content, Context, and Controversy*; Smithsonian Institution Press: Washington, DC, USA, 1998.
43. Martin, Z. Does cultural policy matter in public-art production? the netherlands and flanders compared, 1945–present. *Environ. Plan. A Econ. Space* **2011**, *43*, 2953–2970.
44. Pollock, V.L.; Paddison, R. Embedding public art: Practice, policy and problems. *J. Urban Des.* **2010**, *15*, 335–356. [CrossRef]
45. Caerdydd, C. Cardiff Public Art Strategy. 2005. Available online: https://www.cardiff.gov.uk/ENG/resident/Planning/Documents/The%20Cardiff%20Public%20Art%20Strategy.pdf (accessed on 11 November 2018).
46. Culture, M.O. Urban Sculpture Construction Management Measures. 1993. Available online: http://fadu.lvshi.baidu.com/detail?searchType=statute&from=aladdin_28231&originquery=%E5%9F%8E%E5%B8%82%E9%9B%95%E5%A1%91%E5%BB%BA%E8%AE%BE%E7%AE%A1%E7%90%86%E5%8A%9E%E6%B3%95&count=20&cid=5b7d8c5a72d830c1751d047f54502bd3_law (accessed on 1 July 2018).
47. BGACC. Fort Worth Public Art Master Plan Update. 2017. Available online: http://fwpublicart.org/UserFiles/PlanDraft_Vs5.pdf (accessed on 1 December 2018).
48. URA. Enhancing Singapore's City Landscape: The Public Sculptures Masterplan 2002. Available online: http://www.ura.gov.sg (accessed on 1 June 2018).

49. Zheng, J. Contextualizing public art production in China: The urban sculpture planning system in Shanghai. *Geoforum* **2017**, *82* (Suppl. C), 89–101. [CrossRef]

50. Miller, T.; Yudice, G. *Cultural Policy*; Sage: London, UK, 2002.

51. NCOCO. Reply on the Adjustment of the Management Function of Urban Sculpture Construction (Zhongyang bianban [2001] No. 150). 2001.

52. Zhu, J. From urban sculpture to public art-study on the mechanism of public art construction in Beijing. *Economist* **2010**, *5*, 11–14.

53. Yue, X. Theoretical and practical exploration of domestic urban sculpture planning-thoughts on urban sculpture planning. In Proceedings of the Sustainable Development Rational Planning—2017 China Urban Planning Annual Conference Proceedings (13 Landscape Environment Planning), Doguan, China, 18–20 November 2017.

54. Observation and Thinking of Chinese Urban Sculpture: Public Art Needs Planning. Available online: http://cul.sohu.com/20110923/n320284630.shtml (accessed on on 30 May 2018).

55. Shen, C.; Ge, Y.; Ji, F. The problems and the counter- measures in the development of the urban sculptures. *City Plan. Rev.* **2002**, *26*, 23–26.

56. Young, J.; Dake, J. China's modern public art. *World Art* **1997**, *1*, 58–59.

57. Public Art: A Guide to Evaluation. 2014. Available online: http://animatingdemocracy.org/resource/public-art-guide-evaluation (accessed on 1 June 2018).

58. Zhan, X.; Walker, S. Value direction: Moving crafts toward sustainability in the Yangtze river delta, China. *Sustainability* **2018**, *10*, 1252. [CrossRef]

59. Zheng, F. Planning and design of sculpture spots in Jingzhou city. *Jiangxi Build. Mater.* **2016**, *21*, 36.

60. Liu, X. Analysis on the planning and layout of northeast urban sculpture. *Art Rev.* **2016**, *3*, 165–168.

61. Dong, Q.; Dai, X. Urban public art planning: A new field of study. *J. Shenzhen Univ.* **2011**, *28*, 147–152.

62. Li, Y.; Zhang, H. A few points to note in planning of urban public art and construction management -Take the planning and construction of urban sculpture in Taizhou for example. *Planners* **2006**, *22*, 56–58.

63. Jiang, Z.; Wang, H.; Tan, Q. Research on the problems of public art in urban construction in China and its measures-Taking Beijing, Shanghai and Shenzhen as examples. *J. Chifeng Univ.* **2015**, *36*, 183–185.

64. Sun, W.; Yuanq, Q. Urban Sculpture Planning from the Perspective of Regional Characteristics and Culture. In Proceedings of the China Urban Planning Annual Meeting, Qingdao, China, 16–18 November 2013.

65. Wang, H. National conditions and requirements of the times in the rapid development of urban sculpture planning in Chinese cities. *J. Civ. Eng. Archit. Res.* **2014**, *1*, 32–36.

66. Ministry of Housing and Urban-Rural Development of the People's Republic of China. *Technical Regulations for Urban Sculpture Engineering JGJT 399-2016*; China Architecture & Building Press: Beijing, China, 2017.

67. Wang, H. A planning and construction research of the urban sculpture for Beijing centeral city. *J. Beijing Youth Politics Coll.* **2013**, *22*, 60–66.

68. Xiong, L.; Chai, Q. Existing problems and development countermeasures of uban sculpture-Taking Ningbo city as an example. *Urban Constr. Theory Res. Electron. Ed.* **2013**, *19*, 1–5.

69. Zhang, J.; Fan, X.; Lin, J.; Li, M. Developing an urban sculpture management program: Hangzhou sxample. *Planners* **2010**, *S2*, 99–102.

70. Lei, M. Research on Wuhan Urban Sculpture Planning Strategy. In Proceedings of the China Urban Planning Annual Conference, Kunming, China, 17–19 October 2012.

71. Huang, Y. *Urban Sculpture System Planning*; Chemical Industry Press: Beijing, China, 2010.

72. Lynch, K. *The Image of the City*; MIT Press: Cambridge, MA, USA, 1960.

73. Zhao, H.; Zhao, J. Sculptures and the design of city space environment. *Urban Stud.* **2006**, *13*, 123–126.

74. BCA. City of Atlanta Public Art Master Plan 2001. Available online: www.bcaatlanta.org (accessed on 1 June 2018).

75. IPAR. A Public Art Master Plan for Reston. 2008. Available online: http://publicartreston.org/discover/about/masterplan/ (accessed on 1 June 2018).

76. APPC. Santa Rosa Public Art Master Plan. 2014. Available online: https://srcity.org/DocumentCenter/View/6678/Santa-Rosa-Public-Art-Master-Plan-PDF?bidId= (accessed on 1 June 2018).

77. GAC. The City of Greeley Art Master Plan. 2014. Available online: https://greeleygov.com/docs/default-source/public-art/art-master-plan.pdf?sfvrsn=0 (accessed on 1 June 2018).

78. Huang, Y.; Li, Q.; Bi, J. Suzhou practice of urban sculpture system planning based on overall planning level. *Urban Stud.* **2011**, *18*, 37–43.

79. Yu, Y.; Xu, S. On planning of city sculpture of Harbin. *City Plan. Rev.* **2006**, *4*, 76–78.
80. NMPB. Nanjing Urban Sculpture Planning 2017 (unpublished government ducuments).
81. Government, S.M. Shanghai Urban Sculpture Master Plan (2004–2020). 2004. Available online: http://www.shgtj.gov.cn/ghsp/ghsp/shj/200410/t20041001_181600.html (accessed on 11 June 2018).
82. Lin, J. Local cultural character creation in city sculpture planning: Nanning sculpture development. *Planners* **2009**, *25*, 39–43.
83. Qiu, B.; Zhang, F. Public art planning based on collective memory: Art involved environment planning. *Planners* **2016**, *32*, 12–17.
84. Hall, T.; Robertson, I. Public art and urban regeneration: Advocacy, claims and critical debates. *Landsc. Res.* **2001**, *26*, 5–26. [CrossRef]
85. Lin, B.; Yang, M. Research on sculpture plan and development in Chinese cities with sculpture plan and scheme of Xi'an a famous historical city, as example. *J. Xi'an Univ. Achit. Technol. (Nat. Sci. Ed.)* **2017**, *4*, 497–502.
86. Hodder, R. Redefining a southern city's heritage: Historic preservation planning, public art, and race in Richmond, Virginia. *J. Urban Aff.* **1999**, *21*, 437–453. [CrossRef]
87. Hayden, D. *The Power of Place*; MIT Press: Cambrige, MA, USA, 1995.
88. Wang, Y. Urban sculpture general planning based on the analysis of spatial characteristics-Taking an example of Xiantan city. *Archit. Cult.* **2015**, *9*, 67–70.
89. APA. How the Arts and Cultural Sector Strengthen Cultural Values and Preserve Heritage and History. 2016. Available online: https://www.americansforthearts.org/node/100910 (accessed on 1 June 2018).
90. Hang, L.; Zhou, X. Exploration and innovation-Introduction to the organizational experience of Shanghai Luwan district urban sculpture planning. *Jiangsu Sci. Technol. Inf.* **2009**, *6*, 115–116.
91. Wang, J. 'Art in capital': Shaping distinctiveness in a culture-led urban regeneration project in Red Town, Shanghai. *Cities* **2009**, *26*, 318–330. [CrossRef]
92. Kwon, M. *One Place After Another: Site-Specific Art and Locational Identity*; MIT Press: Cambridge, MA, USA, 2004.
93. TMPB. Tianjin Urban Sculpture Master Plan-Public Notice Edition (2017–2035). 2017. Available online: http://gh.tj.gov.cn/news.aspx?id=23673 (accessed on 15 June 2018).
94. Li, T. A preliminary study on the compilation method and management mechanism of Beijing urban sculpture planning. In Proceedings of the China Urban Planning Annual Meeting, Qingdao, China, 16–18 November 2013.
95. BMPC. Beijing Central City Urban Sculpture Planning. 2009. Available online: http://www.bjghy.com.cn/ghy2Develop.aspx?menu=2&sideitem=29&Tid=111 (accessed on 11 June 2018).
96. HMPB. Hangzhou Urban Sculpture Master Plan (2007–2020). 2008. Available online: https://max.book118.com/html/2016/1129/66461690.shtm (accessed on 11 June 2018).
97. Tong, Z. Preliminary study on the planning of urban sculpture system. *Jiang Su Urban Plan.* **2011**, *11*, 32–36.
98. YDUPA. Shanghai Yangpu District Urban Layout Planning. 2007. Available online: http://www.shgtj.gov.cn/ghsp/ghsp/yp/200809/t20080923_181080.html (accessed on 11 June 2018).
99. Flynn, B. City of Sydney City Centre Public Art Plan. 2013. Available online: https://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0008/150947/City-Centre-Public-Art-Plan.pdf (accessed on 1 June 2018).
100. Environ. *Local Sustainability*; Environ: Leicester, UK, 1996.
101. Guinard, P.; Molina, G. Urban geography of arts: The co-production of arts and cities. *Cities* **2018**. [CrossRef]
102. Du, H.; Tang, M. Urban public art planning-The origin, theory and method. *Si Chuan Sci.* **2009**, *35*, 248–251.
103. Blair, J.M.; Pijawka, K.D.; Steiner, F. Public art in mitigation planning: The experience of the Squaw Peak Parkway in Phoenix. *J. Am. Plan. Assoc.* **1998**, *64*, 221–234. [CrossRef]
104. Wang, H. Research on intergenerational equity in the sustainable development of Chinese urban sculpture. *J. Tian Jin Univ. (Soc. Sci.)* **2015**, *4*, 347–350.
105. Yin, Y.; Jiang, Y. On the present situation and development of Changsha city sculpture. *Chin. Overseas Archit.* **2012**, *11*, 63–65.
106. Zhang, H. Research on Harbin Urban Public Art Planning. Master's Thesis, Harbin Institute of Technology, Harbin, China, 2010.
107. Zhuo, T. *The Research on Urban Sculpture Planning System Method-Case Study of the Xian'yang City Sculpture System*; Chang'an University: Xi'an, China, 2009.

108. Jing, W.; Liu, Y. Thoughts on the planning of Changchun contemporary urban sculpture construction. *Sculpture* **2006**, *6*, 44–47.

109. Ye, M. Discussion on the local characteristic culture of urban sculpture planning-Taking Huainan urban sculpture planning 2006–2020 as an example. In Proceedings of the International Conference on Urban Culture and Urban Planning International Forum, Beijing, China, 9–11 June 2007.

110. Du, H.; Tang, M. Exploring and practice of public art planning-Case study on Panzhihua city. *Huazhong Archit.* **2007**, *25*, 95–101.

111. Li, K. The research on spatial planning of urban sculpture system-Take the Fuzhou urban sculpture planning as the example. *Fujian Archit. Constr.* **2015**, *4*, 20–24.

112. Liang, J.; Wan, M. Discussion on landscape sculpture planning in modern city. *Decoration* **2006**, *7*, 111–112.

*sustainability*

*Article*

# Social Project Culture: A New Project Management Culture to Promote the Sustainable Development of Organizations

**Hailing Wang [1], Libiao Bai [1,\*], Ning Huang [1], Qiang Du [1] and Tingting Zhang [2]**

[1]  School of Economics and Management, Chang'an University, Middle Section of South Second Ring Road, Xi'an 710064, China; hailing711@163.com (H.W.); Ning_Huang@chd.edu.cn (N.H.); q.du@chd.edu.cn (Q.D.)

[2]  School of Civil Engineering, Chang'an University, 161 Middle Chang'an Road, Xi'an 710061, China; 2015128079@chd.edu.cn

\*  Correspondence: LB.Bai@chd.edu.cn; Tel.: +86-29-8233-9228

**Abstract:** With economic development and globalization, more organizations have been cooperating with foreign enterprises, which brings not only opportunities but also management difficulties and competitions with organizations. Organizations must improve their management and adapt to changing market conditions and the requirements and needs of its customers to maintain and strengthen its position in the market. Management by Project (MBP) uses technical methods of modern project management (PM) to manage various tasks and activities that are considered as projects. It is an effective way to solve management problems and improve management levels and enterprise competitiveness. However, few small and medium-sized enterprises apply MBP in their operation and management processes. Therefore, this paper presents a new idea to promote the application of MBP and the formation of a PM culture within society. In this paper, we searched a major database using the systematic literature review method and analyzed the articles directly or indirectly linked to our paper to obtain literature supporting the views of this article. First, this paper presents a new kind of management culture from the social aspect, termed as Social Project Culture (SPC), which can promote sustainable development and improve the management level and efficiency of organizations by promoting MBP application across society. Second, by analyzing the SPC definition, its three functions, i.e., project management behavior, management and risk control capacity, and international competitiveness, are provided. Then, to help organizations apply this method, an evolutionary path is proposed, including the creation stage, formative stage, mature stage, and heritage stage. Finally, to ensure the continued optimization of SPC, four safeguard measures in terms of theory, institution, behavior, and ideology are proposed.

**Keywords:** social project culture; management by project; evolution path; sustainable development

## 1. Introduction

With economic development and globalization, more organizations have been cooperating with foreign enterprises, which brings not only opportunities but also management difficulties and competitions with organizations. Organizations must improve their management and adapt to changing market conditions and the requirements and needs of its customers to maintain and strengthen its position in the market. Therefore, organizations are striving to improve their management and competitiveness in order to promote sustainable development.

To deal with an increasingly complex business environment, organizations have begun to find new methods to improve management ability and solve management problems, such as transformation and upgrading issues, risk control, and self-management problems [1]. Hence, the idea of Management by

Project (MBP), which leads to clearer management purposes, more scientific control, and more efficient operation results [2], is proposed to solve the management problem and promote the sustainable development of organizations and enterprises.

However, at present, the organizations utilizing MBP are mostly large corporations. Few small and medium-sized enterprises implement MBP into their operational processes [3]. Many management problems, such as transformation and upgrading issues, risk control, and self-management problems, are becoming key impediments to the sustainable development of these enterprises, which plays an irreplaceable role in promoting economic development [4–6]. Therefore, it is imperative to find a way to generalize the MBP concept to improve the management capacity of small and medium-sized enterprises and promote the sustainable development of organizations [7–9].

Based on the management problems of small and medium-sized enterprises and a systematic literature review of papers directly or indirectly linked to culture and PM such as MBP, studies on enterprise project culture (EPC) and organizational culture, this paper proposed a new kind of management culture, termed Social Project Culture (SPC). The aim of SPC is to help organizations, especially small and medium-sized enterprises, achieve sustainable development by improving the application of MBP in society. It can then also indirectly promote economic development through the prosperity of organizations and enterprises.

The definition and functions of SPC are provided to make the leaders of relevant organizations clearly understand its connection. We describe the evolution of SPC to guide users in implementing SPC and help them to make this culture more suitable for their socio-economic environment. Meanwhile, to ensure the smooth implementation and continued optimization of SPC, four safeguard measures in terms of theory, institution, behavior, and ideology are proposed. These guarantees can also reduce the risk of implementation and ensure the formation of SPC.

This paper is structured as follows. Section 2 describes the literature review. The methodology is introduced in Section 3. Section 4 elaborates on the connotation of SPC and presents an analysis of the important role of SPC. Section 5 addresses the four stages of SPC's evolutionary path. The four safeguard measures from theory, systems, behavior, and ideology are provided in Section 6. Conclusions and discussions are drawn in Section 7.

## 2. Literature Review

Modern project management (PM), especially the idea of MBP, has become popular within organizations [10–12]. As a modern model, MBP uses technical methods of modern PM to manage various tasks and activities that are considered as projects [13,14], and is an effective method to improve the efficiency of enterprise management [10,15,16]. The concept of MBP was first advanced in the mid-1980s [17] and applied in a number of areas, such as architecture, national defense, aerospace, etc. After the 1990s, MBP was gradually applied to the rapidly developing IT industry and other high-tech fields [18], which effectively improved management ability in these fields. As a result, more and more enterprises and departments chose to complete their work using MBP [19]. Since then, MBP has been used in multi-project management, including project program and project portfolio management, and become the main management model in organizations due to its advantages in pursuing organizations' strategies, improving resource utilization, and solving sustainable development problems [20,21]. Above all, most researchers concentrate on how to apply it in different fields and the optimization of this theory. Few researchers pay attention to promoting the application of this method within society for sustainable development of organizations, especially small and medium-sized enterprises. There are also few studies that combine MBP and culture. In order to fill these research gaps, SPC is proposed to guide organizations, especially small and medium-sized enterprises, to achieve sustainable development by promoting the application of MBP within society.

Culture is typically viewed as the values, beliefs, and ideology of an organization or society [22–24]. It influences the way in which people behave [25,26]. A person's decision-making process is dependent on their cultural background according to what is considered 'the right way', highlighting the

importance of culture [27]. As a collection of group consciousnesses, the guiding role of culture in society has become increasingly prominent [28,29], especially in the management of enterprises and organizations [30–32]. Therefore, theoretical research focusing on cultural perspectives has significantly improved in the field of management [33–35]. Some researchers have pointed out that PM culture is enterprise-oriented [7,36–41]. It is considered as a unique culture within a project or a project portfolio. They have also analyzed its importance in the success and sustainable development of projects [42,43], especially cross-border international cooperation projects [44–47]. Other researchers have noted that PM culture is a set of stable beliefs, attitudes, and values recognized from the perspective of an enterprise, and could combine the values of members with strategic objectives to promote the realization of those objectives [48]. Drawing conclusions from this previous research, it can be argued that PM culture is only suitable for spreading MBP within enterprises and not suitable for prompting the application of MBP within society. Therefore, we propose SPC from a social perspective for the first time. It fills the research gap in that most researchers only concentrated on management culture from the perspective of a single enterprise.

## 3. Methodology

In our analysis we make use of the systematic literature review (SLR) approach. The SLR method originated in the 1990s, and it was initially used in the field of medicine, although more recently it has also been adopted in various fields, such as systems engineering, marketing, tourism, and strategic innovation [49–52]. We reviewed the literature directly or indirectly linked to culture, organizational culture, enterprise project culture, and project management. Some of the references we selected to support the viewpoint of this paper are summarized in Appendices A and B, the others are described in this paper. The systematic review process is presented as follows.

### 3.1. Search Strategy

SLR was conducted as a research methodology to collect material for this paper. To obtain the relevant literature, we used a search in the common database of published literature including Web of Science, Springerlink, Wiley Online Library, Elsevier and China National Knowledge Infrastructure, one of the largest biomedical abstracts and full test literature databases in China. In addition, references identified from bibliographies of pertinent articles were also retrieved if needed. We made no restriction on language or date. The searches sought the following combinations of key words: "management by project", "project management", "enterprise project culture", "enterprise culture", "organizational culture", "culture", "enterprise culture AND function", "culture AND function", "enterprise culture AND evolution", and "culture AND evolution".

### 3.2. Criteria

The studies are selected to support the conception provided in this paper. Therefore, articles were included when they met the following criteria:

1. The paper included the key words that we mentioned above.
2. The definition of enterprise project culture or culture is provided in the paper.
3. The function of project management, management by project, enterprise project culture or organizational culture, or culture is described directly or indirectly.
4. The evolution of enterprise project culture or culture is decribed.

### 3.3. Study Selection

First, we selected the studies based on titles, key words, and abstracts of the retrieved records. Studies that did not meet the criteria were discarded during the initial review. Then, we cross-checked these studies. When uncertainty existed, we retrieved and assessed the full text studies if they were available. Different opinions were resolved through discussion. The articles we selected have been

cited in this paper. The views of the articles we referenced to support this paper have been summarized in Appendices A and B.

## 4. Overview of Social Project Culture

### 4.1. Connotation of Social Project Culture

Culture is a type of social phenomenon based on a certain organization and produced in a certain environment [53]. It is an internal restriction and norm, which is widely recognized by humans in social activities. Culture can guide the public and organizations to choose their own behavior to achieve long-term, sustainable development [42,53]. SPC is a special kind of culture that emerges during the process of popularization and application of PM in various fields. The benefit of promoting SPC to realize organizations' long-term sustainable development is obvious [54]. However, the definition of SPC has not been determined. Therefore, it is necessary to define SPC in order to promote it.

SPC has a strong similarity in several aspects with enterprise-based group consciousness—enterprise project culture (EPC). Both SPC and EPC attempt to popularize MBP and build a project culture to ensure sustainable development and achieve organization strategic objectives with the MBP application. Hence, it can be concluded that the EPC characteristics can provide a reference for defining SPC [55], which enables SPC to be analyzed from three aspects, i.e., scope, purpose, and result, and the definition of SPC can be described as follows.

Definition: SPC is a consensus that originates from the MBP process. It is composed of PM values, management styles, management methods, and ideological systems, of which the purpose is to improve the efficiency of management activities and guide the organization to form management behavior and achieve sustainable development.

The number of cooperative projects is increasing and the scale is expanding, which brings difficulties to organizations. SPC can contribute to solving this problem. SPC helps guide organizations to conduct activities using PM in order to improve the management efficiency of organizations and ensure the smooth implementation of cooperation. Its purpose is to guide enterprises, individuals, and outreach groups to address cooperative matters using project management. It will promote the success of a single project into the success of the organization, and the success of a single organization into the success of national strategy. Eventually, a kind of project management value concept, system standard, management thought, and management behavior are formed.

The connotation of SPC is complicated; it involves many influencing factors, such as project environment, national policy, and management capacity, which cause difficulties for building SPC in essence [54]. Similar to the process of forming corporate culture [56] and EPC, the core elements in building SPC are the scope, purpose, and result [54,57]. Therefore, in this paper, the connotation of SPC is described as follows: from the scope perspective, the scope of SPC is covered by the whole organizations in society. From the perspective of construction purpose, the main purpose of building SPC is to guide the organization to apply PM to its daily routine. Based on the result analysis, SPC adapts to the special background of the society to form PM values, concepts, system standards, management ideas, and management behaviors for organizations.

### 4.2. Functions of Social Project Culture

Based on analyzing the previous studies, we found that as a special kind of management culture SPC has functions in culture as well as PM [54]. Here, the functions in culture are orientation, value integration, and normative integration, which will guide the organization to achieve sustainable development. Developing a corporate culture supersedes factors such as corporate strategy, market presence, and technological advantage to affect the success of a company [58]. The functions in PM work towards more flexible organizations, closer teamwork, and a more efficient management process [2]. According to the method we described in Section 3, we selected some literature to support the function provided in this section, as summarized in Appendix A. The functions of SPC can be

concluded by combining the functions of culture and PM, which can be divided into three aspects, as shown in Figure 1 [59–66].
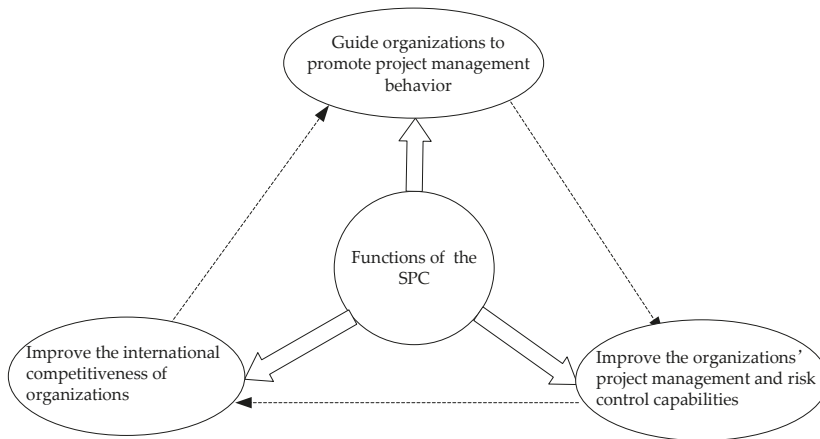


**Figure 1.** Functions of Social Project Culture (SPC).

Figure 1 shows that guiding organizations to promote PM behavior and sustainable development is the primary function of SPC. SPC emphasizes PM behavior implementation, PM system establishment, and PM thinking formation during the MBP process. It guides organizations, individuals, and groups to address affairs, actualize PM behavior, and manage using a specific program in accordance with the MBP principles, which will promote their sustainable development.

The second function of SPC is to help organizations improve their PM and risk control capabilities (Figure 1). Modern PM emphasizes three-dimensional constraints (quality, cost, and duration) as well as other factors, such as human, risk, and flexible management. Hence, the establishment of an intangible mechanism is required to ensure PM implementation and integrate the rigid and flexible constraints. In addition, SPC could ensure that organizations perform activities in accordance with MBP and control risks by using systematic procedure in the order of plan, organize, implement, control, and finish.

The importance of SPC can be reflected in improving the third function of SPC, i.e., international competitiveness of organizations, individuals, and groups (Figure 1) by facilitating enterprises to apply MBP. Within the MBP trend, building SPC will help organizations, individuals, and groups improve their levels of technical services, engineering quality, and management [7–9]. Ultimately, these organizations will achieve a market advantage with higher efficiency and quality and raise their international and sustainable development competitiveness.

It can be found that these three functions correlate with each other and can work together to improve the management level of the company for sustainable development. In practice, SPC will help organizations develop PM behavior, which will in turn improve the organizations' PM and risk control capability, management efficiency, and international competitiveness. Hence, more organizations will be encouraged to develop PM behavior.

## 5. Evolutionary Path of Social Project Culture

With the implementation of policies such as "The Belt and Road", the number of cross-border projects has increased, which provides a broader space for the practice of project management. Modern project management not only requires the support of all kinds of 'hardware' but the assistance of 'software' such as project management culture. Therefore, the development process of SPC should be included, in addition to building SPC. At present, there are few studies about the evolutionary

path of SPC, but many researchers have studied similar corporate culture. By analyzing the existing literature shown in Appendix B, it can be found that the development of culture generally includes four stages: generation, interpretation, identification, and following [67–73]. As a management culture, SPC includes some other complex processes, such as creation, formation, improvement, and heritability. Therefore, the evolutionary path of SPC can be constructed in four steps: cultural creation, cultural formative, cultural maturity, and cultural heritage, as shown in Figure 2.

According to the evolutionary path of SPC shown in Figure 2, first, government departments, PM institutes, or other organizations create SPC based on the environment of society and enterprises. Then a special PM agency is established by a PM institution or the relevant government departments to establish and improve the PM rules and regulations. After that, these relevant departments guide managers to apply MBP and PM knowledge in their organizations. Through the successful implementation of individual project management, the idea of PM is gradually extended to the whole industry. It then extends to multiple industry areas. The concept of project management is deepened and SPC is initially formed within society. Then, relevant organizations evaluate the effect of the implementation of SPC and propose some optimization measures to make it more suitable for the current social and economic environment. SPC is recognized generally and constantly inherited. The specific implementation method of each stage is as follows.

The creation stage, as the first evolutionary phase of SPC, refers to how to build SPC based on the environment of society and enterprises to improve the adaptive capacity. At the beginning of this stage, the idea of PM is proposed and promoted by government departments, PM institutes, or other organizations. Then, the basic framework of SPC is proposed after analyzing the construction environment, the construction content, the construction purpose, the target group, etc. The requirements for creating the SPC should be raised and used to guide the subsequent building stage.

The second evolutionary phase of SPC is the formative stage, referring to how to make society accept and implement SPC. This is a process that makes SPC convert from concept to behavior and mainly includes three parts: (1) Identifying SPC. In the initial construction stage, some employees may doubt the SPC functions, and hence some methods, such as publicity, training, and communication, are adopted to help them accept and recognize SPC and provide ideological guarantees for the implementation of specific actions. (2) Implementing SPC. The SPC will be translated into practical action from the level of managers' design frame in the implementation process. (3) Building SPC. The purpose of building SPC is to promote MBP and guide people to form PM behavior. The project management organizations (PMOs), as direct users of SPC, could regulate people's will and behavior and make sure they follow and implement what the SPC advocates. In order to ensure that SPC can be implemented in a mandatory manner, institutionalizing PM and building SPC systematically are necessary.
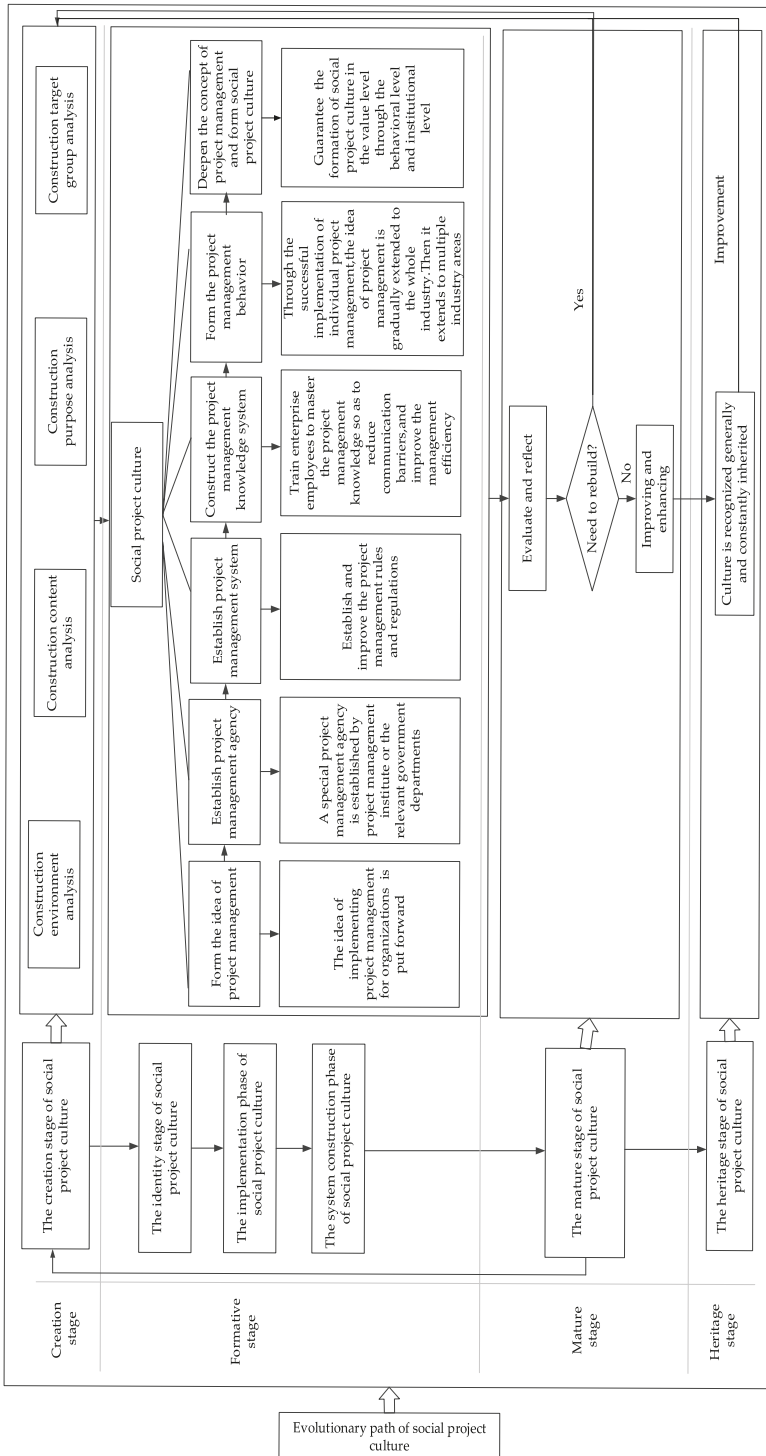
**Figure 2.** Evolutionary path of SPC.

The process of the SPC formative stage is shown in Figure 2. First, according to the actual situation of a project, a PM idea based on SPC is proposed. Then, a PM agency is established by an institution or a relevant government department responsible for developing and designing standards of PM, which provides guidance for project activities and deploys and builds the SPC. PM institutions or government legal branches regulate the management process and the division of responsibilities by establishing the relevant PM system. After that, the PM system can ensure PM process standardization, define the division of responsibilities clearly, and restrain the behavior of project members, while the management system helps the organization ensure that the PM procedure is working correctly and the activities are efficiently managed, which will provide an institutional guarantee for SPC construction. Finally, PM agencies or organizations could carry out some training and experience exchange activities to help employees understand, master, and apply PM knowledge. These steps would lay the foundation for developing PM behavior, reducing communication barriers, and improving management efficiency. After summarizing the successful experience in an individual organization, the MBP application can be gradually extended to the entire industry, and the MBP behaviors could evolve from a single project to a complex program or project portfolio management, which provides a guarantee for building the SPC and promoting the sustainable development of the organization. During the formative stage of SPC, a foundation for raising people's awareness of MBP and promoting SPC development is established. However, during the formation process of SPC, the order of multi-subprocesses is not fixed. It should be noted that these subprocesses could begin simultaneously as long as the conditions required for building the culture are satisfied.

The third evolutionary phase of SPC is the mature stage, referring to evaluation and improvement. The original SPC may contain many shortcomings, so evaluating and analyzing the SPC insufficiency from PM systems, PM departments, PM practices, and other aspects is an effective way to realize SPC's sustainable improvement. Through this assessment, the basic situation of the established SPC can be grasped, on the basis of which suggestions for sustainable improvement can be proposed. If the evaluation results reflect that the original SPC cannot fulfill the requirements for building the culture, the process of building the SPC will be reorganized or returned to the first stage. If the evaluation results show that the initial SPC satisfies the requirements for building the culture but is insufficient, the shortcomings will be addressed. Afterwards, the SPC is re-evaluated to ensure that the purpose of the organization's sustainable development can be achieved. It can be seen that during the formative stage and mature stage, SPC can be accepted by staff and workers, optimized, and applied in different organizations, and then management can be guided to improve the success rate of projects.

The fourth evolutionary phase of SPC is the heritage stage, referring to how to inherit and develop the SPC. Similar to the final step of constructing a culture, building SPC eventually realizes the development and heritance of the ideas, theories, and methods of MBP in organizations to guide organizations to achieve sustainable development in contemporary society.

## 6. Guarantees for Promoting Social Project Culture

The evolutionary process of culture can be influenced by the social environment. At present, some problems in the social environment obstruct SPC evolution, such as lack of awareness of PM [74], insufficient attention of leaders paid to PM [75], and inadequate systems built for PM [76]. Solving these problems is a prerequisite for building the SPC, but it is a complex process involving many disciplines, such as organizational ecology [77,78], management [7,9,14], and organizational management [79]. Therefore, considering the existing literature in different disciplines, this paper proposes four supporting guarantees (i.e., theoretic guarantee, behavior guarantee, institutional guarantee, and ideological guarantee) in order to solve the problems for confirming the realization of SPC (Figure 3), which are elucidated as follows.
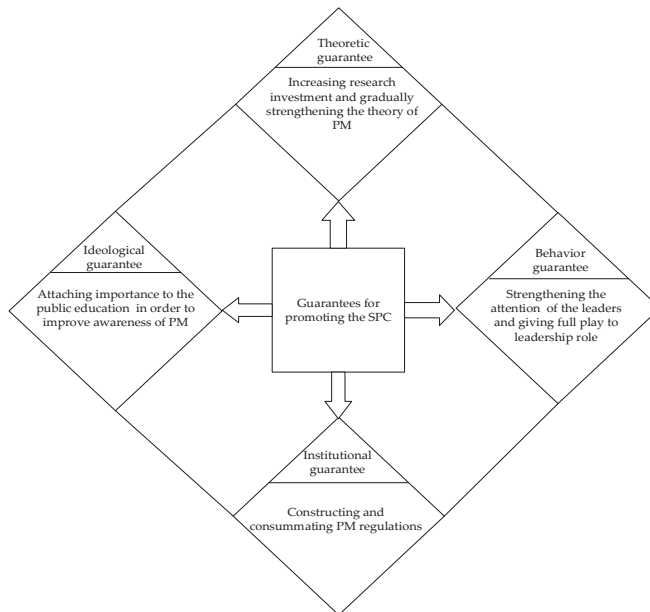
**Figure 3.** Guarantees for promoting the SPC.

The SPC is a combination of project management ideas and culture, so it is imperative to strengthen the theory of MBP for the continuous optimization of this theory. Theoretic guarantee is the basis of promoting SPC from a theoretical perspective. Therefore, it is important to propose this guarantee. There are many approaches to providing theoretical guarantees for the realization of SPC. For example, talent support for SPC implementation can be supplied by developing the academic and vocational education of PM. As a system that provides comprehensive theoretical support for PM practice, PM science can be established to adapt to the requirements of this new trend [80] with some corresponding and supporting policies formulated by the relevant government departments, PM institutions, research institutions, or other organizations. Investment in PM theory and the study of PM science is required to provide a theoretical basis for an organization to carry out PM activities, especially for modern projects that are becoming more variable, uncertain, complex, and ambiguous.

The behavior guarantee is provided to instruct people's behavior during the implementation process. It is key to building SPC to help top managers pay sufficient attention to PM. The behavior patterns and values of senior managers determine which culture the organization pursues. Leaders should pay attention to PM implementation. As behaviors of cultural construction leaders, such as government departments and PM associations, tend to set an example for employees, they must fulfill their responsibility as cultural leaders and demonstrate the important role of PM in production practice for employees through their own actions. In this way, a powerful guarantee is provided for SPC development.

Institutional guarantee is another important support for the construction of SPC to solve the problem of inadequate system building for MBP. In addition, it can prompt the formation of SPC by constraining and guiding people's behavior during the implementation process. A unified PM system can guarantee PM quality, regulate behavior rationality, and ensure the systematic implementation of SPC to adapt to the special trends of MBP. For instance, the PM system could help organizations, individuals, and groups apply the theory of MBP in practice. This system can provide a standard specification of PM that allows different organizations to explore personalized management combined with their characteristics and finally achieve the ultimate goals: improving

the efficiency of PM, enhancing the organization's competitiveness, and achieving the sustainable development of the organization.

Social project culture has both management characteristics and cultural characteristics. It not only affects people from the mind but also influences them from behavior. Therefore, as a special kind of culture, it is imperative to provide ideological guarantees to ensure that people form this kind of thinking. The fourth guarantee, the ideological guarantee, is the core of building SPC. Attaching great importance to publicity and education and improving the awareness of project management in enterprises, individuals and groups provide the ideological guarantee for constructing SPC.As is known, the main body in the process of culture building is people. If there is no effective participation from the people, the culture is just a facade. At present, different people have different understandings of PM, which has hindered the implementation of PM. Therefore, it is necessary to strengthen publicity and education for personnel and improve their technical quality, cultural quality, and moral quality, which will provide an ideological basis for SPC construction. For this purpose, government departments and PM associations should carry out a variety of PM-related training activities to encourage outreach enterprises, individuals, and groups to pay attention to PM. Consequently, an organization's PM skills can be improved and PM ideology can form, which will lay a foundation for the implementation of PM behavior and make construction of the SPC possible.

## 7. Conclusions and Discussion

Under the background of 'The Belt and Road', the number of collaborative projects is increasing, and the background of the stakeholders involved in the projects is also becoming more complex. This situation requires pursuing win-win modern project management to meet the needs of management. Modern project management pays more attention to the market and competition, focusing on the human factor. It ensures projects are carried out efficiently with its systematic management theory and methods. Therefore, the idea of constructing SPC in Chinese society is proposed. Its purpose is to guide outreach organizations to apply the concept of MBP to their practical management activities. The importance of constructing social project management is analyzed. Then, the evolution path of SPC is built within the context of 'The Belt and Road'. Finally, some corresponding safeguard measures are proposed. This provides a new idea for promoting the extensive application of project management, with details shown as follows.

With the number of collaborative projects increasing, the background of the stakeholders involved in the projects is also becoming more complex. Modern PM, taking into consideration influencing factors such as competitions and markets, is a win-win PM strategy that can satisfy sustainable development requirements. As a modern model, MBP uses technical methods of modern PM to manage various tasks and activities that are considered as projects and is an effective method to improve the efficiency of enterprise management [10,13–16]. MBP promotes cooperation among different projects and organizations and can accelerate economic development. With this approach, all projects can be executed efficiently based on the application of a systematic management theory, method, and culture. In this paper, SPC, which aims to achieve the sustainable development of organizations by guiding employees to apply MBP and practical management activities in society, has been proposed. Its evolutionary path including four stages has also been described. Moreover, in order to ensure that SPC is accepted, used, and promoted by the organization, some corresponding safeguard measures have been proposed.

SPC is a type of consensus which is formed in the process of implementing the idea of project management in society. As a special form of culture, SPC not only has the function of culture but also the characteristics of PM mode. On the one hand, culture has the functions of orientation, value integration, normative integration, and so on. On the other hand, a project management model can make organization management more flexible, teams work more closely, and management process more efficient. Culture has a strong influence on people, which will lead the members of society to choose certain behavior. SPC emphasizes implementation of project management behavior,

establishment of the project management system, and formation of project management thinking during the implementation. Therefore, when SPC is formed, it will lead the members of society to choose behavior according to this cultural background. It will instruct enterprises, individuals, and groups to address affairs, to actualize project management behavior, and to manage with a specific program in accordance with the ideas of MBP. We summarize some of the benefits of this culture as follows.

For organizations, SPC can improve their management efficiency and management capacity. In addition, it can reduce the communication barriers in different enterprises and improve the success rate of cooperation. For managers, SPC can reduce the management difficulties caused by different cultures, outdated management, and changing environments. For government, it can indirectly promote the economic development of society by prompting the prosperity of enterprises and organizations.

Finally, this study provides a new idea for the sustainable development of organizations by promoting the extensive application of MBP innovations shown as follows:

1. Combined with the MBP trend, the SPC concept is proposed, which defines the concept of PM culture at the social level. Furthermore, the important role of SPC is analyzed, and a new field regarding PM culture at the social level is provided from the perspective of organizations.
2. Referring to the established literature, the evolutionary path of SPC is constructed based on four stages of culture: creation, formation, maturity, and inheritance. With this evolutionary path of SPC, the requirements of building a culture from four aspects (i.e., materials, behaviors, systems, and spirits) can be satisfied.
3. According to the social status of PM, some safeguard measures are proposed from the aspects of theory, system, behavior, and ideology. At the theoretical level, investment in PM research should be increased, and a disciplined system for projects should be created and improved. At the system level, the corresponding PM system should be established and improved, and the leaders should pay more attention to SPC construction and take an active role as cultural leaders at the behavioral level. At the ideological level, PM should be given great importance in publicity and education to improve the PM ideology of organizations, individuals, and groups. The combination of these four guarantees ensures the realization of SPC and sustainable development of organizations.

There are two shortcomings in this study: (1) In this paper, we proposed a general framework of the evolutionary path of SPC roughly, and the specific details require in-depth analysis. (2) The proposed evolutionary path of SPC is a general framework, which needs an in-depth analysis for specific cases in actual practice. These limitations will be addressed in future research.

## Appendix A

| Function | Authors | References | Point of View |
|---|---|---|---|
| Improve the international competitiveness of organizations | Bai, S.J. | [2] | The functions in PM work towards more flexible organizations, more close teamwork, and a more efficient management process. |
| | Kamenskaya, I.N. | [59] | The author described the components of culture in the modern library and provided that the components become organizational assets that are capable of ultimately increasing the competitiveness and attractiveness of a library. |
| | Barney, J.B. | [60] | Firms that have cultures with the required attributes can obtain sustained superior financial performance and generate sustained competitive advantages from their cultures. |
| | Quan, X.Y. | [61] | This paper provided that organizational culture is one of the intangible resources a firm owns, which is of importance in developing competitive advantage. |
| Guide organizations to promote project management behavior | Bai, S.J. | [2] | The functions in PM work towards more flexible organizations, more close teamwork, and a more efficient management process. |
| | Kerzner, H. | [62] | This research shows how effective project implementation can play a key role for the success of a company. |
| | Milosevic, D.Z.; Patanakul, P.; Srivannaboon, S. | [63] | Culture is a collective programming of the minds, generally used to understand basic values of a group, and is used by management to direct the behavior of employees to achieve better performance. |
| | Meyer, L.L.; Pretorius, J.H.C.; Pretorius, L. | [64] | Culture can improve the efficiency of the project manager and enable engineering and project managers to interact and manage efficiently on a "person to person", "person to team" and "team to team" basis. |
| Improve the organizations' project management and risk control capabilities | Bai, S.J. | [2] | The functions in PM work towards more flexible organizations, more close teamwork, and a more efficient management process. |
| | Kamenskaya, I.N. | [59] | The author described the components of culture in the modern library and provided that the components become organizational assets that are capable of ultimately increasing the competitiveness and attractiveness of a library. |
| | Barney, J.B. | [60] | Firms that have cultures with the required attributes can obtain sustained superior financial performance and generate sustained competitive advantages from their cultures. |
| | Quan, X.Y. | [61] | This paper provided that organizational culture is one of the intangible resources a firm owns, which is of importance in developing competitive advantage. |

The views of the articles we referenced for Figure 1.

## Appendix B

| Authors | References | Point of View |
|---|---|---|
| Schein, E.H. | [67] | The formulation of corporate culture must consider the economic and social environment in which the company is located. |
| Conbere, J.P.; Heorhiadi, A. | [68]. | The construction of corporate culture should be considered in the construction of corporate culture. The behavior of leaders has an important influence on the implementation of culture. |
| Fan, G.Y. | [69] | The formation process of corporate culture includes the following processes: <br> 1. Creating the corporate culture: Corporate leaders build their own cultural based on the enterprise characteristics and social environment. <br> 2. Accept the corporate culture: Let the employees of the company understand and agree with the culture of the company. <br> 3. Behavioral training: Train employees to work in accordance with the culture of the company. <br> 4. Support for stability of corporate culture: Through various measures to ensure the inheritance and continuity of corporate culture. |
| Wang, W.K. | [70] | The formation process of corporate culture includes the following processes: <br> 1. The leader proposes the cultural concept. <br> 2. Corporate managers practice culture and strengthen the implementation of the culture. <br> 3. People implement the organization's culture in the company. |
| Wang, S.J. | [71] | 1. Analyze the external environmental conditions and the strategy of the corporates, Form the cultural mechanism of the enterprise, including the cultural control mechanism and inheritance mechanism. Form the unique corporate environment and employee behavior culture of the enterprise. |
| Rose, K.H. | [72] | Organization culture is shaped by the common experience of the organization and most organization have developed unique cultures over time by practice and common usage. Common experience include, but not limited to: shared vision, mission, values, beliefs and expectation <br> 1. regulations, polices, methods, and procedures <br> 2. motivation and reward systems <br> 3. risk tolerance <br> 4. view of leadership, hierarchy, and authority relationship <br> 5. code of conduct, work ethic, and work hours <br> 6. operating environment |
| Palmer, M. | [73] | Establishing a project culture <br> 1. initiate the project: formalize the initiation of project <br> 2. project definition <br> 3. analysis of the issues <br> 4. developing a European project process <br> 5. launch and roll-out <br> 6. review |

The views of the articles we referenced for Figure 2.

## References

1. Bu, X.L. Thinking about 'going out' engineering contracting within the context of 'The Belt and Road'. *Macroecon. Manag.* **2016**, *2*, 57–60.
2. Bai, S.J. *Modern Project Management*; China Machine Press: Beijing, China, 2010; ISBN 978-7-111-10090-5.
3. Gang, L. The application of project management in small and medium-sized enterprises. *New Economy* **2016**, *12*, 103–104.
4. Hai, B.W. The Strategic Work of Small and Medium Enterprises on China's Economic Development. *Spec. Zone Econ.* **2010**, *12*, 234–235.
5. Shun, F.A. The Impact of Developing Small and Medium Enterprises on China's Economy. *Times Finance* **2013**, *24*, 170.
6. Xin, L. China's economic development and the role of Small and Medium Enterprises. *Bus. Res.* **2012**, *4*, 189–190.
7. Bai, L.B.; Du, Q. Co-evolution efficiency of project portfolio based on strategic orientation. *Rairo-Oper. Res.* **2017**, *52*, 645–659. [CrossRef]
8. Xue, M.Z.; Ran, L. The project management of enterprises. *Econ. Tribune* **2006**, *3*, 81–83. [CrossRef]

9. Gareis, R. Management by projects: The management strategy of the 'new' project-oriented company. *Int. J. Proj. Manag.* **1991**, *9*, 71–76. [CrossRef]

10. Maylor, H.; Brady, T.; Cookedavies, T.; Hodgson, D. From projectification to programmification. *Int. J. Proj. Manag.* **2006**, *24*, 663–674. [CrossRef]

11. Kerzner, H. *Implementation of Project Management; Project Management Case Studies*; Wiley-Blackwell: Hoboken, NJ, USA, 2017.

12. Turner, R.; Ledwith, A. Project Management in Small to Medium-Sized Enterprises: Fitting the Practices to the Needs of the Firm to Deliver Benefit. *J. Small Bus. Manag.* **2016**, *56*, 475–479. [CrossRef]

13. Dan, W.D.; Qing, L.L. Research on Enterprise Project by Management Mode. *J. Manag. Case Stud.* **2013**, *26*, 163–168.

14. Gareis, R. 'Management by projects': The management approach for the future. *Int. J. Proj. Manag.* **1989**, *7*, 243–249. [CrossRef]

15. Chen, X.F. Research on the Construction and Promotion of Project Management System of BC Company. Zhejiang University of Technology: Zhejiang, China, 2014.

16. Winter, M.; Smith, C.; Cooke-Davies, T.; Cicmil, S. The importance of 'process' in Rethinking Project Management: The story of a UK Government-funded research network. *Int. J. Proj. Manag.* **2006**, *24*, 650–662. [CrossRef]

17. Sharad, D. Management by projects-an ideological breakthrough. *Proj. Manag. J.* **1986**, *3*, 61–63.

18. Xie, L.N. Research on Cultural Characteristics of Project Management in IT Project. Master of Thesis, Yunnan University, Yunnan, China, 2010.

19. Winter, M.; Szczepanek, T. Projects and programmes as value creation processes: A new perspective and some practical implications. *Int. J. Proj. Manag.* **2008**, *26*, 95–103. [CrossRef]

20. Davidovitch, N.; Belichenko, M.; Kravchenko, Y. Information Resources Usage in Project Management Digital Learning System. *J. Educ. Learn.* **2017**, *6*, 146. [CrossRef]

21. Kivilä, J.; Martinsuo, M.; Vuorinen, L. Sustainable project management through project control in infrastructure projects. *Int. J. Proj. Manag.* **2017**, *35*. [CrossRef]

22. Dimaggio, P. Culture and cognition. *Metaphilosophy* **1997**, *23*, 263–287. [CrossRef]

23. Montobon, F.; Pagell, M.; Wu, Z. Making Sustainability Sustainable. *J. Supply Chain Manag.* **2016**, *52*, 11–27. [CrossRef]

24. Song, F.; Montabon, F.; Xu, Y. The impact of national culture on corporate adoption of environmental management practices and their effectiveness. *Int. J. Prod. Econ.* **2018**, *205*, 313–328. [CrossRef]

25. Mintu, A.T. Cultures and Organizations: Software of the Mind. *J. Int. Bus. Stud.* **1992**, *23*, 362–365. [CrossRef]

26. Alkhoraif, A.; Mclaughlin, P. Lean implementation within manufacturing SMEs in Saudi Arabia: Organizational culture aspects. *J. King Saud Univ.-Eng. Sci.* **2018**. [CrossRef]

27. Podrug, N. Influence of national culture on decision-making style. *South East. Eur. J. Econ. Bus.* **2011**, *6*, 37–44. [CrossRef]

28. Sacco, P.L.; Ferilli, G.; Tavano Blessi, G. From Culture 1.0 to Culture 3.0: Three Socio-Technical Regimes of Social and Economic Value Creation through Culture, and Their Impact on European Cohesion Policies. *Sustainability* **2018**, *10*, 3923. [CrossRef]

29. Wróblewski, Ł.; Dziadzia, B.; Dacko-Pikiewicz, Z. Sustainable Management of the Offer of Cultural Institutions in the Cross-Border Market for Cultural Services—Barriers and Conditions. *Sustainability* **2018**, *10*, 3253. [CrossRef]

30. Firth, G.; Krut, R. Introducing a project management culture. *Eur. Manag. J.* **1991**, *9*, 437–443. [CrossRef]

31. Eberlein, M. Culture as a critical success factor for successful global project management in multi-national it service projects. *J. Inf. Technol. Manag.* **2008**, *19*, 27–42.

32. Morrison, J.M.; Brown, C.J.; Smit, E.V.D.M. The impact of organizational culture on project management in matrix organizations. *S. Afr. J. Bus. Manag.* **2008**, *39*, 27–36.

33. Henrie, ME.; Sousa-Posa, A. Project management: A cultural literary review. *Proj. Manag. Inst.* **2005**. [CrossRef]

34. Maya, I.; Rahimi, M.; Meshkati, N.; Madabushi, D.; Pope, K.; Schulte, M. Cultural Influence on the Implementation of Lessons Learned in Project Management. *EMJ-Eng. Manag. J.* **2005**, *17*, 17–24. [CrossRef]

35. Zhang, Y.; Marquis, C.; Filippov, S.; Haasnoot, H.J.; Martijn, V.D.S. The Challenges and Enhancing Opportunities of Global Project Management: Evidence from Chinese and Dutch Cross-Cultural Project Management. *Soc. Sci. Electr. Publ.* **2015**, *15*. [CrossRef]

36. Yazici, H.J. The role of project management maturity and organizational culture in perceived performance. *Proj. Manag. J.* **2010**, *40*, 14–33. [CrossRef]

37. Daneshka, A. On the cultural profile of project management, Ikonomiceski i Sotsialni Alternativi. Available online: https://ideas.repec.org/a/nwe/iisabg/y2016i3p83-92.html (accessed on 17 December 2018).

38. Hajian, H.; Astani, S. A Research Outlook for Real-Time Project Information Management by Integrating Advanced Field Data Acquisition Systems and Building Information Modeling. In Proceedings of the Computing in Civil Engineering, Austin, TX, USA, 24–27 June 2009.

39. Yuan, D.; Sai, Y. The Research on System of Construction Materials Management by Project. In Proceedings of the International Conference on Management and Service Science, Wuhan, China, 24–26 August 2010; pp. 1–4.

40. Ou, L.X.; Yu, W.M. Strategic Programme Selection Model for Enterprise Management by Project. *Sci. Technol. Eng.* **2007**, *7*, 2182–2186.

41. Wei, Y.; Miraglia, S. Organizational culture and knowledge transfer in project-based organizations: Theoretical insights from a Chinese construction firm. *Int. J. Proj. Manag.* **2017**, *35*, 571–585. [CrossRef]

42. Anderson, D.K.; Merna, T. Project management strategy—Project management represented as a process based set of management domains and the consequences for project management strategy. *Int. J. Proj. Manag.* **2003**, *21*, 387–393. [CrossRef]

43. Yan, X.L.; Cao, H.P. Establishment and Realization of Project Culture during the Construction Project Management in China. In Proceedings of the International Conference on Management and Service Science, Wuhan, China, 12–14 August 2011; pp. 1–4.

44. Tsekhovoy, A.F.; Nekrassova, N.A.; Karmazina, L.I. The project management culture: International lessons and kazakhstan's experience. *PM World J.* **2014**, *3*, 1–14.

45. Agnantounkpatin, A.R.; Zhang, L.Y. A Framework for Culture Management in Sino-African International Construction Projects. International Conference on Information Management. *Innov. Manag. Ind. Eng.* **2011**, *2*, 51–54. [CrossRef]

46. Fish, A. Assisting cross-border manager adjustment: Psycho-cultural and socio-cultural interventions. *Pers. Rev.* **2005**, *34*, 225–245. [CrossRef]

47. Shore, B.; Cross, B.J. Exploring the role of national culture in the management of large-scale international science projects. *Int. J. Proj. Manag.* **2005**, *23*, 55–64. [CrossRef]

48. Cheng, D.Q.; Chen, K. Organizational project management culture. *Proj. Manag. Technol.* **2006**, *2*, 31–35. [CrossRef]

49. Lee, C.K.; Yiu, T.W.; Cheung, S.O. Selection and use of Alternative Dispute Resolution (ADR) in construction Projects-Past and future research. *Int. J. Proj. Manag.* **2016**, *34*, 494–507. [CrossRef]

50. Putthiwanit, C. Exploring the Impact of Organizational Culture on Employees in Multinational Enterprise: A Qualitative Approach. *Procedia—Soc. Behav. Sci.* **2015**, *207*, 483–491. [CrossRef]

51. Ke, Y.; Wang, S.Q.; Chan, A.P.C.; Cheung, E. Research Trend of Public-Private Partnership in Construction Journals. *J. Constr. Eng. Manag.* **2009**, *135*, 1076–1086. [CrossRef]

52. Yu, Y.; Chan, A.P.C.; Chen, C.; Darko, A. Critical Risk Factors of Transnational Public-Private Partnership Projects: Literature Review. *J. Infrastruct. Syst.* **2018**, *24*. [CrossRef]

53. Kotter, J.P.; Heskett, J.L.; Li, X.T. *Corporate Culture and Performance*; China Renmin University Press: Beijing, China, 2004.

54. Zhang, T.T.; Lai, Y.X.; Bai, L.B.; Bai, S.J. Social Project Culture and Its Evolutionary Path. *Proj. Manag. Technol.* **2017**, *15*, 7–14. [CrossRef]

55. Zeng, Y.; Jin, M.; Guo, C.; Zhang, Z. Research on evaluation of enterprise project culture based on Denison model. *J. Ind. Eng. Manag.* **2015**, *8*, 909–927. [CrossRef]

56. Heng, W.; Yang, D. The theoretical formation process of innovative corporate culture. *Mita Bus. Rev.* **2007**, *50*, 385–395.

57. Ajmal, M.M.; Koskinen, K.U. Knowledge transfer in project-based organizations: An organizational culture perspective. *Proj. Manag. J.* **2008**, *39*, 7–15. [CrossRef]

58. Arditi, D.; Nayak, S.; Damci, A. Effect of organizational culture on delay in construction. *Int. J. Proj. Manag.* **2017**, *2*, 136–147. [CrossRef]

59. Kamenskaya, I.N. Organizational culture as a basis for the competitiveness of a library. *Sci. Tech. Inf. Process.* **2011**, *38*, 27–33. [CrossRef]

60. Barney, J.B. Organizational culture: Can it be a source of sustained competitive advantage? *Acad. Manag. Rev.* **1986**, *11*, 656–665. [CrossRef]

61. Quan, X.Y. Exploring Sustained Competitive Advantage: The Effect of Organizational Culture on Firm Performance. In Proceedings of the International Conference on Management Science and Engineering, Chengdu, China, 14–21 July 2007; pp. 1372–1377.

62. Kerzner, H. Culture. In *Project Management Best Practices*; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 2014; pp. 335–373.

63. Milosevic, D.Z.; Patanakul, P.; Srivannaboon, S. Cultural Aspects of Project Management. In *Case Studies in Project, Program, and Organizational Project Management*; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 2010; pp. 19–27.

64. Meyer, L.L.; Pretorius, J.H.C.; Pretorius, L. Effects of culture on project management contributing to the success of managing culturally diverse engineering teams in a global environment. In Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management, Bali, Indonesia, 4–7 December 2016; pp. 640–645.

65. Riley, J. Understanding the Antecedent Competencies of Organizational Risk Management Capabilities. Doctor of Thesis, Clemson University, Clemson, SC, USA, 2013.

66. Kimbrough, R.L.; Componation, P.J. The Relationship between Organizational Culture and Enterprise Risk Management. *Eng. Manag. J.* **2009**, *21*, 18–26. [CrossRef]

67. Schein, E.H. Culture: The missing concept in organization studies. *Adm. Sci. Q.* **1996**, *41*, 229–240. [CrossRef]

68. Conbere, J.P.; Heorhiadi, A. Cultural influences and conflict in organizational change in new entrepreneurial organizations in Ukraine. *Int. J. Confl. Manag.* **2006**, *17*, 226–241. [CrossRef]

69. Fan, G.Y. Enterprise Culture's New Definition and the Enterprise Culture Management Model. *East China Econ. Manag.* **2009**, *23*, 121–126.

70. Wang, W.K. The Formation Mechanism and Construction Method of Enterprise Culture. *Prod. Res.* **2009**, *5*, 251–252.

71. Wang, S.J. Field Research on Enterprise Culture Evolutionary path and Influence on its Performance—The Analysis from the Perspective of Business Anthropology. *J. Shanxi Univ. Finance Econ.* **2015**, *37*, 71–84.

72. Rose, K.H. A Guide to the Project Management Body of Knowledge (PMBOK®; Guide)—Fifth Edition. *Proj. Manag. J.* **2013**, *44*, e1. [CrossRef]

73. Palmer, M. How an effective project culture can help to achieve business success: Establishing a project culture in Kimberly-Clark Europe. *Ind. Commer. Train.* **2002**, *34*, 101–105. [CrossRef]

74. Wei, C.L. Discussion on Project Management as a New Direction for the Development of Business Management. *J. Harbin Univ. Commerce (Soc. ScienceEdition)* **2011**, *1*, 35–38. [CrossRef]

75. Wang, J.P. Analysis on the Problems and Improvement of Enterprise Project Culture Management. *China High.-Tech. Organ.* **2016**, *20*, 169–170. [CrossRef]

76. Li, S.; Yu, Z.H.; Ding, Z.B. The present situation and problems of project management in China. *Shanxi Arch.* **2008**, *8*, 229–230. [CrossRef]

77. Hannan, M.T.; Freeman, J.H. Organizational Ecology. *Ann. Rev. Sociol.* **1984**, *10*, 71–93. [CrossRef]

78. Boone, C.; Wezel, F.C.; Witteloostuijn, A.V. Top management team composition and organizational ecology: A nested hierarchical selection theory of team reproduction and organizational diversity. *Adv. Strateg. Manag. A* **2006**, *46*, 97–124. [CrossRef]

79. Wood, R.; Bandura, A. Social Cognitive Theory of Organizational Management. *Acad. Manag. Rev.* **1989**, *14*, 361–384. [CrossRef]

80. Qian, F.P. The Call of the Times-on the Establishment of 'Project Science'. In Proceedings of the 2016 China Project Management Conference and International Forum on Chinese Characteristics and Cross-Cultural Project Management, Xi'an China, 26–27 November 2016.

MDPI

*Article*

# Understanding Pro-Environmental Behavior in the US: Insights from Grid-Group Cultural Theory and Cognitive Sociology

Gail Markle

Department of Sociology and Criminal Justice, Kennesaw State University, Kennesaw, GA 30067, USA;
gmarkle@kennesaw.edu

**Abstract:** For almost fifty years researchers have endeavored to identify the factors that influence individuals' performance of environmentally significant behavior, with inconsistent results. This quest has become even more urgent as newly released scientific reports provide mounting evidence of global climate change and other types of anthropogenic environmental degradation. In order to change individuals' behavior on a large scale, it is necessary to change their habits of thinking. Using insights from Grid-group cultural theory and cognitive sociology, this mixed-methods study examined the factors that influence pro-environmental behavior among a nationally representative US sample ($n$ = 395). Qualitative results indicate that individuals develop culturally-specific environmental socio-cognitive schemas which they use to assign meaning to the environment and guide their environmentally significant behavior. Quantitative results indicate cultural orientation, pro-environmental orientation, environment identity, and environmental influence predict pro-environmental behavior. Applying these combined theoretical perspectives to the social problem of environmental degradation could facilitate the development of targeted strategies for bringing about impactful behavioral change.

**Keywords:** pro-environmental behavior; grid-group cultural theory; cognitive sociology

## 1. Introduction

Global climate change is an urgent environmental issue. The Intergovernmental Panel on Climate Change (IPCC) reports that warming of the climate system is unequivocal and has already significantly impacted human and natural systems [1] (p. 1). The IPCC warns that continued emission of greenhouse gases will have severe and irreversible consequences, although the risks of anthropogenic environmental degradation can be mitigated with changes in behavior patterns. Yet, Americans' response to increasing levels of environmental threat has been minimal [2–4]. Moreover, as scientific evidence of environmental degradation mounts, so too does "environmental skepticism" [5] among members of the general public, as well as outright repudiation among conservative think tanks and foundations [6–8]. Climate change has become a polarizing political issue [9].

The social problem of environmental degradation represents the ultimate "commons dilemma" [10]; an individual's personal objective (want/need satisfaction) conflicts with that of the group (resource viability). The challenge is: how to transform the performance of rational individual behavior into collectively performed socially beneficial behavior which usually entails a perceived cost to the individual? In order to bring about behavioral change on a large scale it is necessary to change habits of thinking. This article reports the results of a nationally representative mixed-methods study examining how Americans' thinking about the environment influences their performance of pro-environmental behavior.

## 2. Theoretical Perspectives and Relevant Research

Noting the complexity of pro-environmental behavior, Stern [11] called for the development of synthetic theoretical models to advance our understanding of it; however, three perspectives continue to dominate contemporary research into pro-environmental behavior. Norm activation theory [12] argues that awareness of consequences and ascription of responsibility activate personal norms that influence the performance of pro-environmental behavior. The theory of planned behavior [13] posits that the performance of pro-environmental behavior is predicated upon intention, which derives from a combination of attitudes, norms, and perceived behavioral control. Value–belief–norm theory [14] states that personal values and norms, beliefs about environmental conditions, and individual agency guide the performance of pro-environmental behavior. While useful, these theories focus on individual-level explanations for behavior and pay little attention to social context. Social context is important to consider since environmental attitudes and behavior result from the interplay among characteristics of the individual and the social structure [15,16]. Grid-group cultural theory and cognitive sociology share the perspective that the social structure embedded in the individual as "culture" influences the individual's attitudes and behavior [17]. This mixed-methods study combines insights from grid-group cultural theory and cognitive sociology to examine how culture influences individuals' thinking about the environment, and consequently, their performance of pro-environmental behavior.

### 2.1. Grid-Group Cultural Theory

The controversy over global warming is actually a debate about acceptable levels of risk, specifically "which kinds of risks are acceptable to what sorts of people" [18] (p. 4). Absent complete knowledge of the totality of potential dangers, individuals choose which risks to regard and which to disregard in a manner that conforms to and sustains their way of life; hence risk is socially constructed [18,19]. Grid-group cultural theory posits that conceptualizations of risk are not simply the products of individual cognition, but social cognition as well. According to grid-group cultural theory, the designation of which risks merit concern is a function of cultural biases and social relations, which interact in a mutually reinforcing manner and are referred to as ways of life or political cultures [20]. Cultural biases are defined as worldviews, or shared values and beliefs, which support different patterns of social relations. Social relations are defined as patterns of interpersonal relationships. The specific risks chosen for regard/disregard function to reinforce one way of life while undermining the others.

Grid-group cultural theory distinguishes three main ways of life, or cultures: individualist, egalitarian, and hierarchical. Each culture has its own orientation to nature and specific conceptualization of needs and resources by which its members justify their set of behavioral strategies [21]. Members of the individualist culture regard nature as a cornucopia, where abundant resources exist in a stable and global equilibrium. The individualist strategy is to manage both needs and resources upward through conspicuous consumption, believing that when one prospers everyone else benefits as well. Egalitarians view nature as existing in a delicate and precarious balance; resources are finite and depleting. The ideals of equality and fairness are of utmost importance. The egalitarian strategy is to decrease needs to ensure sustainability. For members of the hierarchical culture, nature appears to exist in an unstable equilibrium with limited resources. The hierarchical strategy is to increase resources in order to match needs. Due to their fundamentally different worldviews, or value systems, these cultures exist in competition with one another, therefore irreconcilable conflict is a central theme of grid-group cultural theory [22].

Several studies have empirically tested the principles of grid-group cultural theory. Consumption behavior reflects the biases of the cultural groups [23]. Environmentalism is positively associated with egalitarianism and negatively associated with individualism [24]. Egalitarians are more likely to recycle and purchase organically-grown food compared to other cultural groups [25]. Egalitarians favor policy measures aimed at reducing car use while individualists considered policy measures

unnecessary [26]. Individualists prefer market-oriented solutions for managing environmental risk and egalitarians preferred behavioral strategies [27].

### 2.2. Cognitive Sociology

Grid-group cultural theory explains variances in values but not the source of the variances. Cognitive sociology has the potential to explain the source of those variances by illuminating the relationship between cognition and culture [28]. Central to a cognitive sociological approach is the distinction among three ways of thinking: *cognitive individualism*—thinking as an individual, from a subjective position of personal experience; *cognitive universalism*—thinking as a human being, from an objective position informed by nature and logic; and *cognitive pluralism*—thinking at the level of a social being, from an inter-subjective position as part of a group whose members have developed similar cognitive structures [29]. Cognitive sociology recognizes that people group themselves into cultures with similar worldviews that provide "plausibility structures" or groups of confirming others who validate the culture's worldview and ipso facto that of the individual [30]. Individuals are socialized into various thought communities, or cultures, via cognitive norms that specify appropriate ways of perceiving, focusing attention, and signifying [29]. In perceiving, we become aware of something. In focusing on something we make it the center of interest, relegating other things to a position of less relevance or irrelevance. In signifying we invest something with meaning through the use of signs (indicators, symbols, and icons). These cognitive norms, or rules of thinking, are a form of social control, in effect, deciding for us "what we attend to, how we reason, what we remember, and how we interpret out experiences" [31] (p. 323).

Cultural norms of focusing not only determine what is relevant and irrelevant, but also what is ignored, usually through social pressure dictating its deliberate disregard. Denial is often invoked in the face of things that virtually demand attention engendering "conspiracies of silence" [32]. For example, Norgaard [4] characterized the lack of public response among a community of rural Norwegians confronted with visible manifestations of global climate change as "collective avoidance." Community members had information, believed it, yet put it out of mind. Similarly, many Americans consider recycling emblematic of pro-environmental behavior in general, and this singular focus precludes their performance of other more productive pro-environmental behaviors [33]. They too are aware of environmental degradation but choose not to focus on it. Neither group denied knowledge of environmental problems; rather they were just not putting that knowledge to use [4]. Members of both groups engaged in selective attention [34]: limiting their exposure to information, confining their "mental horizons" to the short term, and especially among Americans, focusing on something small that they could do.

Cognitive norms coalesce in the form of culturally specific socio-cognitive schemata, or "mindscapes" [29] through which individuals develop an understanding of the world. As knowledge structures, "[s]chemata are both representations of knowledge and information-processing mechanisms" [28] (p. 269). As mechanisms of thinking, schemata provide culturally appropriate cognitive shortcuts, simplifying individual cognition; thus, it is that culture is "manifest in people's heads" (p. 272). The process of developing a commitment to recycling entails adopting a socio-cognitive schema associated with the role of recycler [35]. Grounded in the cultural meaning of the role of recycler, the schema guides the perception and understanding of relevant information and ultimately behavior.

### 2.3. Other Influences on Pro-Environmental Behavior

Other social factors have been hypothesized to influence environmental behavior. Past experiences with nature and exposure to negative environmental events [36] and environmentally-committed role models [25] influence future performance of pro-environmental behavior. Stets and Biga [37] developed a model of environment identity which situates one's relationship with the natural environment along a continuum from anthropocentrism (viewing the environment as a resource for consumption) to ecocentrism (believing in interdependency among humans and the environment). Environment

identity positively influences pro-environmental behavior [37]. Similarly, having a self-concept of "environmentalist" positively influences pro-environmental behavior [38]. The process of becoming a recycler entails: recognition and understanding of the meaning of the role of recycler; awareness that the role can be a basis for identity; and congruence between the meaning of the role and the self [33]. Attitudes and behaviors associated with the role of recycler become associated with the self; it is thus that "culture enters the person through cognitive schema associated with social roles" [35] (p. 55).

In this study I combined grid-group cultural theory and cognitive sociology to examine the following research questions: what factors influence the performance of pro-environmental behavior?; and how do these factors differ by cultural orientation? I hypothesize that individuals develop culturally specific environmental socio-cognitive schemas which guide their performance of environmentally significant behavior. An important step toward changing individuals' behavior toward the environment is to better understand how their thinking about the environment is influenced by cultural group membership.

## 3. Research Methodology

This study was a correlational mixed-method design, in which both quantitative and qualitative data were collected at the same time through an online survey instrument. A nationally representative sample was generated from the US population using Zoomerang™ (Zoomerang, San Mateo, CA, USA), an online market research company. Participants were randomly selected from this sample and invited to participate in the survey via an email invitation from Zoomerang in 2011. The response rate reported by Zoomerang was 67%. The survey consisted of 78 closed and open-ended questions which assessed participants' beliefs, attitudes, and behaviors relative to the environment.

### 3.1. Sample

Of the 395 participants who completed the online survey, 57.8% were women. Ages ranged from 18 to 84, with a median age of 32. Most (77.4%) had at least some college education. Just over 75% of participants identified as white; 9.7% as black; 8.4% as Hispanic; and 4.0% as Asian. Household income levels varied: 17.1% of participants reported an annual household income of less than $20,000; 26.5% reported between $20,001 and $45,000; 27.6% reported between $45,001 and $70,000; and 28.9% reported more than $70,000. Most participants (79.2%) resided in an urban/suburban area, while the remainder resided in a rural area. One important difference between this sample and the US population is in the level of educational attainment; 77.4% of the sample have at least some college, compared to 59% of Americans [39]. This difference could be due to the use of an online data collection method.

### 3.2. Measures

Pro-environmental behavior was measured using a seven-item scale that reflects the level to which participants take positive action toward the environment [40] (See Appendix A). The scale includes such questions as: have you made any changes in your day-to-day behavior because of concerns about the environment? Would you be willing to pay higher prices so that industry could better preserve and protect the environment? Chronbach's alpha for this scale was 0.76.

Cultural group consisted of 16 items from Rippl's [41] instrument for assessing cultural group membership (See Appendix A). Participants were asked to indicate their level of agreement on a scale of one to five with such statements as: the freedom of the individual should not be limited for reasons for preventing crime (individualist); important questions for our society should not be decided upon by experts but by the people (egalitarian); in a family, adults and children should have the same influence in decisions (hierarchical). Chronbach's alphas for the three subscales were: egalitarian 0.78; hierarchical 0.69; and individualist 0.76.

Pro-environmental orientation refers to individuals' values, attitudes, and beliefs toward the environment. Pro-environmental orientation was measured by the 15-item revised New Ecological Paradigm Scale [42] (See Appendix A). Participants were asked to indicate their level of agreement on

a scale of one to five with such statements as: we are approaching the limit of the number of people the earth can support; the balance of nature is strong enough to cope with the impacts of modern industrial nations. Chronbach's alpha for this scale was 0.83, and its validity has been established by dozens of studies [42].

Environment identity was measured using Stets and Biga's [37] Environment Identity Scale (See Appendix A), in which participants indicate their relationship to the environment along eleven continua such as: independent from the environment/dependent on the environment; very concerned about the environment/indifferent about the environment. Chronbach's alpha for this scale was 0.81.

Environmental influence refers to participants' attribution of environmental influence from experiences, role models, and/or events. This measure was derived from responses to the open-ended question: what experiences, role models, or events have influenced your feelings toward the environment?

Other open-ended questions included: what comes to mind when you think about the environment? What environmental issues are you aware of? What environmental issues do you think are important? How do you think these environmental issues should be resolved?

*3.3. Methods of Analysis*

I used multiple regression analysis to examine the influence of cultural group, pro-environmental orientation, environment identity, and environmental influence on pro-environmental behavior. I used single factor analysis of variance (ANOVA) to determine if pro-environmental orientation, environment identity, environmental influence, and pro-environmental behavior differ according to cultural group. I analyzed the qualitative data by applying the open coding phase of grounded theory methods, examining responses line-by-line, linking concepts to indicators (words or series of words), and comparing them until the concept was well defined [43]. The qualitative analysis was guided by the categorization of thinking into the cognitive acts of perceiving, focusing, and assigning meaning [29].

## 4. Results

*4.1. Quantitative Results*

4.1.1. Descriptive Statistics

Table 1 presents the means and frequencies for the scales measuring pro-environmental behavior, pro-environmental orientation, and environment identity. Scores on these variables were relatively high. About two thirds of participants' scores were in the top half of the environmental behavior scale. More than 85% of participants' scores were in the top half of both the pro-environmental orientation scale and the environment identity scale. The most populated category of cultural group was hierarchical (44.0%, *n* = 174), followed by individualist (34.2%, *n* = 135), and egalitarian (21.8%, *n* = 86).

Almost 80% of participants reported that their feelings toward the environment were influenced by personal experiences, role models or particular events. The most frequently reported types of influence were personal observations of environmental degradation, environmental disasters such as the 2010 British Petroleum Oil Spill in the Gulf of Mexico, childhood experiences, family members, the media, and classes taken in high school or college.

**Table 1.** Descriptive statistics. $N = 395$.

| Means and Standard Deviations | M | SD |
|---|---|---|
| Pro-Environmental Behavior | 8.39 | 2.33 |
| Pro-Environmental Orientation | 58.44 | 10.43 |
| Environment Identity | 43.23 | 7.15 |
| Frequencies | % | N |
| Pro-Environmental Behavior | | |
| 2–7 | 34.1 | 135 |
| 8–10 | 48.6 | 192 |
| 11–13 | 17.3 | 68 |
| Pro-Environmental Orientation | | |
| 15–44 | 16.5 | 65 |
| 45–59 | 49.9 | 197 |
| 60–75 | 33.6 | 133 |
| Environment Identity | | |
| 11–32 | 12.4 | 49 |
| 33–43 | 36.7 | 145 |
| 44–55 | 50.9 | 201 |

### 4.1.2. Regression Results

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. Table 2 presents the results of the regression analysis on pro-environmental behavior. Cultural orientation is a significant predictor of pro-environmental behavior; members of both the individualist and hierarchical cultures performed lower levels of pro-environmental behavior compared to the egalitarian. Pro-environmental orientation, environment identity, and environmental influence were also significant predictors of pro-environmental behavior. The adjusted $R^2$ of the model was 0.310, indicating that these four variables explain 31% of the variation in pro-environmental behavior. The demographic variables, gender, age, race/ethnicity, education, and household income were not significant factors predicting pro-environmental behavior and are not listed in Table 2.

**Table 2.** Unstandardized and standardized coefficients from regression of pro-environmental behavior.

| | Pro-Environmental Behavior | |
|---|---|---|
| Independent Variable:<br>Cultural Orientation | B | β |
| Hierarchist | −0.563 * | −0.120 |
| | (0.315) | |
| Individualist | −0.796 ** | −0.164 |
| | (0.325) | |
| Pro-Environmental Orientation | 0.050 *** | 0.225 |
| | (0.014) | |
| Environment Identity | 0.124 *** | 0.375 |
| | (.020) | |
| Environmental Influence | 0.296 ** | 0.129 |
| | (0.106) | |
| Constant | −0.615 | |
| N | 395 | |
| R² | 0.310 | |

Note: Numbers in parentheses are standard errors. Egalitarian is the omitted category for Cultural Group. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

### 4.1.3. ANOVA Results

The results of one-way between groups analyses of variance (ANOVA) indicate significant differences between cultural groups for pro-environmental behavior, pro-environmental orientation,

and environment identity (see Table 3). Effect sizes for these differences, calculated using eta squared, were large. The mean scores on the pro-environmental behavior scale for each group were: egalitarian ($M$ = 9.91, $SD$ = 1.73); individualist ($M$ = 8.48, $SD$ = 2.35), and hierarchical ($M$ = 7.80, $SD$ = 1.90). The mean scores on the pro-environmental orientation scale for each group were: egalitarian ($M$ = 64.24, $SD$ = 7.66); individualist ($M$ = 53.10, $SD$ = 9.86), and hierarchical ($M$ = 49.51, $SD$ = 8.38). The mean scores on the environment identity scale for each group were: egalitarian ($M$ = 48.76, $SD$ = 5.90); individualist ($M$ = 42.44, $SD$ = 7.05), and hierarchical ($M$ = 39.95, $SD$ = 9.90). Egalitarians had the highest levels of pro-environmental behavior, pro-environmental orientation, and environment identity, followed by individualists, and finally hierarchists.

**Table 3.** Results of one-way analyses of variance.

| | Culture | Culture | Mean Difference | SD |
|---|---|---|---|---|
| Variable | (A) | (B) | (A–B) | Error |
| Pro-Environmental Behavior | Egalitarian | Hierarchist | 2.10 *** | 0.268 |
| | Egalitarian | Individualist | 1.43 *** | 0.280 |
| | Hierarchist | Individualist | −0.68 * | 0.233 |
| Pro-Environmental Orientation | Egalitarian | Hierarchist | 14.74 *** | 1.156 |
| | Egalitarian | Individualist | 11.14 *** | 1.210 |
| | Hierarchist | Individualist | −3.60 ** | 1.006 |
| Environment Identity | Egalitarian | Hierarchist | 8.81 *** | 1.065 |
| | Egalitarian | Individualist | 6.31 *** | 1.114 |
| | Hierarchist | Individualist | −0.50 * | 0.926 |

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

## 4.2. Qualitative Results

### 4.2.1. Concepts

Applying the open coding phase of GTM (grounded theory methods) to the textual data I identified the following six concepts that scaffold the environmental socio-cognitive schema. *Environmental consciousness* represents the cognitive act of perceiving, and has two dimensions, level and scope. Level of environmental consciousness refers to the amount of awareness participants have of the environment, whether the environment appears in the foreground of people's minds or if it is relegated to the background. Participants' levels of environmental consciousness varied considerably from "I never gave it a thought until I filled out this survey" to "I consciously try to keep the environment in mind." Scope of environmental consciousness refers to how far participants' awareness of the environment extends. Responses ranged from the very local to a global perspective. Many participants described a dawning of environmental consciousness, for example:

> I used to not care about the environment because I lacked knowledge of what was actually going on. But then I saw a documentary on pollution and it shocked me into thinking about my part in the problem. On New Year's Eve I made a resolution not to litter and I kept that resolution and then I challenged all of my friends and family members to do the same.

The concepts *anthropocentrism*, *environmental concern*, *proximity of environmental issues*, and *importance of environmental issues* illustrate the cognitive act of focusing. Anthropocentrism reflects the level at which participants placed themselves, or humans, at the center of the universe. Levels of anthropocentrism varied from low, "the environment is like a big chain, each part affects the others and they all need to work together as one;" to high, "we need to worry about getting everything okay for ourselves before we try to worry about the animals."

Environmental concern has two dimensions. Intensity of concern about the environment varied along a spectrum: "honestly, I have never really cared all that much about environmental issues"; "I am not a tree hugger or anything, but I do care about the environment and what happens to it"; "I am genuinely concerned." Scope of concern varied as well. Some participants' concern was limited to one topic such as pollution, while others expressed concern about multiple issues.

Proximity of environmental issues describes the distance participants perceive themselves to be from environmental issues. It reflects the degree to which they believe they have already been affected by environmental issues and their perceptions of their risk of being affected in the future. This participant describes directly experiencing the effects of water pollution:

> I am concerned about our water. As a kid we could swim all summer in the Rock
> River or any of the lakes and streams. Now I can't even allow my dog to swim in
> them. I seriously had to take her to the vet because she kept getting a skin disorder,
> we finally figured out it was from swimming in the river.

In contrast, another participant considered himself far removed from environmental issues, stating "I am simply not concerned with beach erosion and marine habitats because I live three hours away from the nearest coastal area."

Participants cited many environmental issues including climate change, pollution, deforestation, species extinction, and plastic water bottle disposal, attributing varying levels of importance to each.

Participants *assign meaning* to the environment in various ways. Their explanations of what the environment means to them encompassed five domains: (1) home; (2) resource; (3) nature; (4) spiritual symbol; and (5) ideological symbol.

### 4.2.2. Culturally Specific Environmental Socio-Cognitive Schemas

Members of each cultural group used the cognitive acts of perceiving, focusing, and assigning meaning similarly in the construction of their environmental schemas. For egalitarians, the environment had spiritual, or ideological meaning; they believed in "nature and humans living in harmony." Egalitarians reported high levels of environmental consciousness. Egalitarians had a holistic perspective on the environment, viewing all elements (species and physical features) as interconnected and dependent upon one another. Egalitarians were the least anthropocentric of the three groups. They considered humans to be no more important than other species and were especially concerned about the plight of animals. Egalitarians perceived the risk of being personally affected by environmental issues as quite high. Many saw themselves as having been already personally affected by environmental issues, and argued that these issues present an impending threat to all, including the planet as a whole. Egalitarians were alarmists, convinced that the planet was dying, on the brink of ecological disaster. They viewed the future as apocalyptic. According to egalitarians, everyone is responsible for coming together to solve environmental problems, although they had little confidence that this will occur.

Individualists thought of the environment as their home, or associated the environment with nature. Individualists reported moderate levels of environmental consciousness. The scope of environmental consciousness for individualists encompassed the individual and the community as well. Individualists were moderately anthropocentric. Individualists acknowledged the existence of environmental issues but did not perceive themselves to be at risk because they believed that current environmental degradation was reversible, there was still plenty of time before conditions became serious, and scientific and technological solutions would soon be forthcoming. Individualists supported free-market solutions to environmental issues such as "[c]lean water is a crucial environmental issue for many developing countries, but there are companies that can provide pure spring water from other sources to those who need it." Individualists also argued that those responsible for environmental issues should pay for their solution. Individualists were optimistic; they believed that future environmental conditions would be much improved.

For hierarchists, the environment represented natural resources. Hierarchists reported low levels of environmental consciousness. Hierarchists reported the highest levels of anthropocentrism, as one stated: "we need to worry about getting everything okay for ourselves before we try to worry about the animals". Hierarchists did not perceive themselves to be at risk of being impacted by environmental issues. Hierarchists did not perceive current environmental conditions as problematic. Many could even be considered environmental skeptics [7], as they expressed the opinion that reports of environmental destruction were exaggerated or falsified for political reasons. Members of the hierarchist culture believed that government should manage the environment by implementing rules and regulations, but they did not have much confidence in the resolvability of environmental issues.

Figure 1 presents a heuristic, or hypothetical, model integrating the quantitative and qualitative results of the study, illustrating the factors that influence the performance of pro-environmental behavior. Those factors identified by qualitative analysis are italicized. Quantitative analysis indicates cultural orientation, pro-environmental orientation, environment identity, and environmental influence significantly influence the performance of pro-environmental behavior. Members of the three cultural groups think differently about the environment as the culturally specific environmental socio-cognitive schemas suggest, and differ from one another in their environmental attitudes and behavior.
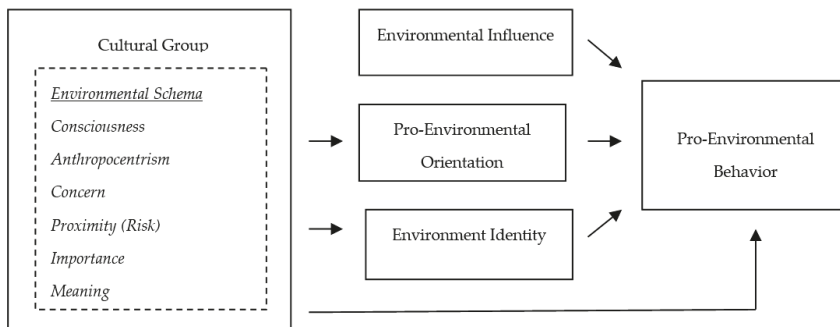


**Figure 1.** Heuristic model of factors that influence pro-environmental behavior.

## 5. Discussion and Conclusion

This mixed-methods study examines the factors that influence the performance of pro-environmental behavior, synthesizing grid-group cultural theory, and cognitive sociology to better understand the influence of culture on individuals' thinking about the environment and performance of pro-environmental behavior. In general, participants reported relatively high levels of environment identity and pro-environmental orientation, yet only 17.3 percent reported performing high levels of pro-environmental behavior. Scores on these measures were consistent with those found in other studies [37,44]. The results of this study indicate widespread support for environmentalism, but a lack of corresponding individual or collective behavior. Many studies have documented this gap between environmental attitudes and behavior [2,3,34] but so far none has identified the reasons for it.

The results of this study indicate environmental influence, environmental orientation and environmental identity influence the performance of pro-environmental behavior. These results are consistent with other studies [25,35–38]. This study supports others' findings that cultural orientation influences the performance of pro-environmental behavior [21,23–27]. These results are consistent with grid-group cultural theory: attitudes and beliefs about the environment and the performance of pro-environmental behavior differ according to the cultural groups identified by Douglas and Wildavsky [45,46]. In this study, members of the egalitarian cultural group had the highest levels of pro-environmental orientation and were the most likely to engage in pro-environmental behavior, followed by members of the individualist cultural group. Members of the hierarchist cultural

group had the lowest levels of pro-environmental orientation and were the least likely to engage in pro-environmental behavior.

I use cognitive sociology to argue that cultural orientation influences the performance of pro-environmental behavior via culturally specific environmental socio-cognitive schemas. Cognitive sociology explains how cultural points-of-view influence the meaning individuals' assign to the environment, their understanding of environmental issues, their perceptions of environmental risk associated with environmental issues and consequently their behavior. Individuals adopt a particular environmental orientation and engage in a particular level of pro-environmental behavior based on the worldview ascribed by their cultural group.

Conflicting assessments of environmental risk are not so much about empirical disagreements than they are about competing cultural visions [47]. Egalitarians view environmental degradation as a serious consequence of unregulated commerce and industry which they also believe generates and legitimizes inequality. Individualists do not view environmental issues as very important because doing so would lead to restrictions on commerce and industry, forms of behavior crucial to their cultural way of life. Hierarchists view claims of environmental degradation as indictments of the competence and authority of societal elites; remedies would upset the status quo supportive of traditional social roles. The culturally specific meanings associated with the environment allow members of each group to justify behavioral strategies that advance the way of life to which they are committed, whether it be conspicuous consumption, organizing to reduce inequality, or supporting increased government regulation.

There were limitations to this study. I chose the online survey method of data collection in order to examine a large, nationally representative sample of consumers. Participants' level of education in this study was somewhat higher than that of the general population, thus making the sample not truly representative. I attempted to structure the open-ended questions in such a way that would allow me to examine in detail how respondents think about the environment. However, with this method I was limited to the answers that respondents provided; I could not probe any further. Suggestions for further research include collecting similar data from a broad range of countries and comparing results among them.

Combining qualitative and quantitative methods requires a mixed process of validation [48]. Reliability was assessed by applying Cronbach's alpha to the scales measuring the quantitative variables and by maintaining an audit trail describing in detail how qualitative data were coded and interpreted. In mixed methods studies validity refers to the "ability of the researcher to draw meaningful and accurate conclusions" from the data [49] (p. 146) and is a function of data quality and researcher competence. The qualitative data came directly from the participants with minimal researcher interaction. The participants were anonymous; there is no reason to suspect insincerity. The researcher's competence and integrity can be confirmed by examining the audit trail.

This study has both theoretical and practical implications. Grid-group cultural theory and cognitive sociology are useful for explaining the relationship between environmental attitudes and behavior; they provide a much-needed social context. Together these theories suggest a method of executing two of the intervention principles proposed by Gardner and Stern [50]—understanding the situation from the actor's perspective and using multiple intervention types—by developing segmented strategies for increasing individuals' engagement in pro-environmental behavior. Environmental socio-cognitive schemas for each cultural group are not just different from one another, but frequently conflict with one another. This finding reflects an increasing tendency of Americans to self-divide along ideological lines [51].

Egalitarians perceive environmental issues as grave and in need of immediate collective attention; individualists acknowledge the existence of environmental threats but believe they will be neutralized in time by the "invisible hand" of the free market system; environmental issues remain an abstraction for hierarchists. Since egalitarians value consensus and communality, they could be encouraged to join local environmental groups to work together in solving local problems; their success in the local arena

may spur them on to larger scale activism. Individualists believe in the power of the free-market system and do not want to be confined by rules and regulations. By appealing to individualists' entrepreneurial spirit, they can be motivated by grants or other financial incentives to develop innovative technological solutions to environmental issues. Hierarchists are traditionalists whose behavior is governed by rules and regulations; they are especially susceptible to the power of subjective norms. Exert social pressure on hierarchists by demonstrating the pro-environmental behavior of valued others and the hierarchists will follow.

This study is significant because climate change presents an existential threat and time is of the essence. Synthesizing grid-group cultural theory and cognitive sociology enables us to better understand obstacles to the individual and collective performance of efficacious pro-environmental behavior. By attending to the cultural meanings inherent in the conflicts surrounding environmental issues, it may be possible for societies to re-frame these conflicts in ways that better correspond to the worldviews held by its members and to develop culturally targeted strategies to bring about behavioral change.

## Appendix A

**Table A1.** Measures.

| Pro-Environmental Behavior [40] | | |
|---|---|---|
| 1. | Would you be willing to pay higher consumer prices so that industry could better preserve and protect the environment? | yes, no |
| In the past several years, have you: | | |
| 2. | Made any changes in your day-to-day behavior because of concerns about the environment? | yes, no |
| 3. | Contributed money to an environmental, conservation, or wildlife organization? | yes, no |
| 4. | Boycotted a company's products because of its record on the environment? | yes, no |
| 5. | Volunteered for an environmental, conservation, or wildlife protection group? | yes, no |
| To what extent do you agree or disagree with each of the following (SD = 1, D = 2, N = 3, A = 4, SA = 5): | | |
| 6. | I would be willing to give up convenience products and services I now enjoy if it meant | 1–5 |
| | helping preserve our natural environment. | |
| 7. | I would be willing to spend a few hours a week of my own time helping to reduce the | 1–5 |
| | pollution problem. | |
| Cultural Group [41] | | |
| To what extent do you agree or disagree with each of the following (SD = 1, D = 2, N = 3, A = 4, SA = 5): | | |
| 1. | A person is better off if he or she doesn't trust anyone. | 1–5 |
| 2. | In a family adults and children should have the same influence in decisions. | 1–5 |
| 3. | When I have problems I try to solve them on my own. | 1–5 |
| 4. | There is no use in doing things for other people—you only get taken advantage of. | 1–5 |
| 5. | It is important to preserve our customs and cultural heritage. | 1–5 |
| 6. | Firms and institutions should be organized in a way that everybody can influence | 1–5 |
| | important decisions. | |
| 7. | I would not participate in civic action groups. Those in power do what they like anyway. | 1–5 |

**Table A1.** *Cont.*

| | | |
|---|---|---|
| 8. | I prefer clear instruction from my superiors about what to do | 1–5 |
| 9. | The freedom of the individual should not be limited for reasons for preventing crime. | 1–5 |
| 10. | It is important to me that in the case of important decisions at work everyone is asked. | 1–5 |
| 11. | I prefer tasks where I work something out on my own. | 1–5 |
| 12. | Order is probably an unpopular but important virtue. | 1–5 |
| 13. | Important questions for our society should not be decided upon by experts but by the people. | 1–5 |
| 14. | An intact family is the basis of a functioning society. | 1–5 |

Environment Identity [37]

Think about how you view yourself in relationship to the natural environment and indicate where you would place yourself between each statement (1–5):

| | | |
|---|---|---|
| 1. | in competition with the environment . . . .. in cooperation with the environment | 1–5 |
| 2. | detached from the environment . . . .. connected to the environment | 1–5 |
| 3. | very concerned about the environment . . . .. indifferent about the environment | 1–5 |
| 4. | very protective of the environment . . . .. not at all protective of the environment | 1–5 |
| 5. | superior to the environment . . . .. inferior to the environment | 1–5 |
| 6. | very passionate towards the environment . . . .. not at all passionate towards the environment | 1–5 |
| 7. | not respectful of the environment . . . .. very respectful of the environment | 1–5 |
| 8. | independent from the environment . . . .. dependent on the environment | 1–5 |
| 9. | an advocate of the environment . . . .. disinterested in the environment | 1–5 |
| 10. | wanting to preserve the environment . . . .. wanting to utilize the environment | 1–5 |
| 11. | nostalgic thinking about the environment . . . .. emotionless thinking about the environment | 1–5 |

Pro-Environmental Orientation [42]

To what extent do you agree or disagree with each of the following (SD = 1, D = 2, N = 3, A = 4, SA = 5):

| | | |
|---|---|---|
| 1. | We are approaching the limit of the number of people the earth can support. | 1–5 |
| 2. | Humans have the right to modify the natural environment to suit their needs. | 1–5 |
| 3. | When humans interfere with nature it often produces disastrous results. | 1–5 |
| 4. | Human ingenuity will insure that we do NOT make the earth unlivable. | 1–5 |
| 5. | Humans are severely abusing the environment. | 1–5 |
| 6. | The earth has plenty of natural resources if we just learn how to develop them. | 1–5 |
| 7. | Plants and animals exist primarily to be used by humans. | 1–5 |
| 8. | The balance of nature is strong enough to cope with the impacts of modern industrial nations. | 1–5 |
| 9. | Despite our special abilities humans are still subject to the laws of nature. | 1–5 |
| 10. | The so–called "ecological crisis" facing humankind has been greatly exaggerated. | 1–5 |
| 11. | The earth is like a spaceship with very limited room and resources. | 1–5 |
| 12. | Humans were meant to rule over the rest of nature. | 1–5 |
| 13. | The balance of nature is very delicate and easily upset. | 1–5 |
| 14. | Humans will eventually learn enough about how nature works to be able to control it. | 1–5 |
| 15. | If things continue on their present course, we will soon experience a major ecological catastrophe. | 1–5 |

## References

1. Intergovernmental Panel on Climate Change (IPCC). Special Report: Global Warming of 1.5 °C. 2018. Available online: https://www.ipcc.ch/sr15/ (accessed on 27 December 2018).
2. Macnaghten, P. Embodying the environment in everyday life practices. *Sociol. Rev.* **2003**, *51*, 63–84. [CrossRef]

3. Newholm, T. Case studying ethical consumers. In *The Ethical Consumer*; Harrison, R., Newholm, T., Shaw, D., Eds.; Sage: London, UK, 2005; pp. 107–124.

4. Norgaard, K.M. *Living in Denial: Climate Change, Emotions, and Everyday Life*; MIT Press: Cambridge, MA, USA, 2011.

5. Jacques, P. The rearguard of modernity: Environmental skepticism as a struggle of citizenship. *Glob. Environ. Politics* **2006**, *6*, 76–101. [CrossRef]

6. Armitage, K.C. State of denial: The United States and the politics of global warming. *Globalizations* **2005**, *2*, 417–427. [CrossRef]

7. Jacques, P.; Dunlap, R.; Freeman, M. The organization of denial: Conservative think tanks and environmental skepticism. *Environ. Politics* **2008**, *17*, 349–385. [CrossRef]

8. McCright, A.M.; Dunlap, R.K. Defeating Kyoto: The conservative movement's impact on U.S. climate change policy. *Soc. Probl.* **2003**, *50*, 348–373. [CrossRef]

9. McCright, A.M.; Dunlap, R.K. The politicization of climate change and polarization in the American public's views of global warming, 2001–2010. *Sociol. Quart.* **2011**, *52*, 155–194. [CrossRef]

10. Hardin, G. The tragedy of the commons. *Science* **1968**, *162*, 1243–1248.

11. Stern, P.C. Toward a coherent theory of environmentally significant behavior. *J. Soc. Issues* **2000**, *56*, 407–421. [CrossRef]

12. Schwartz, S.H. Normative influences on altruism. In *Advances in Experimental Social Psychology*; Berkowitz, L., Ed.; Academic Press: New York, NY, USA, 1997; Volume 10, pp. 271–279.

13. Fishbein, M.; Ajzen, I. *Belief, Attitude, Intention, and Behavior*; Addison-Wesley: Reading, MA, USA, 1975.

14. Stern, P.C.; Dietz, T.; Abel, T.; Guagnano, G.A.; Kalof, L. A value-belief-norm theory of support for social movements: The case of environmental concern. *Hum. Ecol. Rev.* **1999**, *6*, 81–97.

15. Haller, M.; Hadler, M. Dispositions to act in favor of the environment: Fatalism and readiness to make. sacrifices in a cross-national perspective. *Sociol Forum* **2008**, *23*, 281–311. [CrossRef]

16. Goldman, M.; Shurman, R.A. 'Closing the great divide': New social theory on society and nature. *Annu. Rev Sociol* **2000**, *26*, 563–584. [CrossRef]

17. Swidler, A. Culture in action: Symbols and strategies. *Am. Sociol. Rev.* **1986**, *51*, 273–286. [CrossRef]

18. Douglas, M.; Wildavsky, A. *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*; University of California Press: Berkley, CA, USA, 1982.

19. Dake, K. Myths of nature: Culture and the social construction of risk. *J. Soc. Issues* **1992**, *48*, 21–37. [CrossRef]

20. Dake, K. Orienting dispositions in the perception of risk: An analysis of contemporary worldviews and cultural biases. *J. Cross Cult. Psychol.* **1991**, *22*, 61–82. [CrossRef]

21. Dake, K.; Thompson, M. The meanings of sustainable development: Household strategies for managing needs and resources. In *Human Ecology: Crossing Boundaries*; Wright, S.D., Dietz, T., Borden, R., Young, G., Guagnano, G., Eds.; The Society for Human Ecology: Fort Collins, CO, USA, 1993; pp. 421–436.

22. Douglas, M. *A History of Grid-Group Cultural Theory*; University of Toronto Press: Toronto, ON, Canada, 2006.

23. Dake, K.; Thompson, M. Making ends meet, in the household and on the planet. *GEOJ* **1999**, *47*, 417–424. [CrossRef]

24. Ellis, R.J.; Thompson, M. Culture and the environment in the Pacific Northwest. *Am. Political Sci. Rev.* **1997**, *91*, 885–897. [CrossRef]

25. Martensson, M.; Pettersson, R. Everyday life contexts and the environment. In *Individual and Structural Determinants of Environmental Practice*; Biel, A., Hansson, B., Martensson, M., Eds.; Ashgate: Burlington, VT, USA, 2003; pp. 26–65.

26. Steg, L.; Sievers, I. Cultural theory and individual perceptions of environmental risk. *Environ. Behav.* **2000**, *32*, 250–269. [CrossRef]

27. Poortinga, W.; Steg, L.; Vlek, C. Environmental risk concern and preferences for energy-saving measures. *Environ. Behav.* **2002**, *34*, 455–478. [CrossRef]

28. DiMaggio, P. Culture and cognition. *Ann. Rev. Sociol.* **1997**, *23*, 263–287. [CrossRef]

29. Zerubavel, E. *Social Mindscapes: An Invitation to Cognitive Sociology*; Harvard University Press: Cambridge, MA, USA, 1997.

30. Berger, P.; Luckmann, T. *The Social Construction of Reality: A Treatise on the Sociology of Knowledge*; Doubleday: New York, NY, USA, 1966.

31. Zerubavel, E.; Smith, E.R. Transcending cognitive individualism. *Soc. Psychol. Quart.* **2010**, *73*, 321–325. [CrossRef]

32. Zerubavel, E. *The Elephant in the Room: Silence and Denial in Everyday Life*; Oxford University Press: New York, NY, USA, 2006.

33. Markle, G. Accounting for the performance of environmentally significant behavior: The symbolic significance of recycling. *Symb. Interact.* **2014**, *37*, 246–263. [CrossRef]

34. Norgaard, K.M. 'People want to protect themselves a little bit': Emotions, denial, and social movement nonparticipation. *Sociol. Inq.* **2006**, *76*, 372–396. [CrossRef]

35. Collier, P.; Callero, P. Role theory and social cognition: Learning to think like a recycler. *Self Identity* **2005**, *4*, 45–58. [CrossRef]

36. Finger, M. From knowledge to action? Exploring the relationships between environmental experiences, learning, and behavior. *J. Soc. Issues* **1994**, *50*, 141–160. [CrossRef]

37. Stets, J.E.; Biga, C.F. Bringing identity theory into environmental sociology. *Sociol. Theor.* **2003**, *21*, 398–423. [CrossRef]

38. Wade-Benzoni, K.A.; Li, M.; Thompson, L.L.; Bazerman, M.H. The malleability of environmentalism. *Anal. Soc. Issues Public Policy* **2007**, *7*, 163–189. [CrossRef]

39. U.S. Census Bureau. Educational Attainment in the United States: 2015. Available online: https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf (accessed on 21 January 2017).

40. Dunlap, R.E.; Scarce, R. The polls—Poll trends: Environmental problems and protection. *Public Opin. Quart.* **1991**, *55*, 651–672. [CrossRef]

41. Rippl, S. Cultural theory and risk perception: A proposal for a better measurement. *J. Risk Res.* **2002**, *5*, 147–165. [CrossRef]

42. Dunlap, R.E.; Van Liere, K.D.; Mertig, A.G.; Jones, R. Measuring endorsement of the New Ecological Paradigm: A revised NEP scale. *J. Soc. Issues* **2000**, *56*, 425–442. [CrossRef]

43. LaRossa, R. Grounded theory methods and qualitative family research. *J. Marriage Fam.* **2005**, *67*, 837–857. [CrossRef]

44. Hunter, L.M.; Hatch, A.; Johnson, A. Cross-national gender variation in environmental behaviors. *Soc. Sci. Quart.* **2004**, *85*, 677–694. [CrossRef]

45. Douglas, M. The depoliticization of risk. In *Culture Matters: Essays in Honor of Aaron Wildavsky*; Ellis, R., Thompson, M., Eds.; Westview Press: Boulder, CO, USA, 1997; pp. 121–132.

46. Thompson, M.; Ellis, R.; Wildavsky, A. *Cultural Theory*; Westview Press: Boulder, CO, USA, 1990.

47. Kahan, D.M. More statistics, less persuasion: A cultural theory of gun-risk perceptions. *Univ. Pa. Law Rev.* **2003**, *151*, 1291–1327. [CrossRef]

48. Hesse-Biber, S. *Mixed Methods Research: Merging Theory with Practice*; Guilford: New York, NY, USA, 2010.

49. Creswell, J.W.; Plano Clark, V.L. *Designing and Conducting Mixed Methods Research*, 2nd ed.; Sage: Thousand Oaks, CA, USA, 2011.

50. Gardner, G.T.; Stern, P.C. *Environmental Problems and Human Behavior*; Allyn and Bacon: Boston, MA, USA, 1996.

51. Pew Research Center. Political Polarization in the American Public: How Increasing Ideological Uniformity and Partisan Antipathy Affect Politics, Compromise, and Everyday Life. 2016. Available online: http://www.people-press.org/2014/06/12/political-polarization-in-the-american-public/ (accessed on 5 November 2016).

# Sustainable Management of Contemporary Art Galleries: A Delphi Survey for the Spanish Art Market

**Alicia Mateos-Ronco [1],* and Nieves Peiró Torralba [2]**

[1]   Centre of Business Management Research (CEGEA), Universitat Politècnica de València,
     46022 Valencia, Spain
[2]   Faculty of Business Administration and Management (FADE), Universitat Politècnica de València,
     46022 Valencia, Spain; niepeito@ade.upv.es
*    Correspondence: amateos@cegea.upv.es; Tel.: +34-96-387-7007 (ext. 74719)

**Abstract:** The art market operates in a very different way from conventional economic markets, ranging from its behaviors of supply and demand, the trading of goods, and the economic agents intervening in it. In addition, it is a highly unregulated market, with very little standardized information in economic terms. This paper focuses on art galleries, which are the most influential intermediaries in the Spanish primary contemporary fine-art market and perform a role that goes beyond the mere distribution of works of art. This study develops and applies a prospective methodology based on the subjective information compiled by experts, known as the Delphi method, to identify and evaluate the factors that determine the current situation and future outlook for Spanish contemporary art galleries. The results show, on one hand, that the method employed constitutes a valid option to provide reliable information. In addition, they show that the survival of these organizations will depend on their ability to adapt to the changing conditions of the economic environment, reactivating and internationalizing demand, and redirecting their business model towards sustainable management by implementing appropriate business management models and techniques.

**Keywords:** contemporary art market; art galleries; sustainable management; Delphi method; foresight study

## 1. Introduction

The art market is an area of study which has considerable peculiarities from an economic perspective. Largely unregulated, with its own rules based on handshake and trust [1], it operates in a very different way from a conventional economic market, ranging from its behaviors of supply and demand, the trading of goods, and the economic agents intervening in it. In addition, it is one of the markets for which there is a very small amount of economic information available. Therefore, although it has received some attention from research, there are still many aspects in the market that need to be explored. Specifically, this paper focuses on the contemporary fine-art (visual art) market, whose main players, as discussed below, are the artists or producers of the goods being traded, and the buyer of these goods, whether (public or private) collectors or occasional buyers. This sector, which is popularly referred to as the "arts sector", is made up of organizations whose raison d'être is a unique product, a work of art that has not been designed to be mass produced (such as films, records, and books).

One of the most striking peculiarities of the common operating processes of the art market is the absence of a unified economic theory [2]. The studies carried out to date, based on different hypotheses, have endeavored to shed light on various aspects of the market, concluding in some cases that there is

no point of equilibrium in the market itself. The elasticity of supply is non-existent [3], since an increase in demand does not alter the number of products offered: works of art are unique and inimitable and cannot be mass produced to satisfy increases in demand. Other authors, however, have identified closer relationships between the art market and other asset markets. [4] pointed out that art behaves in the same way as other assets, with a positive relationship between profitability and risk, the difference being that changes in these variables are not due to economic factors, as occurs in other markets, thus inferring that these shifts must be motivated by cultural forces [2]. Ginsburgh and Jeanfils [5] concurred with this, relating the behavior of the secondary art market with the stock market, pointing out that there are no long-term links between the two markets, although in the short term, the stock market can influence art market transactions. Chanel [6] also concluded that financial markets react quickly to economic fluctuations, so that profits generated in these markets can be invested in the art market. Therefore, shifts in financial markets can be used as indicators to predict variations in the art market in the short term.

Research does seem to agree, however, that it is impossible to draw accurate and definitive conclusions about the art market as a whole, since many of the variables that converge and affect it cannot be measured in economic terms. In addition, the longer the time horizon, the greater the uncertainty as to the behavior of the market, since the tastes, fashions and trends associated with works of art cannot be easily determined [7]. In terms of changes in the market over time, [8] demonstrated that these shifts were mainly related to cultural phenomena rather than to economic losses or gains.

Another of the defining characteristics of the art market is the unique nature of the goods being traded. Works of art are not a standard commodity and therefore traditional and conventional rules on price setting, depreciation, and profitability are not applicable. Several factors determine that works of art are not ordinary consumer goods: each of them is unique, has a special symbolism and is a guarantee of longevity [9]. Their value neither diminishes nor is depleted over time; they do not have a logical depreciation compared to other assets or goods, though their value can fluctuate in the market. It is precisely this aspect, their market value, which marks the radical difference in behavior of these goods: works of art do not follow an economic logic when it comes to fixing market prices since, unlike the rest of goods, they have a significant symbolic value. Works are expected to convey sensations, intellectual insight, and singularity to the beholder. This symbolic value is an abstract one, which is very difficult to transpose in economic terms, but it determines the market price of the work. In the case of contemporary art, there are several factors that have a bearing on the setting of market value [10,11], such as the artist's track record; the technique, dimensions, and production cost of the work; the prestige and reputation of the gallery owner who represents the artist in the primary market [12]; and supply and demand behavior.

The economic agents who participate and interact in this market are the artist (the producer of the traded goods) and the collector (who acquires the goods and injects capital into the market). The remaining players act as intermediaries in this process: gallery owners, auction houses, art dealers, curators and critics, museums, and art shows [13]. According to how the interactions between these agents take place, there is a difference between the primary market, whose main middleman is the art gallery which interacts directly with the artist, and the secondary market, where the main agents in terms of turnover are usually the auction houses [7].

In the Spanish contemporary art market, the art gallery is the most important intermediary agent, asserting itself as a driving economic force and accounting for 80% of total market value in 2016 [14]. Galleries have different functions. In the primary market, artists supply galleries with original works of art which are then distributed to individual and institutional collectors. In this context, the gallery assumes a role beyond that of a simple distributor of art: the gallerist promotes the artist's career with a long-term view and "places" the work with important collections, interpreting the body of work for collectors and taking over administrative functions for the artist [15]. Thus, the relationship between artist and gallerist can be characterized as a "deep partnership" [1]. In the case of well-known artists,

be they contemporary or historical, the gallery owner becomes an intermediary that is more involved in the purchase and sale of works of art on the secondary market.

From a marketing perspective, there is a lack of literature on the primary art market, the distribution of art and the relationships between the channel players [1]. This has been compounded by the economic downturn that has affected cultural organizations, which is at the heart of the difficult financial situation faced by most art galleries in the contemporary art market, with insufficient income that often leads to closure. Badia and Lo Morello [16] pointed out that this situation is directly correlated with the current contemporary art gallery business model and they stressed the need for these galleries to refocus on innovative ways of creating social and economic value and achieving financial sustainability. Furthermore, in the global context, the areas of art and culture need to be linked to business. Cultural institutions are increasingly called upon to do business internationally and increase their competitive advantage. However, only those that include market orientation in their operations and efficiently manage their different target groups will be able to improve their competitive advantage [17]. Consequently, the changing political and economic environment in which these cultural organizations operate has begun to modify their core values and realities. The traditional socio-cultural objectives on which art organizations based their strategic management and operational processes have been displaced by the concepts and tools of the business environment, which are gaining ground in these entities [18]. Art management is a discipline in which research has developed considerably over the last 25 years [19].

In view of the aforementioned aspects and following the argument used by [20], which shows how the local and socio-cultural context determines market development, highlighting the active role of intermediaries in this process, this paper analyzes the situation of the main mediator in the Spanish contemporary art market: art galleries. The objective is two-fold: firstly, to delve into the nature of this intermediary's relations with the other agents in the contemporary art market and, secondly, to analyze the business formulas of these organizations as a way to redirect their practices towards sustainable management that will secure their survival in the market. The fact that they are so closely related to the other market agents makes them an ideal subject for study: The difficulties they encounter may also be applicable to other agents and this can lead to the identification of issues that are common to the market. In addition, the current situation of galleries is a good example of the present-day status of the art market. The paper contributes in three ways to the literature on the contemporary art market and galleries: firstly, it characterizes the art market, analyzing its position in the economic environment and pinpointing the relationships between the agents who work in it; secondly, thanks to the qualitative methodology used, it allows the opinions that the market agents have on these aspects to emerge; and finally, it identifies the main challenges faced by art galleries and proposes possible courses of action to deal with them.

However, attaining these objectives involves methodological drawbacks due to the scarcity of prior information that would enable the statistical validation of results. The lack of factual information that can be obtained directly from past or present reality makes it necessary to resort to subjective information and the use of exploratory techniques. We propose the application of a methodology based on qualitative techniques, the Delphi method, which, a priori, represents a very efficient resource to obtain the required information. The Delphi method is a structured communication technique involving a group of people who provide valuable information to solve a complex problem [21]. It is noted for its flexible design, the fact that it does not require physical contact between experts [22], and for the fact that the requirements regarding the size of the panel of experts are relatively modest [23]. In addition to this advantage, it can also identify divergent opinions and harmonize positions regarding the current situation and the future proposals for the organizations under study. As [1] stated, the art world is an insider market full of implicit rules, and is a market of handshake and trust, which needs to be observed rather than quantified.

This paper is structured as follows: Section 2 offers a characterization of contemporary art galleries in Spain, describing their role in the fine-art market and their relationships with other agents.

Section 3 analyzes the principles and characteristics of the Delphi technique, as well as the design and development of its application. Section 4 deals with the statistical control of the answers and the results of the Delphi analysis. Finally, Section 5 discusses the results and Section 6 sets out the conclusions that demonstrate their usefulness and validity.

## 2. Art Galleries in Spain

Art galleries are the most important intermediary agent in the contemporary art market: they are the link between artists and buyers (supply and demand), and connect other agents. They contribute to building market value [24], functioning as gatekeepers to the art market by selecting a limited number of artists whose work they seek to market [25,26]. In addition, they actively aim to "make markets" for new art, creating exhibition spaces where they organize solo and group shows. They develop networks among curators, critics, museum directors and others who possess the symbolic capital to consecrate art, or to produce belief in its value [27]. Only once this belief is produced and an artist establishes a reputation are art dealers able to sell their work and raise its price [28]. In short, art galleries perform an essential function both for the valuation and intermediation of art [20].

In 2016, the art gallery industry in Spain consisted of 2845 registered companies, of which 650 generated around 70% of total sales. The bulk of Spanish galleries tend to be small companies, with relatively low turnover, and more than 68% billing less than €500,000 [14]. The majority are individual entrepreneurs who work in the industry because of the close relationship they have with art. They do not focus on the profit to be made from the business, but rather use it to promote art and culture in society. Most of them operate in the primary market, which accounted for 77% of sales in 2016, and promote young and mid-career artists. Nevertheless, Spain's major cities (Madrid, Barcelona) have some galleries with a high volume of business, mainly operating in the secondary market. Eighty percent of Spanish galleries deal in contemporary art, followed by modern art (11%), since the artists that work in the primary market are all contemporary.

Galleries are still the most popular sales channel, with 54% of market share in 2016, followed by online sales (both through galleries' official websites and intermediaries) and art shows. In the secondary market, the gallery works just like many other trading companies: it buys the product and then sells it for a higher price, thus obtaining a profit margin. Gallery owners are in charge of buying works that they find interesting either because of their personal tastes or because they believe that they will be able to make greater profits in the future by predicting changes in the artist's value. In this scenario, the purchased work remains in stock until a decision is made that it is time to put it on the market. Galleries make a profit from the difference between the initial price they have paid, and the amount received from the subsequent sale of the works. This type of market dominates the global art world [29].

The primary market, however, is somewhat more complex, since gallery owners first must select the artists whose work they want to exhibit in their galleries throughout the year. One of the criteria used may be based on previous choices made by other gallery owners as a way of minimizing the risk associated with this artist, since this gives an idea of how the market has reacted to his or her works. Other galleries, on the other hand, rely on their own criteria which they have fine-tuned over the years: they look for artists based on their own personal tastes, disregarding the sales factor, yet maintaining the conceptual aesthetics to which their clients are accustomed. In terms of pricing, it is the artist who provides an estimate of the market value he or she considers to be in line with his or her work. The gallery owner adjusts the proposed initial price based on the artist's track record and current market value. Most gallery sales in the primary market take place at national and international fairs, as these concentrate potential buyers.

The most important factor for gallery owners in terms of their relations with their clients is the promotion of culture which is achieved, in their eyes, by their customers purchasing works of art. Their motivations go beyond a mere profit orientation [20]. The aim is to make the act of buying art something normal and routine, so they usually give their customers many purchasing options,

although some of them do not benefit the gallery from an economic point of view, such as delays in customer payments, which can result in growth and expansion issues for some galleries, especially smaller ones.

Galleries tend to have a regular customer base and many sporadic clients. Most regular clients are institutional: museums, foundations, and companies with specific art departments (insurance companies, banks, etc.). There is also a small number of private collectors at national level, who have been hard hit by the economic crisis and whose purchases have fallen by more than half compared to the onset of the recession. Today, most private collectors who continue to buy art on the Spanish market are foreigners, mainly from European countries such as France, Germany, and Sweden.

## 3. Materials and Methods

The use of subjective information, drawn from the opinions or judgements of recognized experts in a particular field of study, is an undeniable contribution to scientific knowledge in cases where the research lacks information that can be gleaned from reality. However, such opinions may be biased if they are not guided by a helping hand. The use and development of methods to support the elicitation, structuring, and evaluation of expert knowledge are essential to reduce or eliminate bias. These methods generate the opinions of the experts and provide a structured methodology to collect and process them, as well as a system to measure and monitor their quality.

The use of the Delphi method is proposed in this work, since it fulfils the aforementioned requirements due to its capacity to generate knowledge and offer an effective and efficient perspective of the subject under study. Delphi is a qualitative, subjective, and intuitive exploratory technique for foresight studies and centers on the opinions of experts on a particular subject [30]. It also has the advantage of being flexible in design; experts do not need to meet in a group [22], and the requirements regarding panel size are relatively modest [23]. This procedure is the one that adapts best to the exploration of elements that require a combination of scientific evidence and social values [31]. For the above reasons, the Delphi method was considered to be the most suitable tool available for the present study, requiring human decisions on different economic and social issues. Another strong reason was the need to consider divergent opinions and reach a consensus on the different views of the art market and art galleries in Spain. Different authors [32–36] have pointed out that the Delphi method not only seeks a consensus opinion, but identifies divergent opinions, which is sometimes more important.

The research hypothesis we assumed regarding the methodology was that a group of recognized experts in the Spanish art market would together accumulate more experience and knowledge than the sum of the individual members. The combined judgement of the group, with a highly developed capacity for criticism, was considered to be more suitable than that of any one individual to analyze the current situation of the art galleries operating in the Spanish contemporary art market. Despite the advances made by this technique since it was first used, to avoid its most critical and controversial aspects, its key design elements continue to be anonymity, iteration, controlled feedback, and participating experts [36–38]. Anonymity is achieved by using questionnaires, which eliminates the so-called "leadership effect", and their successive iteration in different rounds allows individuals to re-consider or even modify their views without losing face in the eyes of other experts. Controlled feedback is provided between iterations, so that the members are aware of the opinions of their colleagues and can adapt or modify their opinion should they deem the views of others to be more suitable than their own. The group response is arrived at by calculating the statistical mean of individual estimations in the final round, showing the level of consensus reached as well. The method consists of several successive rounds of questions that are answered by the experts. Once all the answers from the round have been obtained, those which coincide are discarded, so that in successive rounds the other questions on which no consensus has been reached will be raised once again, thus trying to modify the answers and move towards group consensus.

The research included the selection of experts, the design of questionnaires, the statistical analysis of the responses and, finally, the interpretation and evaluation of the results.

### 3.1. Panel of Experts

The selection of the group of experts is one of the decisive phases in the Delphi method, to such a degree that the success or failure of the method will be conditioned, to a large extent, by the experts who have been chosen to participate in the panel. This fact dictates that the characteristics required of potential participants must be identified with the utmost care. The most common selection criteria focus on in-depth knowledge of the subject in question. In addition, the potential candidates must be very willing to participate. One of the factors that can modify a group response is the appearance of tendencies towards the profession or region the members belong to. To ensure maximum objectivity, any possible bias among group members must therefore be sounded out and allowed for to prevent distortions in the group response [39]. In this case, the bias that may have the greatest influence on the study is that of professional dedication in the sector under analysis, as certain questions in the questionnaire may lead to very different opinions depending on who answers it. The geographical area can also distort information; cities such as Madrid and Barcelona are more relevant and dynamic from a cultural standpoint, with more activity in the art market than other less influential cities.

The criteria used in the selection process were as follows:

1.  Professional dedication to the art market. Experts were chosen from three professional fields, which in turn correspond to three of the most active economic agents in the market. The aim of this was to make the final group as heterogeneous as possible.

    (a)  Artists: active contemporary artists with different age ranges and professional backgrounds were selected to obtain the most heterogeneous group possible.
    (b)  Galley owners: gallery owners from different Spanish cities and with varying degrees of influence in the market were selected. The market in which these galleries operated was also taken into account: primary or secondary market.
    (c)  Art critics/curators: these were chosen based on their importance and experience in the market. In this group, the degree of knowledge, reputation, and track record were fundamental.

2.  Contemporary art collectors: the inclusion of this group of experts in the study was considered significant, since they represent a large part of contemporary art clients and consumers. They represent market demand and it is interesting to find out their opinion on why they buy art or why they stop buying it.
3.  Geographical area: this refers to the location in which the experts are located, which in this study was Spain.

The size of the panel of experts can vary for a whole host of reasons. Many studies [39] agree that there should be a minimum of seven and a maximum of 25. Below this minimum, the room for statistical error is high and having more than the maximum does not produce a significant improvement in the results. The group that participated in the first round was composed of 25 experts: 36% artists, 32% collectors, 18% art critics/curators and 14% gallery owners.

### 3.2. Questionnaires

The questionnaire was drawn up with closed-ended questions, i.e., it only featured a limited range of previously established responses and could only be answered with a numerical estimate or a numerically objective system [40].

Various types of closed-ended questions were used:

1.  Dichotomous: the expert had to choose between two opposing options, generally "yes"/"no" or "for"/"against".
2.  Multiple choice: these were questions with several closed-ended options from which the expert had to choose.

3. Likert-type intensity qualitative scales: a statement was presented to the subject and he or she was asked to rate it on a scale from 1 to 5. A negative extreme and a positive extreme were determined, leaving the determination of intermediate ranges to the expert's discretion.

Once the questions had been defined, the questionnaire was created on the Google Forms platform. This platform was chosen for the ease with which the obtained results can be managed, but above all because it is easy for the experts who respond to the questionnaire, since they only must click on the attached link and send the answers once all the questions have been completed. Making it easier to complete the questionnaire can improve participation and the response rate.

A pilot test was carried out at the beginning of June 2018, by sending the questionnaire to two experts. After this test and following the suggestions made by the experts, a series of modifications were made before the questionnaire was considered valid for the study. Subsequently, an email was sent in the second week of the same month to the selected participants explaining what the study consisted of and what their contribution to it would be. This email included a link to the final electronic questionnaire so that it could be filled in easily and quickly (electronic questionnaire available on the following website (in Spanish): https://docs.google.com/forms/d/e/1FAIpQLSeyI6_aNKPRWECI2Wb4huqVSUzLdxwkeUT-87XNGSOCgvI8SQ/viewform?usp=sf_link). After leaving an estimated response time of one week, the results were statistically analyzed. Based on these results and on the fact that no consensus had been reached on some of the responses, a second questionnaire was drawn up and sent to the experts in the second half of June 2018. In this second round, only the issues on which no consensus had been reached were repeated. Participation in this second round was identical to the first, with all the experts who took part in the previous round answering the second questionnaire. Finally, after receiving answers a few days later, the final results of the study were analyzed and the conclusions of the study were obtained.

## 4. Results

Once the last round of consultation had been completed, the individual responses of the experts were analyzed and the results of the Delphi application were obtained. The analysis of these results implied their evaluation at three levels of control: Centralization, or the central tendency of individual estimates; dispersion, or consensus of the responses, and the stability of the opinions.

### 4.1. Centralization

To assess this control parameter, we chose to use the median (w), since this made the group response more centralized, compared to the use of the mean. The use of the mean can produce misleading results, as the group's core response is influenced by extreme answers [41]. In the case of dichotomic questions (for example, being in favor of or against the need for a Patronage Law in Spain), the group response was expressed by the mode ($\mu$), which represented the most common response.

### 4.2. Dispersion/Consensus

Consensus in the group response represents the absence of dispersion or the convergence of expert replies. The existence of a degree of dispersion in the individual responses is normal, since the aim of the Delphi method is to reduce this in each of the iterations carried out. Dispersion was measured through the *k interquartile interval or range* (difference between the third and first quartile [$q_3 - q_1$]), given that it is not overly influenced by outlying values. Consensus is inversely proportional to the interval width $k = [q_3 - q_1]$, i.e., the greater the width, the lower the degree of consensus and vice-versa. Unanimity is produced at $k = 0$ and after values of $k \leq 1$, an acceptable consensus can be assumed.

Table 1 shows the percentage results of responses that reached consensus level ($k \leq 1$) in the first and second rounds. There was a notably high degree of consensus in the first round (77.78% of the items), and consensus was achieved after the second round in more than 94% of the responses.

**Table 1.** Consensus criterion.

|  | Questionnaire |
|---|---|
| $k \leq 1$ in Round 1 | 77.78% |
| $k \leq 1$ in Round 2 | 75.00% |
| $k \leq 1$ Total | 94.44% |

*4.3. Stability*

Stability is understood as the lack of significant variation in the opinions of experts in successive rounds, irrespective of the degree of consensus reached. Thus, after a series of iterations, the point will be reached at which experts do not change their opinion, regardless of the number of iterations in which they participate, and the results will then be stable. This fact determines the number of iterations or consultation rounds in the Delphi application. More than two or three iterations are rarely used because most of the changes are made in these initial rounds.

The existence of consensus implies stability, but the reverse is not necessarily true, as stability can also take place in the absence of consensus. Stability is measured in different ways in the literature [42–44], such as the relative interquartile interval variation of the response distribution in successive rounds, the relative variation of the median in contiguous rounds, and the percentage of experts that change their opinion. The Delphi method does not aim to force consensus *per se* on the group of experts, and response stability should be implemented as the finalization criterion [44]. However, in the first Delphi consultation round, stability can only be deduced from the existence of consensus, so that, at this stage, the criterion of stability is equal to consensus.

In our case, it was not seen to be advisable to carry out more than two rounds. The group opinion about the issues that corroborated the predetermined consensus ($k \leq 1$) in the first round was considered to be stable, and accordingly these issues were removed in the second iteration.

Conversely, aspects that did not reach a degree of consensus did not meet the finalization criterion either, so these were assessed again in the second round. In these cases, response stability was taken as the finalization criterion, measured by the relative interquartile interval variation of answers in two subsequent rounds. If the relative interquartile interval ($k_R$) is established as the interquartile interval divided by the median (w), the variation ($\Delta k_R$) will be equal to the difference between the relative interquartile intervals of the following two rounds, i.e.:

$$\Delta k_R = k_{Rn} - k_{R\,(n-1)}, \tag{1}$$

When this variation is between $-0.25$ and $0.25$ it is assumed that a satisfactory level of group response stability has been reached, in which case this response will be considered stable. However, the consensus level after the second round (see Table 1) meant that these responses also reached the stability criterion and, consequently, could be taken as the definitive group response.

Table 2 shows the statistical summary of final results obtained after the second round.

**Table 2.** Statistical summary of final results.

| Item | Statistics * | | | | | |
|---|---|---|---|---|---|---|
|  | w | μ | s | $q_3$ | $q_1$ | $k = q_3 - q_1$ |
| Overview of Spanish art market [(1) Strong–(2) Average–(3) Weak] | - | 3 Weak market | 0.64 | 3 | 3 | 0 |
| Competitiveness of the Spanish market in terms of prices [(1) Competitive–(2) Not competitive] | - | 2 Not competitive | 0.48 | 2 | 1 | 1 |
| VAT conditions the market [1 does not condition–5 totally conditions] | 5 | - | 1.07 | 5 | 4.25 | 0.75 |
| Appropriate regulation between artist and gallerist [1 totally inappropriate–5 very appropriate] | 2.5 | - | 0.92 | 3 | 2 | 1 |
| Need for greater protection and regulation for the artist as a professional [(1) Yes–(2) No] | - | 1 Yes | 0.28 | 1 | 1 | 0 |

**Table 2.** *Cont.*

| Item | Statistics * | | | | | |
|---|---|---|---|---|---|---|
| | w | μ | s | q₃ | q₁ | k = q₃ − q₁ |
| Aspects that should be amended in terms of protection and regulation for the artist as a professional | - | 3 Modify and improve the self-employment contribution | 0.56 | 3 | 2.5 | 0.5 |
| How adequate is the level of public expenditure on contemporary art [1 totally inadequate–5 very adequate] | 2 | - | 0.52 | 2 | 2 | 0 |
| Need for a Patronage Law in Spain [(1) Yes–(2) No] | - | 1 Yes | 0.19 | 1 | 1 | 0 |
| Sales of contemporary art will increase in the short term [(1) Yes–(2) No] | - | 2 No | 0.48 | 2 | 2 | 0 |
| Main motivation for buying contemporary art [(1) Passion for art–(2) Investment–(3) Other] | - | 1 Passion for art | 0.64 | 1 | 1 | 0 |
| Lack of appreciation of contemporary art by society [(1) Yes–(2) No] | - | 1 Yes | 0.19 | 1 | 1 | 0 |
| Causes behind the lack of appreciation of contemporary art [(1) Cultural education–(2) Lack of governmental support–(3) Public preference–(4) Lack of awareness–(5) Other] | - | 1 Lack of cultural education | 1.11 | 2 | 1 | 1 |
| Main challenges facing galleries over the next 5–10 years | - | 1 Finding new clients | 1.30 | 3 | 1 | 2 |
| Factors which account for galleries' recent need to internationalize | - | 2 Scant Spanish demand and low purchasing power | 0.86 | 2 | 1 | 1 |
| Will Brexit have an impact on the Spanish contemporary art market? [(1) Yes–(2) No] | - | 1 Yes | 0.48 | 2 | 1 | 1 |
| Level of impact of Brexit [1 insignificant–5 very significant] | 3 | - | 1.08 | 4 | 3 | 1 |
| Need for independent cultural and political institutions [(1) Yes, this is necessary–(2) No, it is not necessary] | - | 1 Yes | 0.34 | 1 | 1 | 0 |
| Existing level of independence [(1) very independent] [(5) not at all independent] | 4 Not ind. | - | 1.00 | 4 | 3 | 1 |

* w. median; μ: Mode; s: Standard deviation; q: Quartile; k: Interquartile interval.

## 5. Discussion

The final evaluation of the results obtained with the Delphi methodology involves verifying its reliability and validity. The first refers to the capacity shown by the application to construct the real situation from the contributions of the participants. The second refers to the capacity of the results to be applied to achieve the objective for which they were obtained.

Another fundamental aspect is the level of participation and commitment of the members of the panel. Of the 25 initially selected experts, 22 completed the two rounds of the study, giving a participation index of 88%, a figure which is highly significant for this type of studies. The final number of experts validated the results obtained [40]. It is important to point out that none of the experts dropped out in the second round which, given that their cooperation was voluntary and unpaid, demonstrates their interest in the subject under study.

The first result derived from the study which reflects its degree of reliability, was the high level of consensus reached among the experts, as shown in Table 1. The Delphi method assumes that if a high level of consensus is achieved, higher quality information outputs are provided insofar as they are closer to the real situation. Consequently, the results of the Delphi study provide a reliable characterization of the current situation and future perspectives of Spanish contemporary art galleries.

The Spanish contemporary art market is considered by experts to be a weak market, with little international influence, and this perception was shared *unanimously*. There are few influential artists at international level, the bulk of Spanish galleries are small companies (between 1 and 3 workers) and there are few private collectors, due to a lack of purchasing power among the general population and to the negative impact of the recent economic crisis. This expert perception of market weakness is consistent with macroeconomic figures. In 2016, Spain's share of the global art market in terms of value was just under 1% and represented just over 2% of the value of art and antique sales in the EU [29].

The general range of Spanish contemporary art on offer comes mainly from young artists who have little experience at present and are the least recognized and renowned. Therefore there was

also consensus among the experts over another of the market's weaknesses, namely the fact that the prices charged by Spanish artists are not competitive in comparison with foreign artists with similar backgrounds. In this sense, all the panelists agreed in emphasizing how the VAT (Value Added Tax) levied on works of art in Spain significantly conditions this market. This aspect generates widespread discontent among the various market players. Firstly, according to the current tax rate, gallerists must add a VAT rate of 21% to their sales, which is a higher percentage than in other European countries. This makes Spanish galleries less competitive in international markets and fairs, where galleries from other countries can sell works by the same artists at cheaper prices. Therefore, gallery owners point out that if the Spanish industry wants to be competitive on the international market, VAT must be reduced to bring the applicable rates into line with the rest of Europe. In addition, they also identify this as one of the main reasons for the low purchasing levels of Spanish contemporary art. Moreover, this taxation aspect also undermines the competitiveness of contemporary Spanish artists, causing the price of their works to be substantially higher than those of foreign artists with a similar background.

Pricing of contemporary works of art is a controversial issue in the art market. As [10] pointed out, buyers of contemporary art face a problem of fundamental uncertainty, because what passes as quality is difficult to determine, and buyers can hardly estimate how a specific piece of art will perform as an investment. The value of an art work or artist originates in an intersubjective process of assessment and conferring of reputation by experts in the art field, such as gallery owners, curators, critics, art dealers, journalists, and collectors, who help establish the artistic reputation of a work or an artist. The quality signals emerging from the art field enable buyers to assess the economic value of art works. Other authors [45] have explored the convergence between the market-oriented actions of commercial art galleries and the exhibiting choices in the museum environment. The convergence between museums' and galleries' choices not only jeopardizes the traditional hypothesis of independence of the art system but can also produce a lack of information balances and speculative behavior. They concluded that, at least in the short term, there are set common preferences and expectations, which could engender higher speculative risks.

The current regulation regarding the contractual relationship between artists and gallery owners is considered to be acceptable, albeit with room for improvement. In this case, however, an analysis of the experts' responses was carried out by professional group, as biases were envisaged in the experts' responses depending on their professional involvement in the market under study. The majority (62.5%) of the artists' subgroup considered the current regulation as being "totally inappropriate (50%)" or "not very appropriate (12.5%)", while the entire subgroup of gallery owners considered this regulation to be "appropriate (60%)" or "very appropriate (40%)".

There was *unanimity*, however, in recognizing the need for greater protection and regulation for the artist as a professional, or for introducing improvements to existing schemes. Nevertheless, identifying the aspects that should be amended required a second round of consultation to reach a consensus. In this round, the experts agreed on the need to modify the Social Security contributions paid by artists as self-employed workers, from a fixed contribution to a variable payment depending on their monthly income, to avoid constant registrations and deregistrations of artists coinciding with periods of activity and inactivity.

Public support for the art market was another aspect that the experts were asked to address. Spain has three tiers of government: central government, regional government, and local government. The level of public spending and funding for culture has fallen dramatically in recent years, coinciding with the major economic recession. The bulk of public expenditure on culture by the three tiers of government took place from 2007 to 2009. After this, expenditure fell drastically because of budget cuts resulting from the economic slowdown. Public spending has continued to decline since then, though it remained roughly the same between 2013 and 2015. These cuts have seriously affected the cultural industry, in general, and the contemporary art market, in particular, further exacerbating the effect of the crisis. In 2015, the amount spent on culture by the Spanish Central Government was €672 million, while regional governments spent €1.081 billion and local governments spent €3.017 billion, which

represents 0.06%, 0.10% and 0.28%, respectively, in terms of their GDP [46]. The experts described these figures as insufficient ("level of public expenditure: inadequate") and were *unanimous* in this respect. This opinion is corroborated when the aforementioned figures are compared with those of other neighboring countries, such as France, for example, where central government expenditure on culture was equivalent to 0.16% of its GDP in 2016 [47].

As a result, of the above, the need for a Patronage Law in Spain, promised by the various and successive governments in recent years, but as yet undeveloped, again achieved *unanimity* among the panel of experts. The enactment of this Law would be very well received by the sector in general and would foreseeably improve the situation in which the contemporary art market currently finds itself, since the purchase of art by private institutions and companies would increase, thus reactivating the market. The experts also stated *unanimously* that sales of contemporary art in the short term will not increase, which is why they consider this Patronage Law necessary.

In relation to demand in the art market, the experts *unanimously* agreed that passion for art is the main motivation for buying contemporary art, rather than considering works of art as investments. Some experts, however, added that it is a combination of both, along with an intention to maintain assets, as more and more buyers are investing in contemporary art for profit. In the case of Spain, the fact that the main motivation for purchasing art is passion implies a very small niche group and limited demand, since not everyone understands this type of art or likes it.

In this sense, there was also *unanimity* regarding the existence of a marked lack of appreciation of contemporary art by most of the population, which experts attribute to the general public's level of cultural education. In 2016, expenditure by Spanish households on cultural goods amounted to €14,099.4 million, representing 2.7% of total expenditure on goods and services. However, a breakdown of this expenditure reveals that 47.9% corresponded to television, data processing, and internet fees, compared to 22.2% for books and periodicals, and 16.3% for cultural services [46]. Some experts also provided additional qualitative information, indicating other causes, such as the poor visibility of galleries and the predominance of television, with little cultural and educational content. Other experts point to flawed transmission of the fundamentals and languages of contemporary art, resulting in confusion for most of the population.

The experts on the panel expressed major discrepancies when it came to taking a stand on the main challenges galleries will have to face in the near future, an aspect in which no consensus was reached after the two rounds of consultation. However, the most recurrent response was the need to find new customers, followed by the company's funding methods and participation in trade fairs. The search for new clients, a consequence of the scarcity and restricted size of Spanish demand, is the main reason behind the growing need for contemporary art galleries to go international. It reinforces the idea that Spanish demand for contemporary art is low, due to the fact that the main motivation for buying works is a passion for art and very few people in Spain have cultural taste to understand and want this type of art. To internationalize, galleries must take part in fairs, so that Spanish art is made known to potential foreign buyers. At the same time, galleries must promote and advertise more, to attract foreign artists and breathe new life into the Spanish market. As regards company funding, the difficulties of most of these companies in accessing credit have already been pointed out, since they are small and have irregular income due to the nature of their economic activity.

Finally, the experts spoke about the impact of Brexit on the contemporary art market in general. It should be noted that the United Kingdom is the largest importer and exporter of art in Europe, accounting for 62% of the European Union's share and 21% of the global share. Therefore, if the United Kingdom were to leave the European Union, this would not only be detrimental to Spain, but to all the member states, as many countries depend on its stock. In addition, there would be a significant decline in trade due to new, more restrictive tariff policies and increases in VAT on imports and resale fees [14]. In the case of the Spanish market, however, as it has little influence at international level, experts believe that this fact would only have a moderate impact.

Considering the aforementioned results, Table 3 provides an analysis of the Strengths, Weaknesses, Opportunities and Threats (SWOT) of galleries in the Spanish contemporary art market.

**Table 3.** SWOT analysis of contemporary art galleries.

| Strengths | Weaknesses |
|---|---|
| - They are very flexible over customer payments, regarding terms and methods of payment.<br>- It is the market's most widely used sales channel.<br>- They serve as a link and connect all the market's agents. | - Mostly small companies with very low turnover. Only a minority have the reputation and size to be able to invoice considerable amounts in the market.<br>- Due to their structure and the way they work, they must bear considerable operating costs, which greatly reduces their profit margin.<br>- Very few actual sales in the gallery. |
| **Opportunities** | **Threats** |
| - Current reactivation of consumption due to the recovery period after the global financial crisis.<br>- Improvements in internationalization processes: greater facilities to encourage the presence of Spanish galleries outside Spain and an increase in contracts with foreign artists to hold exhibitions in Spain, which improves the supply of galleries.<br>- Increase in the number of online artwork sales. | - High VAT rate compared to other European countries, which means that prices are not competitive in the international market.<br>- Lack of appreciation of contemporary art by society.<br>- Possible effects of Brexit on UK tariff policies. |

## 6. Conclusions

The contributions of this study can be summarized in two aspects: Firstly, the validation of the methodology used and, secondly, the usefulness of the real information provided. The participation rates show the social interest in the subject. The reliability of the results is supported by the *consensus* reached.

The Spanish contemporary art market is characterized by the primacy of galleries, which serve as a link to other economic agents and play a crucial role in the market. However, in the context of the global crisis that has hit cultural organizations so hard, especially in Europe, the contemporary art market shows contradictory results. The international art market, measured by auction results, has performed and is still performing well and is even increasing general sales and revenues. In particular, contemporary art represents big business for auction operators, becoming one of the most profitable sectors in the art market [16]. Despite this positive trend, contemporary art galleries are struggling to cope with a difficult situation, the origin of which lies in several factors.

Firstly, the context, characterized by the delocalization of the bulk of modern and contemporary art sales to the United States, as well as the emergence of new competing markets, such as China and new powers, such as India and Brazil. These changes that are taking place in the field of art at global level, together with the recent world recession, are the origin of the decline in European and, consequently, Spanish sales. This is compounded by the weakness of the Spanish market, with scant demand and low purchasing power.

Secondly, the galleries' business model. Most of the galleries in the Spanish market are small and operate in the primary market, discovering new artists and acting as a springboard for them at the beginning of their careers. Launching these artists implies many risks and expenses, since there is no guarantee as to how the market will react to these new talents or the number of sales that will be obtained. Their high operating costs are mainly incurred as a result of their participation in national and international fairs, which galleries now must attend more frequently to find new buyers. As a result, galleries are not economically viable, and their profit margins are much lower than those of normal businesses. Debt levels are very low because small galleries have difficulty in accessing credit. This is compounded by the conservative perception of many gallerists, who prefer not to take out loans they are not sure they can pay them back due to the irregular and unpredictable nature of sales. However, the existence, in general, of favorable financial leverage makes it advisable to refocus these companies' borrowing strategies, increasing debt levels, and thus reducing deep-rooted financial conservatism.

Another aspect that has emerged in this research is the special nature of the relationships of art galleries with their customers, collectors and buyers, and their suppliers, the artists, when they operate

in the primary market. On one hand, new artists entering the market are unknown and the products they provide (works of art) require a lot of explanation and evaluation. On the other side of the market, collectors and investors are unfamiliar with both the artist and his or her work, so it is the gallery owner's job to close the gap between artists and collectors/investors [48]. In their relationship with artists, gallery owners perform crucial functions: they promote the work of the chosen artist, put it on the market and sometimes determine the market value of their work, thus accepting a variable level of risk, which can be high on many occasions. Gallery owners' relationships with clients also have different characteristics. As [1] pointed out, contrary to other behavioral channel models focusing on the manufacturer-retailer relationship, the art market also needs to account for a very powerful end customer: the art collector. In these relationships, the most influential element of the market is the reputation of both the artists and their gallerists [1,11,12,48].

The new and upcoming challenges facing Spanish contemporary art galleries can be summed up in three points. Firstly, the necessary reactivation and internationalization of demand. In this sense, the experts identified two types of necessary actions: The approval of a Patronage Law, to reactivate demand from companies and institutions; and the improvement of communication and promotion among the general public, conveying a clearer message about what contemporary art is, in an attempt to change the apparent lack of appreciation of the majority of the population towards this type of art. Secondly, the lack of public spending and funding on culture, which has declined steadily since 2009, following the economic crisis. In accordance with the concept of the sustainable management of culture, we must finance culture to exist, and not to earn money [49], from which it follows that public support for culture in general and arts sector in particular is essential. Finally, the financial difficulties deriving from the small size of galleries in most cases, together with the irregular revenue from the sale of works, leads to an economic and financial situation that, in some cases, impedes the performance of the activity.

Accordingly, the implementation of business management techniques in these organizations is the first step towards improving and strengthening their position in the market, ensuring that their activities are carried out efficiently from an economic point of view. To this end, the professionalization of management is essential given that, in most cases, gallery managers have extensive artistic training, but little experience in the techniques and methods of running a business. Gallery owners should concentrate their role in the gallery on the artistic management of the gallery, while leaving its economic management to professionals who specialize in managing companies. A financial strategy must be designed to enable these organizations to embark on the international projects they need to find new customers. Specialist management would make it easier to overcome the traditional aversion to risk inherent to small companies and gain access to new sources of funding, based on the economic scenario and the economic and financial standing of the gallery. There is also a need for greater communication with customers and the general public to promote greater awareness of this type of art. Market orientation must be a priority objective of these organizations. To achieve this, it is important to ascertain the characteristics of the consumer (habitual collector) and to adapt the variables of the marketing mix, as well as to analyze the relationship between the public's perception of artists and their intention to buy (possible occasional consumers). In short, marketing strategies must be one of the main priorities of gallery management. The concept of sustainable management has been successfully implemented in the field of culture. In this sense, redirecting the management of these organizations towards the practices of sustainable management, appears as an element of survival.

While the results of the research are valid and reliable, we understand that the application of the methodology has certain limitations that should be addressed in future research. Firstly, the composition of the panel of experts. Although the Delphi methodology does not rely on the statistical significance of the answers, it cannot be denied that a larger number of experts and a different composition of the panel, including a larger percentage of gallery owners and artists, would enhance the accuracy of the answers. Furthermore, the economic, financial, and organizational characteristics of the art galleries analyzed in the study, as well as their evolution over time, require in-depth analysis. Both areas will be the subject of future research.

## References

1. Kurz, K. The Power Balance in the Contemporary Art Market: Artists, Dealers and Collectors. In *Looking Forward, Looking Back: Drawing on the Past to Shape the Future of Marketing. Developments in Marketing Science: Proceedings of the Academy of Marketing Science*; Campbell, C., Ma, J., Eds.; Springer: Cham, Switzerland, 2016.
2. Unzueta, S. El mercado del arte. *Bol. Econ. ICE* **2002**, *2747*, 35–43.
3. Baumol, W. Unnatural value: Or art investment as floating crap game. *Am. Econ. Rev.* **1986**, *76*, 10–14. [CrossRef]
4. Goetzmann, W. Accounting for taste: Art and the financial market over three centuries. *Am. Econ. Rev.* **1993**, *83*, 1370–1376.
5. Ginsburgh, V.; Jeanfils, P. Long-term comovements in international markets for paintings. *Eur. Econ. Rev.* **1995**, *39*, 538–548. [CrossRef]
6. Chanel, O. Is art market behaviour predictable? *Eur. Econ. Rev.* **1995**, *39*, 519–527. [CrossRef]
7. Gérard-Varet, L.A. On pricing the priceless: Comments on the economics of the visual art market. *Eur. Econ. Rev.* **1995**, *39*, 509–518. [CrossRef]
8. Holub, H.; Hutter, M.; Tappenier, G. Light and Shadow in art price computation. *J. Cult. Econ.* **1993**, *17*, 49–69. [CrossRef]
9. Graw, I. *¿Cuánto Vale el Arte?* Mardulce: Cologne, Germany, 2008.
10. Beckert, J.; Rossel, J. The price of art. Uncertainty and reputation in the art field. *Eur. Soc.* **2013**, *15*, 178–195. [CrossRef]
11. Hernando, E.; Campo, S. An artist's perceived value: Development of a measurement scale. *Int. J. Arts Manag.* **2017**, *19*, 33–47.
12. Schonfeld, S.; Reinstaller, A. The effects of gallery and artist reputation on prices in the primary market for art: A note. *J. Cult. Econ.* **2007**, *31*, 143–153. [CrossRef]
13. Pérez-Calero, L.A. Mercado del arte e intermediarios: Una perspectiva actual. *Lab. Arte* **2011**, *23*, 537–550.
14. McAndrew, C. *Cuadernos Arte y Mecenazgo: El Mercado Español del Arte en 2017*; Fundación Arte Mecenazgo: Barcelona, Spain, 2018; Volume 5.
15. Caves, R.E. *Creative Industries: Contracts Between Art and Commerce*; Harvard University Press: Cambridge, MA, USA, 2000.
16. Badia, F.; Lo Morello, V.S. Evolution of the business model for contemporary art galleries. Current situation and future challenges. In Proceedings of the IFKAD 2015: 10th International Forum on Knowledge Asset Dynamics: Culture, innovation and entrepreneurship: Connecting the knowledge dots, Bari, Italy, 10–12 June 2015.
17. Gluic, J.; Mihanovic, Z. International market orientation and stakeholder management in institutions of culture and art in Croatia. *Manag. J. Contemp. Manag. Issues* **2016**, *21*, 105–130.
18. Abdullah, A.; Khadaroo, I.; Napier, C.J. Managing the performance of arts organisations: Pursuing heterogeneous objectives in an era of austerity. *Br. Account. Rev.* **2018**, *50*, 174–184. [CrossRef]
19. Kirchner, T.A.; Rentschler, R. External Impact of Arts Management Research: An Extended Analysis. *Int. J. Arts Manag.* **2015**, *17*, 46–67.
20. Komarova, N.; Velthuis, O. Local contexts as activation mechanisms of market development: Contemporary art in emerging markets. *Consum. Mark. Cult.* **2018**, *21*, 1–21. [CrossRef]
21. Landeta, J.; Matey, J.; Ruíz, V.; Galter, J. Results of a Delphi survey in drawing up the input – output tables for Catalonia. *Technol. Forecast. Soc. Chang.* **2008**, *75*, 32–56. [CrossRef]
22. Hayes, T. Delphi study of the future of marketing of higher education. *J. Bus. Res.* **2007**, *60*, 927–931. [CrossRef]
23. Okoli, C.; Pawlowski, S.D. The Delphi method as a research tool: An example, design considerations and applications. *Inf. Manag.* **2004**, *42*, 15–29. [CrossRef]

24. Smith Maguire, J.; Julian, M. Are we all cultural intermediaries now? An introduction to cultural intermediaries in context. *Eur. J. Cult. Stud.* **2012**, *15*, 551–562. [CrossRef]

25. Bystryn, M. Art Galleries as Gatekeepers: The Case of the Abstract Expressionists. *Soc. Res.* **1978**, *45*, 390–408.

26. Moulin, R. *The French Art Market: A Sociological View*; Rutgers University Press: New Brunswick, NJ, USA, 1987.

27. Bourdieu, P. *The Field of Cultural Production: Essays on Art and Literature*; Polity Press: Cambridge, MA, USA, 1993.

28. Annamma, J.; Sherry, J.F. Disentangling the paradoxical alliances between art market and art world. *Consum. Mark. Cult.* **2003**, *7*, 307–348. [CrossRef]

29. McAndrew, C. *The Art Market 2017*; Art Basel and USB: Miami, FL, USA, 2017.

30. Mateos-Ronco, A.; Server, R.J. Drawing up the official adjustment rules for damage assessment in agricultural insurance: Results of a Delphi survey for fruit crops in Spain. *Technol. Forecast. Soc. Chang.* **2011**, *78*, 1542–1556. [CrossRef]

31. Webler, T.; Levine, D.; Rakel, H.; Renn, O. A novel approach to reducing uncertainty: The group Delphi. *Technol. Forecast. Soc. Chang.* **1991**, *39*, 253–263. [CrossRef]

32. Strauss, H.J.; Zeigler, L.H. Delphi technique and its uses in social science research. *J. Creat. Behav.* **1975**, *9*, 253–259. [CrossRef]

33. Rowe, G.; Wright, G.; Bolger, F. A reevaluation of research and theory. *Technol. Forecast. Soc. Chang.* **1991**, *39*, 235–251. [CrossRef]

34. Woudenberg, F. An evaluation of Delphi. *Technol. Forecast. Soc. Chang.* **1991**, *40*, 131–150. [CrossRef]

35. Turoff, M. The design of a policy Delphi. *Technol. Forecast. Soc. Chang.* **1970**, *2*, 149–171. [CrossRef]

36. Landeta, J.; Barrutia, J.; Lertxundi, A. Hybrid Delphi: A methodology to facilitate contribution from experts in professional contexts. *Technol. Forecast. Soc. Chang.* **2011**, *78*, 1629–1641. [CrossRef]

37. Nowack, M.; Endrikat, J.; Guenther, E. Review of Delphi-based scenario studies: Quality and design considerations. *Technol. Forecast. Soc. Chang.* **2011**, *78*, 1603–1615. [CrossRef]

38. Rowe, G.; Wright, G. The Delphi technique: Past, present, and future prospects. Introduction to the special issue. *Technol. Forecast. Soc. Chang.* **2011**, *78*, 1487–1490. [CrossRef]

39. Rowe, G.; Wright, G. The Delphi technique as a forecasting tool: Issues and analysis. *Int. J. Forecast.* **1999**, *15*, 353–375. [CrossRef]

40. Landeta, J. *El método Delphi. Una Técnica de Previsión para la Incertidumbre*; Ariel: Barcelona, Spain, 1999.

41. Duverger, M. *Métodos de las Ciencias Sociales*; Ariel: Barcelona, Spain, 1981.

42. Dajani, J.S.; Sincoff, M.Z.; Talley, W.K. Stability and agreement criteria for the termination of Delphi studies. *Technol. Forecast. Soc. Chang.* **1979**, *13*, 83–90. [CrossRef]

43. Chaffin, W.W.; Talley, W.K. Individual stability in Delphi studies. *Technol. Forecast. Soc. Chang.* **1980**, *16*, 67–73. [CrossRef]

44. Rowe, G.; Wright, G.; McColl, A. Judgment change during Delphi-like procedures: The role of majority influence, expertise, and confidence. *Technol. Forecast. Soc. Chang.* **2005**, *72*, 377–399. [CrossRef]

45. Curioni, S.B.; Rizzi, E.M.R. Two realms in confrontation: Consensus or discontinuity? An exploratory study on the convergence of critical assessment and market evaluation in the contemporary art system. *Museum Manag. Curatorship* **2016**, *31*, 440–459. [CrossRef]

46. CulturaBase. España. Ministerio de Cultura y Deporte. Estadística de Financiación y Gasto Público en Cultura. Available online: http://www.culturaydeporte.gob.es/servicios-al-ciudadano/estadisticas/cultura/mc/culturabase/gasto-publico/resultados-gasto-publico.html (accessed on 20 May 2018).

47. Baltà, J. *El Ejemplo Francés. Cómo Francia Protege la Cultura*; Santillana: Madrid, Spain, 2016.

48. Prinz, A.; Piening, J.; Ehrmann, T. The success of art galleries: A dynamic model with competition and information effects. *J. Cult. Econ.* **2015**, *39*, 153–176. [CrossRef]

49. Wróblewski, L.; Dziadzia, B.; Dacko-Pikiewicz, Z. Sustainable Management of the Offer of Cultural Institutions in the Cross-Border Market for Cultural Services—Barriers and Conditions. *Sustainability* **2018**, *10*, 3253. [CrossRef]

*Article*

# Filmmaking and Crowdfunding: A Right Match?

**Mina Fanea-Ivanovici**

Department of Economics and Economic Policy, Faculty of Theoretical and Applied Economics, The Bucharest University of Economic Studies, 010374 Bucharest, Romania; mina.ivanovici@economie.ase.ro; Tel.: +40-762-639-155

**Abstract:** Broadly defined, culture is deemed the fourth pillar of sustainable development and increasing attention is currently being paid to how it can access all potential financial resources. In Europe, film production benefits from public financial support; however, film projects require large amounts of money to be completed and this support may prove insufficient in comparison with the actual need. This raises the question of identifying alternative financial resources that filmmakers could benefit from. Crowdfunding has recently emerged as a funding option for all the creative-cultural industries in general and for film production in particular. However, Romania's capacity to use this alternative financial source is one of the lowest in Europe. In this context, the aim of the article is to study Romanian filmmakers' attitudes towards crowdfunding and its perceived suitability for financing film projects. The research method consists in a survey based on self-administered questionnaires and semi-structured interviews with Romanian film producers. Although the largest majority of film producers have not used crowdfunding due to lack of awareness or scepticism, the paper discusses, based on experts' opinion, how this method can become a viable source of finance for the film industry.

**Keywords:** crowdfunding; creative-cultural industries; culture; film industry; attitudes; Romania; sustainable development

## 1. Introduction

The aim of this research is to investigate Romanian filmmakers' attitudes towards crowdfunding as an alternative source of finance and its suitability for financing film projects based on the results drawn from a survey conducted on a sample of filmmakers and from semi-structured interviews conducted with experts in the field. The larger context of the study is that in which the European Parliament considers it necessary to promote crowdfunding and other non-banking financing models given that access to traditional finance for creative-cultural, innovative or start-up companies is limited and the existing funding is insufficient. Despite the fact that banks cover the majority of financing needs of small and medium-sized enterprises, only 41% of all these companies do not perceive any limitations as concerns access to financing sources. In the Action Plan on building a capital markets union, the European Commission suggests that crowdfunding, although presenting certain risks—e.g., liquidity risk, platform-associated technical risks, cyber-attacks—can prove to be successful in financing projects if all precautionary methods are taken in order to protect the backer or the investor [1].

Crowdfunding is an alternative financing method used by companies or within projects that do not have enough resources and are not eligible for traditional financing. In its early ages, crowdfunding would mainly address financing needs of those projects involving a high level of risk and uncertainty, such as research and development, innovation and technology, social and humanitarian causes and creative-cultural industries [2].

Alternative financing methods need to be identified for the creative-cultural industries given their role in achieving national and regional growth, smart, sustainable and inclusive development

and urban regeneration and revitalisation [3,4]. Besides crowdfunding, the Council of the European Union suggests that creative-cultural industries should resort to: public-private funds, business angels, venture capital, sponsorship and donation [5]. Creative-cultural industries are all the more interesting from an academic point of view due to the precarious character of revenues to be obtained and the ineligibility for bank loans justified by the inconsistency of gains. Uncertainty also stems from the target audience, which is only assumed [6]. Such are the obstacles faced by artists and creators, as well as by start-ups in other fields of activity, in addition to the creative sector vulnerability during times of financial crises or economic downturns, when dedicated public finance is drastically reduced [7]. There are authors suggesting that the financial sustainability of creative-cultural industries and not only can be improved using crowdfunding models [2].

According to the Council Resolution of 16 November 2007 regarding the European Agenda for Culture, the following are strategic objectives: promoting cultural diversity and intercultural dialogue, promoting culture as a catalyst for creativity and promoting culture as a vital issue of the international relations of the European Union. Also, the Creative Europe 2014–2020 programme is aimed at enhancing European cultural and linguistic diversity, promoting cultural heritage and strengthening the European creative-cultural sector [5]. The film industry, as part of the creative-cultural economy, is a soft power worth being considered a priority to promote and stimulate because it contributes to the accomplishment of the above-mentioned strategic objectives but also because it has the capacity to generate revenues, value added and employment, to increase cultural consumption, to improve and promote countries' or nations' image, to raise awareness, to enhance tolerance and to promote social and cultural inclusion [6–8]. Culture has been acknowledged as the fourth pillar of sustainable development and it is therefore critical to ensure financial sustainability for all creative-cultural industries [9].

Sustainable Development Goal (SDG) 8 highlights the importance of "*a focus on high-value added sectors, entrepreneurship, creativity and innovation,*" encouraging "*the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services and strengthening domestic financial institutions to encourage and expand access to banking [ . . . ] and financial services for all.*" In this light, the paper addresses sustainable development concerns by analysing the extent to which crowdfunding can represent a viable alternative financing source for creative and innovative activities and organisations [10].

The European Commission has defined crowdfunding as an emerging alternative financing method that reunites donors, lenders or investors, on the one hand and persons in need of finance for a certain project, on the other hand. Their interaction takes place on an online platform (crowdfunding platform) and is preceded by a public call for finance launched by the project initiator [11]. Another definition states that crowdfunding is an Internet-based financing method whose purpose is the achievement of an initiative through online contributions and sponsorship, which usually come under the form of low-end or moderate amounts of money from a large pool of backers, within a limited time frame. Furthermore, it finances activities, ideas or projects based on a call for finance launched via Web 2.0 technologies. As a result, contributors donate, pre-order products, lend or invest, being motivated by the project itself or the project initiator's promise, being or not rewarded for such contribution [12]. A more detailed description of crowdfunding involves the following aspects:

- It is a suitable financing method for start-up companies that are not eligible for traditional financing
- It implies using the Internet and social media influence, which generate audiences
- It is a marketing channel through which entrepreneurs gain visibility, diversifying communication possibilities
- It supports entrepreneurs in testing their ideas or concepts with the participation of the community
- It facilitates direct involvement with the community and the consumers [12].

Despite the plethora existing definitions of crowdfunding, the classification of crowdfunding is quite straightforward and unanimously agreed upon, the main types of crowdfunding being the following:

1.  Donation-based crowdfunding—the backer accomplishes a philanthropic act under the form of donation for a charitable project, without benefiting from material or financial rewards in exchange for the support. Donation-based crowdfunding usually arises in prosocial or humanitarian campaigns but also in the arts, education, research and technology.

2.  Reward-based crowdfunding—the backer supports a project and does not receive financial rewards. Instead, the backer is promised rewards under the form of goods and services once the project succeeds. From an accounting point of view, this crowdfunding type is assimilated with product pre-ordering. The backer becomes a short-term creditor for the producer by paying the product in advance (i.e. before its manufacturing) and receiving it at a later time moment.

3.  Lending-based crowdfunding—the backer becomes creditor for the company or project. Lending-based crowdfunding is also known as peer-to-peer lending. From an accounting standpoint, the creditor is entitled to interests and to the reimbursement of the loan. This crowdfunding model usually requires specific licences and/or authorisations from central banks and financial supervisory authorities, while in some countries the activity is prohibited if the lender is an individual and not a company (the case of Poland). In the countries where this model is not regulated and where the legislation is not flexible enough to allow for such a financing means, the activity cannot take place at all.

4.  Equity-based crowdfunding—the backer becomes investor for the company or project. The investor becomes a shareholder and, from an accounting and legal point of view, is entitled to dividends in the event of profit distribution. As in the case of lending-based crowdfunding, the activity requires special licences and authorisations from financial authorities or specific legislation. Also, specific legislation may not allow individuals to become backers in such schemes, only companies being allowed to perform such financing activities.

5.  Invoice trading crowdfunding—the backer purchases unpaid invoices or other receivables through the online platform. The accounting equivalent of the transaction is called factoring and the receivables become assets belonging to the backer, who is entitled to cash them in.

6.  Hybrid forms of crowdfunding—combinations of the above-mentioned types.

The classification above is built on accounting considerations and it reveals the type of income or benefit (if any)—i.e. interest, profit, product pre-ordering. The roles played by the contributing community range from mere philanthropists and product purchasers to creditors, shareholders and receivables buyers. Besides these types of crowdfunding, other classifications include real estate crowdfunding and renewables crowdfunding. However, these types of crowdfunding refer to the type of project developed rather than gain-related accounting considerations.

The European Commission estimates that the United States' (US) market is the most developed in the world, its value reaching 9.46 billion USD as of 2016; Asia and Europe come next with 3.4 billion USD and 3.26 billion USD, respectively, raised [1].

Crowdfunding has evolved and developed differently across Europe, with Western countries leading the market and Central and Eastern European (CEE) countries lagging behind. European statistics indicate that in the year 2016, 143 crowdfunding platforms were operating in Great Britain, 77 in France and 65 in Germany, while the other countries had fewer or much fewer platforms in operation. The leading European countries in terms of equity-based crowdfunding are Great Britain, Germany, France and Sweden. This ranking is very similar to the one regarding the number of active platforms. The leading European countries in terms of lending-based crowdfunding are Great Britain, Estonia and France. Last but not least, the largest amounts raised via crowdfunding platforms were recorded in Great Britain, France and Germany [13].

CEE crowdfunding rankings indicate that the best performing European Union member states in terms of reward-based crowdfunding in 2016 are: Poland (3.34 million EUR), the Czech Republic (1.89 million EUR), Slovakia (0.76 million EUR), Hungary (0.39 million EUR), Lithuania (0.22 million EUR), Latvia (0.06 million EUR) and Estonia (0.04 million EUR) [14]. The leading CEE countries regarding equity-based crowdfunding as of 2016 are: Poland (0.9 million EUR), the Czech Republic

(0.42 million EUR) and Estonia (0.31 million EUR) [15]. Real estate crowdfunding places Estonia on the leading position among CEE countries in 2016 with 6.09 million EUR raised and in 2015 with 2.35 million EUR. Poland raised 0.38 million EUR in real estate crowdfunding in 2015. Such statistics reveal the fact that Romania is not present in any of the rankings. One of the main reasons for such asymmetric development is the heterogeneity of regulations by which this activity is organised. Western European countries have enforced special legislation for crowdfunding—this is the case of Italy, France, Spain and Great Britain. CEE countries experience low levels of awareness and conservatism as concerns crowdfunding, which are slowing down its speed of development. This is the conclusion of a study conducted on the crowdfunding projects in the Czech Republic and Slovakia [16].

The existing statistics for the year 2017 indicate that 41.4% of the raised funds were for companies and entrepreneurs, 18.9% for social causes, 12.2% for film and performing arts, 6.2% for the real estate market and 4.5% for the music industry [17]. A study conducted in the US in December 2015 investigated the main reasons for which backers supported various projects. The results of the study indicate that 68% of the backers wanted to help a person in need, 34% financed a new product or invention, 32% directed their funds to schools, 30% supported a musician or an artist and only 10% financed a business [18]. Considering the financed fields as a criterion for the successfully completed campaigns in the EU, the 2016 ranking is the following:

- Technology (4,382 successful projects)
- Film (3,898 successful projects)
- Community (3,020 successful projects)
- Music (2,536 successful projects)
- Design (2,377 successful projects)
- Arts (2,156 successful projects)
- Computer games (1,949 successful projects)
- Publications (1,675 successful projects)
- Fashion (1,585 successful projects)
- Small companies (1,539 successful projects) [19].

A study conducted on Kickstarter analysing the projects during the period 2009–2014 reveals that creative-cultural projects (in arts, film and video, dance) are more likely to receive funding than other categories of projects [20]. Film, video and publishing projects are positively influenced by external supports, such as: reward support, impression support and relationship support, which increase their chances to succeed; in addition, crowdfunding performance has been found to be directly influenced by product creativity, which is, in its turn, contingent upon the extent to which backers perceive the project initiator to be passionate [21,22].

The above ranking by industry or field corroborated with the obvious capacity of the filmmaking industry and artists in general to raise funds via crowdfunding is an argument within the present research to analyse the role of crowdfunding for the film industry, with a focus on the less developed market of Romania. As stated at the very beginning of the paper, the purpose of this study is twofold: on the one hand, to analyse filmmakers' attitudes towards the use of crowdfunding for financing the filmmaking industry as a creative-cultural industry (in order to find why crowdfunding is so poorly developed in Romania) and, on the other hand, to investigate the suitability of crowdfunding for financing the industry as seen through the eyes of a selection of experts in the filmmaking industry.

The paper is concerned with the case of Romania, a country in which crowdfunding has not managed to reach the level of development witnessed in Western Europe or in the other CEE countries. The research consists in a survey based on self-administered questionnaires addressed to professional film producers based in Romania and in semi-structured interviews with a selection of these experts.

A similar study was conducted in relation to the Polish crowdfunded film production, within which, inter alia, the Polish experts' attitudes towards crowdfunding were explored [21]. However, the experts included in the survey were not all professionals, the authors including film

students among the respondents as well. Financial sustainability of creative-cultural industries through crowdfunding is also advocated by other authors [23,24].

Crowdfunding has proven to be a driver of film production, with benefits exceeding the sphere of the industry itself. Along with social media and video-sharing websites, it has managed to improve gender balance and intercultural and ethnic diversity in this field and has facilitated the distribution of creations outside the borders of countries [7,25]. For the film industry, crowdfunding has become a popular form of financing involving the patronage of fans located anywhere in the world. Fans are willing to support such projects ever since the creation of the first specialised platforms [7,26–31]. Some authors even argue that new forms of funding the film industry have an even higher impact—they have consequences of the industry, on the kinds of films produced, on the topics explored and on the way they are produced [32]. For instance, in Greece, crowdfunding is credited with the advent of radical documentaries oriented towards the society rather than the political sphere, in an attempt to restore the social body and recover solidarity and social trust [33]. This could not otherwise have been produced within the mainstream media. Similarly, Turkish crowdfunded film production revolves around various social causes and has become a means of accomplishing social or political ends with the support of communities, while also building a reputation of independence [34]. In other words, traditional top-down financing methods co-exist with bottom-up methods for financing production and dissemination, which renders legitimate the question whether crowdfunding is effective and viable [35].

Besides raising funds and the mentioned benefits, crowdfunding also has a promotional role and encourages active community participation, tapping into collective wisdom and intelligence, building a support community around an idea or a project, testing the idea or product by following the reactions of the community during its production and before its launching [11,36–38]. In some cases, consumers become prosumers, thus intervening and interfering with the production process and eventually improving the quality of the final product [39–44]. On a similar note, other authors point out that crowdfunding is a source of open search, that is, actively seeking out ideas from outsiders, of word-of-mouth awareness and backers become the earliest adopters of the final product [45]. Such early adopters may prove to be more important for the product marketing and launch than any usual adopters.

## 2. Materials and Methods

The present research is based on a self-administered questionnaire addressed to professional filmmakers based in Romania and on semi-structured interviews conducted with a selection of these experts. As already shown in the introduction, Romania is not present in any European or CEE crowdfunding ranking and the objective of the research is to investigate the reason for Romania's lagging behind.

The film industry has been chosen for investigating the crowdfunding phenomenon in culture because, as already argued in the introduction, it is one of the creative industries with the highest capacities to crowdfund projects and, from a macroeconomic approach, to contribute to the enhancement of economic growth and development.

The present study is aimed at identifying filmmakers' attitudes towards reward-based crowdfunding as a viable alternative method to finance film production and, based on their answers, to draw valuable conclusions as to the suitability of crowdfunding for financing this industry. The results of the survey are supplemented with valuable insights and opinions provided by experts in semi-structured interviews.

The two research methods used in the present study—survey based on self-administered questionnaires and semi-structured interviews—were chosen having in mind the necessity to study the demand-side of the crowdfunding market—fundraisers. The need to conduct semi-structured interviews arose when faced with a large number of refusals to answer the survey on account of ignorance of the topic and concept. The admission of the filmmakers' ignorance was meaningful in the context of the research, revealing an obvious market underdevelopment but it was also the signal that showed expert opinion was needed to add in-depth clarifications.

The professional filmmakers were taken from the film production catalogues drafted by the Romanian Film Centre (RFC) in the period 2009–2018. The RFC is the national authority in charge of financing and keeping track of film production. More precisely, the questionnaire was sent out to all active Romanian film producers since the advent of crowdfunding in 2009. The filmmakers' answers were collected in the period July-December 2018. The online self-administered questionnaire comprised 14 questions for the filmmakers having already used crowdfunding and 10 questions for filmmakers who never used crowdfunding. The questionnaire is presented in Appendix A. A number of 42 answers were collected from the total population of 127 Romanian film producers identified as having produced at least one film in the period 2009–2018—a response rate of 33.07%. The 42 respondents are all experts in their field, with acknowledged profiles in the film industry, whose opinions reflect the current situation of the investigated phenomenon in their area of expertise.

The questionnaire was designed to include questions pertaining to:

- the principal source of finance used for film production
- the additional sources of finance used by film producers
- general knowledge about and understanding of crowdfunding
- the use or non-use of crowdfunding as of the time of answering the questionnaire
- the production steps financed through crowdfunding by the users of crowdfunding
- whether the efforts of resorting to crowdfunding are justified
- the types of rewards designed and offered by project initiators
- the would-be involvement of backers in the film production process
- the main benefits of using crowdfunding
- the main barriers to the development of crowdfunding for creative-cultural industries, which are translated into reasons for not using crowdfunding by non-users
- success factors for film crowdfunding projects
- the most difficult aspects encountered within crowdfunding campaigns (open question)
- the intention to use crowdfunding (again) in the future
- opinions about future development of crowdfunding in Romania.

This questionnaire-based research is a more elaborate and extended version of a similar research performed in Poland. The study performed on the Polish filmmaking industry included 37 experts and film students altogether, without any clear indication about the corresponding number of filmmakers and students having answered. The total number of film producers, as it results from the Polish Film Institute, is 90. The two studies—the Polish one and the present one dealing with the Romanian case—cannot be compared because the response rate of professionals is not known in the first case. Moreover, the Polish study is limited to the quantitative study, while the present one is novel and original in that it also includes qualitative analysis based on semi-structured interviews.

The items included in the questionnaire represent the result of distillation and synthesis of the literature review, especially concerning the types of rewards, the main benefits of using crowdfunding, the main barriers to its development and the main factors to take into account when creating a filmmaking crowdfunding campaign [6,7,12,20–23,28,29,32,37–44]. Therefore, the questionnaire has a solid scientific basis, building on the extant literature review and theoretical approaches.

The interview plan for the semi-structured interview was built around the following questions: 1) Given the importance of culture in general and of the film industry in particular for sustainable development, what do you consider are the ways through which film production could be better supported financially, apart from the existing public/European/own funds? 2) How do you explain the fact that the Romanian crowdfunding market in general and the Romanian crowdfunding market for culture in particular does not have similar performances to those recorded in Western countries? 3) Could crowdfunding become a supplementary viable financing source for the film industry in Romania in the future? If not, please justify your opinion. If yes, under what conditions? A total of six

experts were interviewed in order to obtain a deeper insight into cultural crowdfunding in Romania. All six are internationally-recognised film producers having won several international awards.

The next section presents the main findings of the survey and semi-structured interviews. The analysis will encompass matters such as: Romanian film producers' crowdfunding experience, openness, awareness and knowledge about crowdfunding as an alternative method to finance film production (for the survey) and expert opinion regarding viable alternative financing means for the film industry, reasons for the Romanian poor performance in terms of crowdfunding and its future in the field of culture.

## 3. Results

### 3.1. Survey

The 42 respondents included in the study fall into two categories: crowdfunding users (10 respondents) and crowdfunding non-users (32 respondents). The prevailing crowdfunding non-user profile (roughly two thirds) is not an unexpected finding for the Romanian film industry. It is, in fact, a confirmation of the poor development of this segment, as it results from the European statistics presented above.

Before investigating filmmakers' attitudes towards crowdfunding, it is of utter importance to have a clear picture of the main sources of finance they use. To do so, respondents were asked to choose only one of the types of finance that are listed in Table 1. It is obvious that Romanian filmmakers first and foremost rely on public funding to support film production. The second choice in terms of main financing source is represented by own funds. All the other alternatives (co-production, European funds, individual or corporate donation, crowdfunding platforms) represent first choices in very seldom cases. One first conclusion is that the film industry is mainly financed using public funds and other types of funds have a reduced capacity to support the majority of film production.

**Table 1.** Principal source of finance used by the filmmakers included in the study.

| Principal Source of Finance | Number of Answers | Percentage |
|---|---|---|
| Own funds | 9 | 21.43% |
| Funds from the state budget, granted by film councils/centres | 27 | 64.29% |
| European funds | 1 | 2.38% |
| Donations from individuals | 1 | 2.38% |
| Donations from companies | 1 | 2.38% |
| Crowdfunding platforms | 1 | 2.38% |
| Co-productions | 2 | 4.76% |
| **Total** | **42** | **100%** |

Source: Author's own calculations based on the data collected.

Film production entails large expenses and only one financing source may not be sufficient to cover for all needs. This is why, as a rule, film producers, do not solely rely on only one source of finance but rather they use a mix of funding sources. Table 2 below illustrates preferences in terms of use of various other sources of finance as complements to their first option. When answering this questions, filmmakers could choose as many alternatives as applied to them.

The most preferred complementary sources of finance are: own funds, European funds, corporate donations, public funds, individual donations, crowdfunding and co-productions. The less popular sources of finance for film production are: advertisements, distribution partners and investors. A most interesting finding is that three respondents do not use any additional sources. Two out of the three respondents use own funds entirely and the third uses public funds as the only source of finance. Although it is the most important source of finance, as stated by filmmakers, public finance is sufficient in only very few cases and needs to be supplemented. A very similar statement can be made about own funds—although they are the main source of finance for roughly one fifth of the producers, it is only in very few situations that they are enough and no additional funds are necessary.

**Table 2.** Complementary sources of finance used by the filmmakers included in the study.

| Complementary Sources of Finance | Number of Answers | Percentage |
|---|---|---|
| Own funds | 22 | 52.38% |
| Funds from the state budget, granted by film councils/centres | 6 | 14.29% |
| European funds | 17 | 40.48% |
| Donations from individuals | 6 | 14.29% |
| Donations from companies | 9 | 21.43% |
| Crowdfunding platforms | 4 | 9.52% |
| Co-productions | 3 | 7.14% |
| Advertisements | 2 | 4.76% |
| Distribution partners (TV channels, media agencies, cinemas) | 1 | 2.38% |
| Investors | 1 | 2.38% |
| No other source | 3 | 7.14% |

Source: Author's own calculations based on the data collected.

When filmmakers were asked whether they associate crowdfunding with donation, more than half of the respondents (23 film producers) provided a positive answer. In their opinion, crowdfunding and donation is one and the same thing. However, it is worth noting that donation-based crowdfunding is just one of the six existing types of crowdfunding, as was shown in the introductory part of the article. The prevailing type of Romanian crowdfunding platforms are reward-based, which under no circumstance can be associated with or considered the equivalent of donation [46]. The reduced use and development of crowdfunding can be explained by the little knowledge and awareness about this alternative financing source. This hypothesis was later explored within the survey, when non-users were asked about the main reasons for not using crowdfunding.

According to Goodell, the filmmaking activity is organised into four phases: development (script), pre-production, production and post-production [47]. Crowdfunding users were asked to indicate the filmmaking phases they financed via crowdfunding. Multiple choices were allowed. The largest majority used it to finance the production phase of the film (9 in 10 users). Post-production and pre-production activities came next in terms of destination of crowdfunded resources (3 in 10 users for each of the two phases). Development (script) (1 in 10 users) is the least financed phase of film production. These results validate the conclusions of those authors arguing that relative financial independence of a crowdfunding project increases the odds of a project to be successful [37]. In this respect, it is arguably advisable to crowdfund the later production steps, showing the public and the community that part of the project is already financed and completed using other sources and that the project is relatively financially sustainable. Such assurances increase the trust of would-be backers to support the project.

When asked whether the effort to create, launch and manage a crowdfunding project is justified with regard to its results, that is, the money raised, 5 of the crowdfunding users offered a positive answer, 2 did not know how to answer and 3 gave a negative answer. Not only are there very few crowdfunding users in the Romanian film users but also only half of them believe the efforts associated with a crowdfunding project are justified. Such answers suggest that roughly half of the respondents may not be willing to use crowdfunding again in the future. This hypothesis will be validated towards the end of the questionnaire, when users are asked whether they will resort to crowdfunding again in the future.

Another aspect of particular interest for film crowdfunding projects is the type of reward offered to backers. Table 3 reveals the types of rewards used by Romanian project initiators in exchange for the financial contributions received from the online backers. While objects, experiences related to the film and public acknowledgement for the financial support are preferred by the majority of crowdfunding users, past willingness to involve the community in the production process as a reward for the contributions received is extremely limited (only 1 respondent). As already mentioned in the introduction, developed crowdfunding markets in the film industry have started to consider the backer a partner and the community a pool of wisdom, which can be exploited to improve the final

product. The community can contribute with ideas, suggestions, manpower or even contributions in kind. In such developed markets, the backer is given the opportunity to exceed the mere role of financial supporter and is actually involved in the production itself. Such is the context in which the consumer-backer becomes a prosumer. This finding is an indicator of the poor awareness within and underdevelopment of the Romanian market.

**Table 3.** Types of rewards offered by the filmmakers having used crowdfunding to finance their projects.

| Type of Reward | Number of Answers | Percentage |
|---|---|---|
| Objects related to the film but of little value (mugs, T-shirts, posters, badges, DVDs, online access to see the movie, etc.) | 8 | 80% |
| Experiences related to the film (invitations to the premiere, dinners with the film production team, interviews, etc.) | 6 | 60% |
| Public acknowledgement of the contribution (mentioning the backers' names in the credit titles, on the web site or on the Facebook page, public nominal thanks upon launching/premiere) | 9 | 90% |
| The possibility to play a role in the film or to contribute to the film production with ideas, opinions, suggestions | 1 | 10% |

Source: Author's own calculations based on the data collected.

Despite the fact that the possibility to play a role in the film or to contribute to the film production with ideas, opinions, suggestions as a reward is underrepresented in the past crowdfunding behaviour of the filmmakers included in the study, 7 out of the 10 users would still not agree to involve the public in the production process in future projects. A more benevolent attitude is displayed by non-users, for a bit over half of them (18 respondents) are declaratively in favour of such rewards.

The respondents who have never used crowdfunding were also asked to choose the type of reward they would give priority to in a hypothetical scenario of using crowdfunding in the future. For this question only one answer was possible to choose in order to obtain a ranking of preferences. The Romanian filmmakers preferred public acknowledgement of the contribution (18 film producers), followed by film-related experiences (10 film producers), film-related objects (2 film producers) and playing a role/contributing to the film production (2 film producers). Overall, Romanian filmmakers are highly reluctant concerning the possibility of involving the general public in the production process as a reward. These results are in line with the declared past behaviours of crowdfunding users described above.

Filmmakers with crowdfunding past experience were asked to list the main benefits of using crowdfunding platforms to finance their film production projects. Table 4 illustrates their ex post expert opinions. Overall, the almost unanimous benefits of crowdfunding are the end-related ones—the money raised and the community built around the project. Process-related benefits (such as the signals from the market, the quality or idea improvement as a result of community reactions, preparation of the subsequent production steps) are not perceived to be as important. As such, crowdfunding users see this financing method as a means to accomplish their financial goal and only to a lesser extent as a source of other benefits.

**Table 4.** Main benefits of using crowdfunding platforms in the opinion of crowdfunding users.

| Benefit | Number of Answers | Percentage |
|---|---|---|
| The money that can be raised | 10 | 100% |
| Creating a community around the project/film | 8 | 80% |
| Concept validation—through successful online funding, the signal is that the film is well received by the public; failure to fund the film online means the idea is not very good or that the project is not well designed | 2 | 20% |
| Through permanent communication with the public, the film may be adjusted in order to meet expectations according to the preferences of the public | 1 | 10% |

Source: Author's own calculations based on the data collected.

In order to explore experts' attitudes towards crowdfunding more extensively, non-users were also asked to express their opinions, to the best of their knowledge, about the main benefits of crowdfunding for filmmaking projects. Table 5 reflects their opinions in this respect. Creating a community around the project and the money that can be used are considered to be the main benefits of using crowdfunding. As in the case of users' answers, process-related benefits are not perceived to be as important. One expert insisted on an additional benefit of crowdfunding—lowering the pressure on well-established consecrated sources of finance due to the relatively recent diversification of financing sources. Creating a community around a project can be translated into an early—i.e. pre-launch—promotion of the film. Furthermore, the supporting community will presumably be the earliest adopters of the final product, ensuring a certain minimum marketability [45].

**Table 5.** Main benefits of using crowdfunding platforms in the opinion of crowdfunding non-users.

| Benefit | Number of Answers | Percentage |
|---|---|---|
| The money that can be raised | 13 | 40.63% |
| Creating a community around the project/film | 26 | 81.25% |
| Concept validation—through successful online funding, the signal is that the film is well received by the public; failure to fund the film online means the idea is not very good or that the project is not well designed | 6 | 18.75% |
| Through permanent communication with the public, the film may be adjusted in order to meet expectations according to the preferences of the public | 2 | 6.25% |

Source: Author's own calculations based on the data collected.

Both users and non-users of crowdfunding were requested to express their opinion regarding the main barriers to the development of crowdfunding. Crowdfunding users gave their answers based on their experience, while non-users provided an answer based on their perception, which actually explains their decision to not use this financing method. Table 6 depicts the main barriers as seen by both categories.

**Table 6.** Main barriers of using crowdfunding platforms in the filmmakers' opinion.

| Barrier | Number of Answers/Percentage | |
|---|---|---|
| | Users | Non-users |
| The public is not aware of this funding method | 7<br>70% | 12<br>37.50% |
| The ones in need of money to finance the project are not aware of this funding method | 1<br>10% | 5<br>15.63% |
| It is difficult to design an attractive and convincing crowdfunding project | 2<br>20% | 4<br>12.50% |
| Project initiators find it difficult to decide what rewards to offer | 1<br>10% | 3<br>9.38% |
| The public does not have "the culture of donation" to contribute and the whole endeavour and efforts are useless | 5<br>50% | 11<br>34.38% |
| The public will not donate, being sceptical that the money will be spent for the declared purpose | 6<br>60% | 9<br>28.13% |
| The backers may change their mind and withdraw their contribution | 1<br>10% | 1<br>3.13% |
| The amounts raised are usually not enough compared to the necessary amount, so the effort is not justified | 2<br>20% | 17<br>53.13% |
| The ones in need of money do not trust crowdfunding platforms—the money can be defrauded by the crowdfunding platform owner and may never get to finance the project | 1<br>10% | 0<br>0% |
| Uncertainty related to project completion | 3<br>30% | 3<br>9.38% |
| There is no national crowdfunding platform dedicated just for film production | 4<br>40% | 7<br>21.88% |
| Unclear legislation regarding crowdfunding | 4<br>40% | 9<br>28.13% |
| Limited online-culture involves a limited potential from backers | 1<br>10% | 0<br>0% |
| The campaign cannot be successful as long as the project does not bring something very particular and astonishing to attract funds | 0<br>0% | 1<br>3.13% |

Source: Author's own calculations based on the data collected.

Romanian filmmaking crowdfunding users find that the most serious barriers to the development of crowdfunding is the public's lack of awareness about crowdfunding, the backers' scepticism that the money will be spent for the declared purpose and the lack of "a culture of donation." Non-users justify their decision to not use crowdfunding mostly because: first, the amounts raised are not enough, so the efforts to create a campaign are not being justified; second, the public is not aware of this method; third, the public does not have "a culture of donation." Obviously, the limited awareness and the lack of "a culture of donation" are the main barriers. Moral hazard on behalf of project initiators is also perceived as an important issue in this respects, which calls for crowdfunding regulation in order to protect backers. Although they have never used crowdfunding, non-users believe that insufficient amounts of money can be raised, which do not pay off the efforts.

A Likert scale was included in the study to assess the users' attitude towards ten success factors of crowdfunding. The findings are presented in Table 7. Romanian crowdfunding users believe that the duration of the campaign, the time until the reward distribution, the relative financial independence of the project and the involvement of the backing community in the production are not really important success factors. In fact, previous studies have shown that the success of a campaign is negatively influenced by the duration of the campaign, because the promise to complete the project within a moderate amount of time and to receive the rewards as soon as possible will reinforce the decision to contribute to the project [48–50]. Research has also shown that relative financial independence is also a success determinant because it reassures the community that part of the project has been paid via other means [37]. Last but not least, backers feel more motivated when empowered, as can be noticed in most filmmaking crowdfunding projects—peak contributions are rewarded with a role in

the film or an active contribution to the making of the film [46]. The first two factors pertain more to the entrepreneurial side of the project, while the third one is industry-specific.

By contrast, users believe that the reputation of the team, the permanent communication with the public and the producer's network are very important success factors. All these factors are confirmed by the literature review [20]. In the film industry, the producer and the entire team play a crucial role in drawing the attention of the public because financial support is explained mainly by fandom. The producer's network ensures the propagation of the crowdfunding call for finance in other online and offline media, while having a written record of the whole progress of the project can be a proof of transparency, which can attract even more backers.

**Table 7.** Attitudes towards the importance of crowdfunding success factors.

| Success factor | Number of answers/Percentage | | |
|---|---|---|---|
| | Not very Important | Important | Extremely Important |
| The topic of the film and its originality | 0<br>0% | 7<br>70% | 3<br>30% |
| The relative financial independence of the project (the existence of other additional funding sources) | 5<br>50% | 4<br>40% | 1<br>10% |
| Including numerous details about the project, so that the backer is completely informed about the film concept | 2<br>20% | 4<br>40% | 4<br>40% |
| Permanent communication with the public through the updates/comments sections of the platform | 1<br>10% | 4<br>40% | 5<br>50% |
| Rewards under the form of unique experiences (invitations to events, dinners, interviews) | 3<br>30% | 4<br>40% | 3<br>30% |
| Involving the backers by offering them the possibility to take part in the decision making of the film production and in the film shooting | 5<br>50% | 5<br>50% | 0<br>0% |
| The producer's network and the way the producer shares the crowdfunding project via other channels (Facebook, Twitter, etc.) | 0<br>0% | 5<br>50% | 5<br>50% |
| The reputation of the team and of actors | 0<br>0% | 3<br>30% | 7<br>70% |
| Asking for a moderate amount of money | 2<br>20% | 7<br>70% | 1<br>10% |
| A short-duration campaign and, implicitly, a short time until reward distribution | 7<br>70% | 3<br>30% | 0<br>0% |

Source: Author's own calculations based on the data collected.

In their capacity of experts in the field of film crowdfunding, users were optionally asked to mention the most difficult thing they had to face during the crowdfunding campaigns they had managed. The respondents mentioned that the most difficult things of their campaigns were: *"the beginning, which normally happens with close persons and acquaintances," "the scepticism of potential backers," "the constant promotion of the crowdfunding call for finance," "those to whom the call for finance is addressed are very hard to be convinced," "it is difficult to share the web page of the campaign to the community," "networking and sharing the message in larger communities," "communication with the public and finding the target public for our project," "insufficient time to spend on the project," "reaching out to the general public," "the lack of interest for crowdfunding on behalf of the general public"*.

Table 8 below illustrates Romanian filmmakers' intentions of using crowdfunding again. It is obvious that a large proportion of Romanian filmmakers are not being able to decide this aspect yet despite their previous crowdfunding experience. This question was designed to confirm the answers to a previous question, when users were asked whether the efforts of launching a crowdfunding campaign are justified. To recall, half of the respondents did not consider the efforts to be justified, such an answer being translated in this question by the inability to decide whether crowdfunding will be used again.

**Table 8.** Intentions to use crowdfunding again in the future.

| Answer | Number of Answers | Percentage |
|---|---|---|
| Yes, to fully fund a project | 1 | 10% |
| Yes, to partially fund a project | 3 | 30% |
| No | 1 | 10% |
| I do not know | 5 | 50% |
| **Total** | **10** | **100%** |

Source: Author's own calculations based on the data collected.

Similarly, non-users were asked whether they intend to use crowdfunding in the future. Their answers are presented in Table 9. Most Romanian filmmakers who have never used crowdfunding before are also undecided about this matter for the future. These results confirm the findings from the question regarding barriers to crowdfunding—more than half of the respondents explained the choice to not use crowdfunding through lack of awareness, lack of "a culture of donation' and the insufficient amount raised (inefficiency of the method).

**Table 9.** Intentions to use crowdfunding in the future.

| Answer | Number of Answers | Percentage |
|---|---|---|
| Yes, to fully fund a project | 0 | 0% |
| Yes, to partially fund a project | 15 | 46.88% |
| No | 2 | 6.24% |
| I do not know | 15 | 46.88% |
| **Total** | **32** | **100%** |

Source: Author's own calculations based on the data collected.

The questionnaire ended by asking all respondents to provide their opinions regarding the future of crowdfunding. Their answers are synthesised in Table 10. This question provides us with a very interesting but at the same time validating attitude towards crowdfunding—Romanians cannot express an opinion about its future. The result is not surprising, though, given the large majority of answers acknowledging the lack of awareness about this financing method.

**Table 10.** Opinion about the development of crowdfunding in the future in Romania.

| Answer | Number of Answers | Percentage |
|---|---|---|
| Yes | 8 | 19.05% |
| No | 5 | 11.90% |
| I do not know | 29 | 69.05% |
| **Total** | **42** | **100%** |

Source: Author's own calculations based on the data collected.

*3.2. Semi-structured Interviews*

A semi-structured interview was conducted in order to obtain in-depth explanations regarding the future of crowdfunding for the Romanian film industry. A number of six experts—film producers—agreed to present their views based on the interview plan provided. Below are presented the most important statements made within the interview. The six interviewees have been denoted I1-I6.

The answers to the first question—*Given the importance of culture in general and of the film industry in particular for sustainable development, what do you consider are the ways through which film production could be better supported financially, apart from the existing public/European/own funds?* —are listed below.

*I1: First of all, public funding is not easy to access, either. Direct loans granted by the RFC as well as sponsorship or contributions from third parties are conditioned by the RFC selection. The same is true for EurImages funds. Such traditional funding is allocated based on the results of a contest, which is largely*

*subjective. Poland is a good practice example in accessing public funds—it has implemented a system of fund allocation based on ballot, so all eligible producers have equal chances in accessing funds. In other words, accessing traditional finance for film production in Romania is difficult. Chances to obtain alternative financing are also meagre. Overall, it is hard to finance film production in general in our country.*

*I2: I believe that a new cinematography law is necessary to foster investment in film production from corporations and individuals. The law would provide the decrease of the profit tax corresponding to the invested amount or other financial or tax benefits granted to investors. Such measures would lead to a revitalisation of the Romanian cinema industry. Financial support for Romanian film producers could also come from local administrations (city halls, prefectures). However, without the regulation of film on national level that is, imposing a minimum number of shows in prime time for each national production by broadcasters, which are currently showing American blockbusters, such financing methods would eventually support the achievement of a final product that never reaches the public. So, besides the financing problem, there is also the issue of Romanian film distribution.*

*I3: Regarding the traditional financing, the RFC system is functional although it has shortcomings at the contest methodology level—the evaluation of the film is quite subjective. The good part is that RFC provides direct loans; the support is not considered public support—de minimis—because that would be limited to 200,000 EUR. Such an amount is way insufficient compared with the necessary amount. Another facility of the existing system is that although the loan should be reimbursed, the beneficiary not having the possibility to reimburse it can transfer ownership right of the film to the RFC. As concerns other sources of finance, the Administration of the National Cultural Fund could be an option. Although it does not finance film production, it can finance projects having a film/video component. Crowdfunding and Creative Europe are other options to finance film production. However, the amounts that can be raised are very small and can only finance small-scale cultural projects, not necessarily feature films. The amounts raised could cover the expenses of short films or other online-based projects. Large sponsorships, another source, come from companies. For the corporate sponsor, the film needs to have a certain value. The value is regarded as the capacity of the film to yield value added for the company. For instance, companies financially support the production of the film through sponsorship and then the film is distributed, for instance by TV channels, which in exchange undertake to promote the company having paid for the film production. One other option to finance film production is when the shooting takes place in another country. Countries having implemented the tax incentive system reimburse the producer a certain percentage of certain eligible expenses related to the filmmaking on the territory of that country. Such a facility could also help Romanian film producers.*

*I4: My first thought is not crowdfunding. Film distribution is not sufficient because we do not have enough screens and we can never earn enough revenues to cover the film production expenses. In Europe, film production is financed by the state but films should be exploited and such exploitation should cover production costs. Encouraging film distribution through investment in restauration/building of cinemas would implicitly help production, more tickets would be sold and the reputation of Romanian films would improve. Thus, a better film distribution could finance film production. The effort to promote a film to be viewed by 50,000 spectators is huge.*

*I5: The RFC should develop a financing platform based on different film categories: starters, young directors, established directors, historic films, films for children, animations etc. Such a system would be more correct, transparent and productive. Needless to say, RFC funds should be more transparent—where do millions of euros go? Other solutions to finance film production would be the National Union of Film Producers and all other Romanian film institutes and associations.*

*I6: Of course it would be wonderful if alternative sources of finance existed for Romanian film production. For instance, in Western countries, there are regional funds and part of them are used to finance film production in the respective regions. Another possibility would be the elaboration of a sponsorship law, especially created for sponsorship of film production. But such a law should be attractive for entrepreneurs, meaning that the tax exemption should be substantial.*

First, experts suggest the following specific measures should be taken to improve financial sustainability of the film industry:

- organising more transparent, fair and objective contests for public funds, which would ensure equal chances for all eligible film producers (by replicating good practice examples of other countries)
- a new cinematography law with substantial tax exemption provisions for investors in the film industry
- special tax provisions regarding tax incentives for sponsorship in culture
- shooting in countries having implemented the tax incentive system of reimbursement of a percentage of expenses
- regional funds
- local administration dedicated funds
- better distribution of Romanian films through broadcasters enforced by specific regulations in the audio-visual field, for example, the existence of a mandatory minimum number of shows of Romanian productions
- better film distribution by increasing the number of screens or by putting in place on-demand online film platforms
- financing projects including video/film components through the Administration of the National Cultural Fund
- Creative Europe
- crowdfunding—just for small-scale projects
- corporate sponsorship
- associations and unions of film producers.

Second, the general opinion expressed by experts is that the existing financing system is far from being perfect. The experts' discourse revolves around the dissatisfaction with regard to the current situation, while displaying a normative stance. The dissatisfaction and need to act are found in phrases such as: *public funding is not easy to access, difficult, subjective contest, chances are [ . . . ] meagre, it is hard, necessary, funds [ . . . ] should be more transparent, [ . . . ] never reaches the public, the system has shortcomings, the amounts are very small, small-scale projects, not crowdfunding, not [ . . . ] enough screens.* The critical tone appears coupled with normative statements. The discourse induces the idea of urgency and need for mobilisation and action to the forefront.

Below are presented the answers to the second question, that is, *How do you explain the fact that the Romanian crowdfunding market in general and the Romanian crowdfunding market for culture in particular does not have similar performances to those recorded in Western countries?*

*I1: The general public believes that culture and films are a black hole for budgets. Supporting a film project largely depends on the filmmaker's reputation. The odds for the project to succeed are proportional to reputation. Unfortunately, as a rule, culture is not a necessity for Romanians and this is a result of the type of education received. Cultural consumption is low, which dissuades the public from financing cultural projects. Also, crowdfunding is not as performant as it is in the West due to a higher poverty rate in Romania. For those who are not poor, the financial contribution to a project needs to be justified by a financial, political or kinship or image-related reason. In Romania, the public has not reached that level at which it can support a project just because it believes in it.*

*I2: In a country in which generalised piracy is not addressed—i.e. there are no coercive measures –, the average wage is below the European average and culture is not a priority, it is hard to imagine that a large pool of people can be sensitised to financially support a film project.*

*I3: Other countries have legislations regulating alternative financing methods. For instance, Anglo-Saxon countries use a wide variety of alternative financing methods, including business angels, joint ventures and crowdfunding. Also, the existence of a proper legislation protects both parties involved in the crowdfunding process, especially because there is a high degree of risk and uncertainty in such projects. In addition, besides the regulation of crowdfunding, tax legislation is motivating in other countries. Tax legislation does not change as often as it does in Romania, it can be predictable and all parties involved can make their own calculations.*

*Another reason for the gap is the difference in the evolution of the digital sector. Let's take the example of Estonia, which is highly digitised. Romania is far from that level of achievement.*

*I4: There are many factors: the difference is mainly explained by culture. We have lived for many years in an isolated type of society, Romanians are not accustomed to common projects within which the individual, through his/her little contribution, could achieve something big. Then there is the scepticism towards online payments, including payments by card and the scepticism regarding the odds of the project to be successful. In Romania the pool of potential backers is not very numerous. In other countries, the crowdfunding concept is more popular and used and potential backers are more numerous. In our country, the concept has never been explained, very few know about it. Then, there is the financial aspect. In our country, people only choose traditional types of investment and not investment in culture. Cultural consumption is also low. For instance, going to the theatre is a special occasion and not a regular event or habit. One last explanation is the lower standard of living in Romania, which makes the population contribute to such projects to a lesser extent.*

*I5: It is all about our mentality. We are so selfish that only an old person or a child in need could make us donate something. It is not a matter of poverty but rather a matter of education, culture and mentality.*

*I6: In Romania there is no crowdfunding culture or market. There are many reasons for this situation. Romanians do not have a cinematography culture, they are not educated in this spirit, unlike the French, Russians, Brits or Americans. There is also the issue of poverty. Moreover, we need to have better skills to promote this field, we need to articulate smart cultural projects.*

In order to explain the large gap between Romania's cultural crowdfunding performance and that of Western countries, experts put forward the following reasons:

- a weak education for culture and cinematography within a society that does not consider culture to be a priority
- egotism and selfishness preventing the involvement in projects larger than the personal level
- risks and uncertainty, partly due to piracy as a reason for films not to make money and be unable to cover production expenses and partly due to low cultural consumption, which diminishes the odds of a production to generate revenues
- relative poverty
- lack of crowdfunding regulation
- inappropriate and unpredictable tax legislation, which is especially harmful for donation-based crowdfunding
- weak development of the digital society and economy and the associated scepticism for online payments
- a pool of very few potential backers due to lack of awareness about crowdfunding
- preference for traditional types of investment to the detriment of online-based platforms and/or cultural projects
- insufficient smart cultural projects on national level
- insufficiently-developed skills to promote the cultural domain

The landscape of underlying reasons invoked by experts is eclectic: mentality, culture, education, relative poverty, inappropriate legislation, lack of awareness and underdeveloped digital economy. Regrouping these answers, the negative gap between Romanian and other countries' performance is explained by economic and legal factors inasmuch as it is by social and cultural factors. The latter seem to come to the fore through metaphors of dismal or discontent, for example, *culture is a black hole, culture is not a priority, unfortunately [ … ] culture is not a necessity, (low) cultural consumption [ … ] dissuades the public from financing cultural projects, the public has not reached that level at which [ … ] it believes in it (project), isolated type of society, Romanians are not accustomed to [ … ] achieve something big, theatre is [ … ] a special occasion, we are so selfish.*

The answers to the third question—*Could crowdfunding become a supplementary viable financing source for the film industry in Romania in the future? If not, please justify your opinion. If yes, under what conditions?* —are presented below.

*I1: It could become a viable financing source only after certain large projects will have been completed. Only then could such a behaviour be replicated. We need several good practice examples to foster trust in this financing method: project initiators will become more aware and the public will better understand the impact of their contribution. Crowdfunding will develop in Romania too but differently according to the field. Unfortunately, the film industry is far from a positive evolution in the near future. Certain projects are currently successfully completed but in other areas of interest. However, in a distant future, Romania will have positive results in film crowdfunding too.*

*I2: I believe a better governance based on emancipation through education and culture and increased welfare can make this method a viable financing source for film production. But we are still far away.*

*I3: In Romania, crowdfunding cannot become the basis for financing cultural production, at least not for the film industry, because it requires large amounts. Only small-scale projects are possible. There is no crowdfunding mentality in Romania. To Romanians, crowdfunding means the well-known 2-EURO donation via text message. It is only when the legislation framework has evolved that innovative financing systems for cultural products can work. In Romania, sponsorship does not work optimally either because there are no tax incentives. In addition, we are too young and inexperienced in matters regarding capitalism, mentalities cannot change in only 30 years. In countries with old democratic and functional systems, mentalities are different. Those who have earned a lot are willing to give something back to their community. In our country, such a behaviour is disfavoured, if any. Crowdfunding, in its basic forms, can only finance small projects.*

*I4: It takes a few years to absorb new concepts. Such implementation of new ideas also depends on mentality. We, as a nation, have a relatively good absorption rate but such practices also depend on the welfare and on the extent to which people are willing to spend money on crowdfunding projects. Even with an attractive legislation to protect investors, most Romanian films incur losses. The same happens in Europe. A better distribution system should be put in place, including on-demand platforms. The classical film distribution is in danger and it should be reconsidered in order to support Romanian film production in the future.*

*I5: No way, it would be shameful. Such a large country cannot leave film production at the mercy of crowdfunding. It would be degrading. For film production, crowdfunding is a desperate gesture, not an alternative financing source.*

*I6: I cannot see how it can work in the future, I cannot see a way to make crowdfunding appealing to Romanians.*

In brief, experts believe crowdfunding will develop in a distant future but in some areas more and in some areas less. The cultural field is not a preference, for a reason already mentioned before: poor education for culture. Film crowdfunding projects, according to their opinion, are not appealing to the population because most productions are not profitable. Distribution could solve, to some extent, this problem. The root cause of weak revenues in the industry is, however, the reduced level of cultural consumption. Cultural crowdfunding could eventually develop if certain successful stories are popularised by the power of example. Education, culture, mentality, legislation and welfare are omnipresent explanations for lack of crowdfunding development and pre-requisites for its future development. In fact, these are long-term goals the Romanian society should achieve.

The experts' discourse analysis unveils undetermined and/or indefinite time references, such as: *distant future, it could become a viable financing source only after certain large projects will have been completed, we are still far away, it is only when [ . . . ] that [ . . . ], we are too young and inexperienced, it takes a few years, I cannot see how it can work in the future.*

Once again, experts resort to the interplay between the dominant economic argument and the peripheral subjective mentality-related argument. As much, the normative interference confirms the consistency of the discourse all throughout the interview.

## 4. Discussion

It is critical to find alternative financing sources for culture, which is one of the pillars of sustainable development and a current European concern, because public finance may prove insufficient for all the existing projects and because cultural projects are frequently deemed ineligible for traditional banking financing. The film industry is one of the creative-cultural industries with the

highest potential to generate revenues, employment, smart, sustainable, inclusive growth, to promote social inclusion, to improve country image but also to attract crowdfunds. European and world statistics place the film industry among the top recipients of crowdfunding, successfully competing with technology and community-related projects. From a macroeconomic vantage point, the welfare of a country, Romania's included, can improve by diversifying its production and exports and by focusing more on high value added products (such as cultural-creative industries) to a larger extent [51].

The capacity of the film industry to further develop depends on the awareness of filmmakers and industry professionals about all types of possible funding in order to increase production both from a qualitative and from a quantitative point of view. Therefore, access to more diversified finance is one way to improve their financial sustainability.

Romania is not present in any European or CEE crowdfunding rankings, which justifies the importance to investigate Romanian filmmakers' attitudes vis-à-vis crowdfunding. The reasons behind this investigation are to assess how crowdfunding can bring in more financial resources and in the industry and what the main perceived barriers are. Crowdfunding, unlike traditional funding (banking, public or European funding), is a bottom-up approach—filmmakers are the ones who initiate the funding campaign, which justifies the importance of their attitudes and perceptions.

Romania is an interesting case in the CEE and European landscape because it is not included in international statistics—partly because data are not collected and reported and partly because the crowdfunding performance and development of the country are very weak. In addition, Romania has not yet legislated crowdfunding, which makes its legal situation hazy for film producers and all other would-be beneficiaries, as well as for the supporting community. The interviews conducted with filmmakers bring to light the reasons why Romanian crowdfunding performance is not comparable to that of other Western or CEE countries: economic (relative poverty) and legal conditions (lack of appropriate regulations), on the one hand and culture, education and mentalities on the other hand (selfishness, poor education for culture, low cultural consumption). An exploration of the legislative progress made in terms of crowdfunding across CEE countries reveals that few are those countries having actually created special laws for crowdfunding. Lithuania is an example in this respect. However, the more general legislation applies and leaves room for flexibility to create new types of finance. Equity-based or lending-based crowdfunding activity is allowed under the more general existing legislation on condition that the necessary licences and authorisations are obtained from supervisory authorities and central banks. Despite the lack of non-specific legislation, most CEE countries successfully carry out a plurality of crowdfunding activities, for example: Bulgaria, the Czech Republic, Estonia, Latvia, Poland, Slovakia and Slovenia. The legislation review performed by the European Crowdfunding Network places Romania in the group of CEE countries where the legislative progress has been stalled; similar poor performance is recorded in Croatia and Hungary [52].

The unclear status of crowdfunding generates mistrust and scepticism on the one hand and lack of awareness and popularity on the other hand. Equity-based and lending-based crowdfunding activities cannot take place in Romania currently due to lack of specialised regulation and inflexible general legislation; the only existing forms of crowdfunding, donation-based and reward-based, are not popular means to raise funds for projects. To illustrate this, calls for finance in the film industries can be found on five out of the twelve active crowdfunding Romanian platforms. There are 23 film projects of which eleven successful and twelve unsuccessful. Out of the eleven film crowdfunding projects, only eight are artistic creation—one of the films is just a follow-up of a larger prosocial campaign, a second one is a community awareness project, while a third project raised the necessary money but was never completed. That is to say, to the best of our awareness, Romanian crowdfunding platforms have hosted a total number of eight successful film projects so far. Table 11 below synthesizes the amounts earned. The low-end amounts raised prove that crowdfunding—as it is right now—only addresses financing needs for small-scale projects. The same conclusion was also reached in the semi-structured interviews.

**Table 11.** Funds raised on Romanian crowdfunding platforms by film projects.

| Project/Crowdfunding Platform | Raised Amount | Number of Backers | Average Contribution (amount) | Average Contribution (percentage) |
|---|---|---|---|---|
| The Goat and Her Three Kids (crestemidei.ro) | 16,075 RON | 15 | 1,072 RON | 6.67% |
| The Last Transhumance (crestemidei.ro) | 40,169 RON | 255 | 158 RON | 0.39% |
| 777 (crestemidei.ro) | 3,031 RON | 41 | 74 RON | 2.44% |
| Friends (crestemidei.ro) | 9,055 RON | 39 | 232 RON | 2.56% |
| The Gift (wearehere.ro) | 2,285 EUR | 22 | 104 EUR | 4.55% |
| Behind the Iron Curtain. Case study: Romania (wearehere.ro) | 1,244 EUR | 33 | 38 EUR | 3.03% |
| Herman—the Man behind the Terror (sprijina.ro) | 23,430 RON | 24 | 976 RON | 4.17% |
| Duality (sprijina.ro) | 2,980 RON | 43 | 69 RON | 2.33% |

Source: Author's own compilation based on the data collected from the three crowdfunding platforms: crestemidei.ro, wearehere.ro, sprijina.ro.

Obviously, crowdfunding is still in its early ages in this country. Romania is also interesting from a scholarly point of view because the majority of film production primarily relies on public finance, as can be seen in Table 12. According to the legislation in force, public finance is directed towards film projects by the RFC. According to the Government Ordinance no. 39/2005 regarding cinematography, the main public financing types are: direct credit and non-reimbursable financial support.

**Table 12.** Romanian film production by type and financing source, 2012–2016.

| Film Production/Financing Source | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| FEATURE FILMS | | | | | |
| *Feature films fiction* | **19** | **25** | **27** | **17** | **25** |
| Made with RFC support | 14 | 18 | 13 | 12 | 20 |
| 100% nationally-financed films | 9 | 16 | 19 | 10 | 12 |
| Co-productions | 10 | 9 | 8 | 7 | 13 |
| *Feature films documentary* | **7** | **5** | **10** | **7** | **6** |
| Made with RFC support | 6 | 5 | 6 | 4 | 5 |
| 100% nationally-financed films | 4 | 4 | 7 | 4 | 4 |
| Co-productions | 3 | 1 | 3 | 3 | 1 |
| *Feature films animation* | **1** | **1** | **1** | **2** | **1** |
| Made with RFC support | 1 | 1 | 1 | 2 | 1 |
| 100% nationally-financed films | 1 | | | 2 | 1 |
| Co-productions | | 1 | | | |
| SHORT FILMS | | | | | |
| *Short films fiction* | **9** | **5** | **6** | **10** | **12** |
| Made with RFC support | 8 | 5 | 5 | 9 | 8 |
| 100% nationally-financed films | 8 | 5 | 5 | 8 | 11 |
| Co-productions | 1 | | 1 | 2 | 1 |
| *Short films animation* | | | | | **2** |
| Made with RFC support | | | | | 2 |
| 100% nationally-financed films | | | | | 1 |
| Co-productions | | | | | 1 |

Source: [53].

The RFC data presented above clearly indicate that the largest majority of feature film production (both fiction and documentary) is financed using public funds, while such funds finance animation feature films and short films in their quasi-totality—in the period 2012–2016, all animation films were made with the support of the RFC. Moreover, feature film production is financially supported by co-productions to a large extent. Given that most film productions are financed by the RFC, it is legitimate to argue that only a small number (and a small weight) of the total film productions are financed independently from this institution. For this reason and in this context, it is essential for the film industry to diversify the financing sources in order to ensure its financial sustainability and relative independence. Thus, crowdfunding becomes extremely attractive due to its financial benefits but to its other benefits—building a community around the project, early promotion of the product, testing the product, to name just the most important ones according to experts' opinions.

The average number of film productions per year is 38, that is, an average of 1 film per roughly 3 producers (38/127). The 1 film: 3 producers ratio is comparable to the response rate of 1:3 for the survey (42/127). In other words, on average, one film is produced per every 3 film producers every year; similarly, there is an answer to the survey per every 3 producers included in the survey.

The current study is original in that there are no other studies on filmmaking crowdfunding investigating the phenomenon in Romania. Similar studies have been conducted in Poland and Czech Republic and Slovakia [16,21]. The Polish survey indicates that experts' opinions strongly differed about crowdfunding in general and about crowdfunding for documentary films in particular. Diverging opinions are explained by the novelty of crowdfunding and their difficulty to assess its present and future role for filmmaking. According to the Polish study, over 85% of experts (filmmakers and film students) agree with the backers' active involvement in the film production. The Polish attitude towards such a reward is more favourable than the Romanian experts' attitude.

The only study dealing with attitudes towards crowdfunding in Romania was performed on a reduced sample of young persons and, within that research, crowdfunding was only seen as a part of the sharing economy and not the object of investigation per se [54].

A most noteworthy conclusion of the research is that Romanian filmmaking producers use a mix of funds but they mostly depend on public funding, own funds, European funds and donations. Crowdfunding is not among the main financing sources used in film production. However, the fact that own funds cannot sustain the production (own funds are not the main or only source of finance but in very few cases) in addition to the insufficient public funding renders it an attractive financial supplement. Some authors even suggest that crowdfunding projects tend to be more successful if they are not entirely funded from community money and if relative financial independence is proven. Relative financial independence fosters trust among backers. The study reveals that film producers have a poor level of understanding and a wrong idea about crowdfunding—roughly half of the respondents associate it with donation. Romanian crowdfunding users' experience shows that they have a hard time actively involving backers in the film production. Declaratively, the majority of respondents would not be willing to promise rewards consisting in the opportunity to play such active roles in the future. Film experts consider that the main benefits of using crowdfunding reside in the money that can be obtained and in the community built around the project. They do not place a high value on the help that could come from the community under other forms. Insofar as the main perceived barriers are concerned, lack of awareness about this financing source, the lack of "a culture of donation,' the inefficiency of the method and scepticism are the top answers received from Romanian experts. The existing literature review in the matter of crowdfunding participation argues that the most important barrier for the creators is fear of failure, while for the supporters, lack of trust [55]. Lack of trust and risk perceptions manifested by the online community can be mitigated with full disclosure of information, permanent communication and transparency regarding the project [56]. The most difficult parts of the crowdfunding campaign, in the experts' opinion, are: convincing a sceptical public, the efforts to constantly keep in touch with backers, networking and the time-consuming character of such enterprises. Last but not least, Romanian film producers' intentions to use crowdfunding in the future are moderate, roughly a bit more than 40% providing a positive answer. In terms of opinion about how the crowdfunding phenomenon will evolve in the future—most Romanian experts cannot express an opinion. The last two findings confirm that the market is not yet developed and both the public and those in need of money are not fully familiarised with crowdfunding.

The qualitative analysis performed through semi-structured interviews reveals the main issues Romania is facing: inadequate legislation for crowdfunding, insufficient tax exemptions for investment or sponsorship in culture, a poor education for culture, an underdeveloped digital economy, relative poverty, low level of awareness and openness towards modern investment methods and destinations.

The main limitation of the study is that it only investigates perceptions and attitudes towards crowdfunding in the Romanian filmmaking industry. In this respect, it would be useful to inspect how crowdfunding is seen through the lens of professionals in other Romanian creative-cultural industries

and not only. The successful adoption of this alternative financing method largely depends on the fundraisers' openness and awareness. Therefore, future research would include creative-cultural industries other than the film industry. Such studies could also be extended to other CEE countries. The survey response rate of Romanian filmmakers was 33.07%, which was satisfactory to draw valuable conclusions for the scope of the paper. These conclusions were then supplemented with in-depth analyses ensuing from the semi-structured interviews. For the purposes of this study, the whole community of film producers was contacted, that is, all the 127 officially registered and active Romanian filmmakers since the advent of crowdfunding. However, due to the novelty of the topic and to the limited knowledge of the filmmakers' community in terms of crowdfunding, a large number of recipients of the survey sent a direct refusal to answer it. They would justify their incapacity to answer the survey on account of ignorance of the crowdfunding concept. However meaningful such reason may be for understanding the underdevelopment of the Romanian crowdfunding market, such downright refusal is also a limitation of the study.

Although the present research is primarily focused on the Romanian film industry and its findings solely refer to this area, it also provides a general picture of how fundraisers perceive the emerging phenomenon of crowdfunding. The general perception about crowdfunding comes forth especially in the responses provided by experts during the semi-structured interviews—it is seen as a successful financing method in a distant future and its development is conditioned by would-be changing mentalities and behaviours and standard of living. At the other end of the stick, however, the behaviour of fundraisers and fund givers within the donation-based crowdfunding model for prosocial and humanitarian causes cannot be explained by such studies. In fact, further research is needed to distinguish between the driving forces behind the decision to financially contribute on a crowdfunding platform for a creative-cultural product, an innovative product or simply to support a cause through donation-based crowdfunding.

The study is useful in that it provides answers as to why the Romanian crowdfunding market for the film industry does not have a similar performance to its European counterparts and it highlights and justifies the necessity to popularise crowdfunding, as well as to regulate its more advanced forms (equity-based and lending-based) in order to foster trust among the community. By and large, a stronger and more developed crowdfunding market could improve financial sustainability of starts-ups, creatives and other entrepreneurs that have limited or no access to traditional financing. A critical problem identified during the interviews is the lack of profitability of the film industry, which makes it less appealing for investment. Experts also suggest that a possible solution to overcome this issue is the diversification of distribution channels—more screens and online distribution—but also by enforcing legislation requiring the broadcasting of a minimum number of shows of Romanian productions.

## 5. Conclusions

Based on the results of the study, I argue that regulating crowdfunding is a desired and necessary step in its development. Such regulation does not primarily regard the existing forms of crowdfunding in Romania—reward-based and donation-based—which can still be used without any intervention. However, regulation would allow the existence and operation of crowdfunding platforms in the more advanced forms of this financing instrument: equity-based crowdfunding, lending-based crowdfunding, invoice trading and hybrid forms. The reason for regulating crowdfunding is also expressed in the Action Plan on building a capital markets union and, in this context, I reiterate the need for regulation for the following main reasons:

- by regulation, crowdfunding would be used in all its forms and its impact will be proportionally higher than it currently is in its basic forms. Project initiators would have a wider choice to find alternative finance and a clearer picture about all its forms, including the existing ones. It is obvious that regulating would bring about higher popularity of alternative finance due to better information and available information

- regulation brings forth a higher level of protection for backers. Thus, by regulating equity-based and lending-based crowdfunding, increased protection measures could and should also be

adopted by reward-based crowdfunding platforms, mostly those referring to moral hazard, information asymmetry, financial transparency, cyber-risks, liquidity risks, platform-associated technical risks. After all, reward-based crowdfunding implies an economic transaction between the parties, as the reward offering is seen as a presale from an accounting point of view. Such commercial activity requires protecting backers' interests and backers need to trust the process both from a financial and from a technical point of view.

Crowdfunding regulation could be accompanied by the amendment of the Romanian tax law. Thus, specific substantial tax exemptions are mandatory to encourage investment and sponsorship in culture and in the film industry in particular.

A first long-term objective for the Romanian society, as identified within the study, is to articulate smart cultural and educational policies with the purpose of increasing cultural consumption. A second long-term objective is the digitisation of the economy and society. Digital media can improve both the production and distribution of cultural products, as well as the cultural consumption.

Statistics reveal that the funds raised via crowdfunding are increasing every year but that they are still low compared to those raised using established financial instruments. According to the European Commission, the world crowdfunding market rose by 167% in the period 2013–2014 and by 28% during the period 2014–2015. Such evolution was followed by a slight decrease, that is, 3%, in the period 2015–2016. The total amount raised via EU crowdfunding platforms in 2015 was 4.2 billion EUR, of which 98% yielded financial benefits. In 2016, the EU crowdfunding market reached 7.67 billion EUR [1,57]. This accelerated evolution unveils the rising popularity and attractiveness of this innovative financing method, as well as its potential for further development. The worldwide prevailing type of crowdfunding is the lending-based one, whereas equity-based is still underdeveloped due to numerous legal restrictions. Despite the existing pioneering legislation on equity-based crowdfunding that came into force in the United States once with the Crowdfund Act of Jumpstart Our Business Start-Ups (JOBS) Act in 2015, world markets are still to settle on the appropriate legal framework for this novel instrument and Romania is one of these markets [58]. Regulation of financial innovative products has emerged as a necessary undertaking in all markets where the speed of innovation exceeds that of updating the regulatory framework [59].

Crowdfunding per se is the result of disruptive innovation within the FinTech revolution, alongside the blockchain technology. Besides the benefit of financing creative-cultural and innovative projects worldwide with large amounts of money, the more elaborate forms of crowdfunding—e.g., equity-based, lending-based, invoice trading crowdfunding and other hybrid forms—are deemed to have the potential to remove financial intermediation. Such crowdfunding models emerge as alternative financial investment instruments, "*without standard financial intermediaries and expensive registration requirements*," thus enabling "*the fundraiser to avoid complicated regulation requirements and to reduce transaction costs*" [58] (p. 974). Crowdfunding provides the opportunity to obtain finance relatively quickly, the only downsides being the dilution of equity, decreased autonomy or higher liabilities [60]. In other words, crowdfunding brings about more efficiency, lower transaction costs and increased flexibility in world financial markets, which are undergoing an unprecedented change from a regulation and accessibility standpoint.

## 6. Limitations

Due to great limitations of sample size, the outcomes of the study cannot be generalized to the entire investigated country and compared to the rest of CEE nations. Therefore, the current study reveals only the results of an industry-specific primary investigation.

**Appendix A**

**Questionnaire: Crowdfunding—a viable option to finance film production?**

1.  What is the main funding source that you use to finance film production? (compulsory question, one answer only)

    - own funds
    - funds from the state budget, granted by film intuitions/councils/centres
    - European funds
    - donations from individuals
    - donations from companies
    - crowdfunding platforms
    - other . . .

2.  What other funding sources do you use to complement your main funding source? (compulsory question, multiple answers possible)

    - own funds
    - funds from the state budget, granted by film institutions/councils/centres
    - European funds
    - donations from individuals
    - donations from companies
    - crowdfunding platforms
    - other

3.  Do you associate the term "crowdfunding" to the term "donation"? (compulsory question, one answer only)

    - Yes
    - No

4.  Have you ever used crowdfunding platforms to raise money in order to finance film production? (compulsory question, one answer only)

    - Yes
    - No

    **Section A (if yes is the answer to question 4)**

5.  What production steps did you finance using the crowdfunding campaign(s) (film production steps according to Goodell, 1998)? (compulsory question, multiple answers possible)

    - development (script)
    - pre-production
    - production
    - post-production

6.  Is the effort to create, launch and manage a crowdfunding project justified with regard to its results (the money raised)? (compulsory question, one answer only)

    - Yes
    - No
    - I do not know

7.  What kind of rewards did you offer in exchange for the financial contributions received from the online backers? (compulsory question, multiple answers possible)

    ■   objects related to the film but of little value (mugs, T-shirts, posters, badges, DVDs, online access to see the movie, etc.)
    ■   experiences related to the film (invitations to the premiere, dinners with the film production team, interviews, etc.)
    ■   public acknowledgement of the contribution (mentioning the backers' names in the credit titles, on the web site or on the Facebook page, public nominal thanks upon launching/premiere)
    ■   the possibility to play a role in the film or to contribute to the film production with ideas, opinions, suggestions

8.  Would you agree that the most generous backers be involved in the film production process by offering them as reward the possibility to play a role in the film or to contribute to the film production with ideas, opinions, suggestions? (compulsory question, one answer only)

    ●   Yes
    ●   No

9.  In your opinion, what are the main benefits of using a crowdfunding platform to finance your film production? (compulsory question, multiple answers possible)

    ■   the money that can be raised
    ■   creating a community around the project/film
    ■   concept validation—through successful online funding, the signal is that the film is well received by the public; failure to fund the film online means the idea is not very good or that the project is not well designed
    ■   through permanent communication with the public, the film may be adjusted in order to meet expectations according to the preferences of the public
    ■   other

10. In your opinion, what are the main barriers to the development of crowdfunding for filmmaking in particular and for creative projects in general? (compulsory question, multiple answers possible)

    ■   the public is not aware of this funding method
    ■   the ones in need of money to finance the project are not aware of this funding method
    ■   it is difficult to design an attractive and convincing crowdfunding project
    ■   project initiators find it difficult to decide what rewards to offer
    ■   the public does not have "the culture of donation" to contribute and the whole endeavour and efforts are useless
    ■   the public will not donate, being sceptical that the money will be spent for the declared purpose
    ■   the backers may change their mind and withdraw their contribution
    ■   the amounts raised are usually not enough compared to the necessary amount, so the effort is not justified
    ■   the ones in need of money do not trust crowdfunding platforms—the money can be defrauded by the crowdfunding platform owner and may never get to finance the project
    ■   uncertainty related to project completion
    ■   there is no national crowdfunding platform dedicated just for film production
    ■   unclear legislation regarding crowdfunding

■    other

11.    In your opinion, how important are the factors below for a crowdfunding campaign to be successful? (compulsory question, multiple-choice grid) *Rows*

a.    the topic of the film and its originality

b.    the relative financial independence of the project (the existence of other additional funding sources)

c.    including numerous details about the project, so that the backer is completely informed about the film concept

d.    permanent communication with the public through the updates/comments sections of the platform

e.    rewards under the form of unique experiences (invitations to events, dinners, interviews)

f.    involving the backers by offering them the possibility to take part in the decision making of the film production and in the film shooting

g.    the producer's network and the way the producer shares the crowdfunding project via other channels (Facebook, Twitter, etc.)

h.    the reputation of the team and of actors

i.    asking for a moderate amount of money

j.    a short-duration campaign and, implicitly, a short time until reward distribution

*Columns*

●    not very important
●    important
●    extremely important

12.    What is the most difficult aspect you had to deal with within your crowdfunding campaign(s)? (non-compulsory question, open-ended question) _____

13.    Will you use crowdfunding again in the future? (compulsory question, one answer only)

●    Yes, to fully fund a project
●    Yes, to partially fund a project
●    No
●    I do not know

14.    Do you believe that crowdfunding will further develop in Romania?

●    Yes
●    No
●    I do not know

If you wish to receive the results of the survey, please indicate an e-mail address where I can send you the findings.
Thank you for your time and valuable help!

**Section B (if no is the answer to question 4)**

5.    Why have you not used crowdfunding platforms to finance your film production? (compulsory question, multiple answers possible)

■    the public is not aware of this funding method
■    I do not know that crowdfunding is

- ■ I find it difficult to design an attractive and convincing crowdfunding project
- ■ I find it difficult to decide what rewards to offer
- ■ the public does not have "the culture of donation" to contribute and the whole endeavour and efforts are useless
- ■ the public will not donate, being sceptical that the money will be spent for the declared purpose
- ■ the backers may change their mind and withdraw their contribution
- ■ the amounts raised are usually not enough compared to the necessary amount, so the effort is not justified
- ■ I do not trust crowdfunding platforms—the money can be defrauded by the crowdfunding platform owner and may never get to finance my project
- ■ I may never complete the project, which would be awkward to explain to my backers
- ■ there is no national crowdfunding platform dedicated just for film production
- ■ unclear legislation regarding crowdfunding
- ■ other

6. In your opinion, what would be the main benefits of using a crowdfunding platform to finance your film production? (compulsory question, multiple answers possible)

- ■ the money that can be raised
- ■ creating a community around the project/film
- ■ early film promotion—even before pre-production or production
- ■ concept validation—through successful online funding, the signal is that the film is well received by the public; failure to fund the film online means the idea is not very good or that the project is not well designed
- ■ through permanent communication with the public, the film may be adjusted in order to meet expectations according to the preferences of the public
- ■ other

7. Do you consider using crowdfunding in the future? (compulsory question, one answer only)

- Yes, to fully fund a project
- Yes, to partially fund a project
- No
- I do not know

8. What kind of rewards would you primarily offer in exchange for the financial contributions received from the online backers? (compulsory question, one answer only)

- objects related to the film but of little value (mugs, T-shirts, posters, badges, DVDs, online access to see the movie, etc.)
- experiences related to the film (invitations to the premiere, dinners with the film production team, interviews, etc.)
- public acknowledgement of the contribution (mentioning the backers' names in the credit titles, on the web site or on the Facebook page, public nominal thanks upon launching/premiere)
- the possibility to play a role in the film or to contribute to the film production with ideas, opinions, suggestions

9. Would you agree that the most generous backers be involved in the film production process by offering them as reward the possibility to play a role in the film or to contribute to the film production with ideas, opinions, suggestions? (compulsory question, one answer only)

- Yes
- No

10. Do you believe that crowdfunding will further develop in Romania? (compulsory question, one answer only)

- Yes
- No
- I do not know

If you wish to receive the results of the survey, please indicate an e-mail address where I can send you the findings.

Thank you for your time and valuable help!

## References

1. European Commission. Commission Staff Working Document. Crowdfunding in the EU Capital Markets Union. 2016. Available online: https://ec.europa.eu/info/system/files/crowdfunding-report-03052016_en.pdf (accessed on 30 October 2018).
2. Moon, Y.; Hwang, J. Crowdfunding as an Alternative Means for Funding Sustainable Appropriate Technology: Acceptance Determinants of Backers. *Sustainability* **2018**, *10*, 1456. [CrossRef]
3. European Commission. Green Paper. Unlocking the Potential of Cultural and Creative Industries. 2010. Available online: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0183&from=EN (accessed on 30 October 2018).
4. Correa-Quezada, R.; Álvarez-García, J.; del Río-Rama, M.C.; Maldonado-Erazo, C.P. Role of Creative Industries as a Regional Growth Factor. *Sustainability* **2018**, *10*, 1649. [CrossRef]
5. Council of the European Union. Draft Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting with the Council, on a Work Plan for Culture. 2014. Available online: http://data.consilium.europa.eu/doc/document/ST-16094-2014-INIT/en/pdf (accessed on 30 October 2018).
6. Fanea-Ivanovici, M. Filmmaking Financing Through Crowdfunding. An Analysis of Successful and Unsuccessful Financing Proposals. In *Knowledge for Market Use 2018: Public Finances in the Background of Sustainable Development, Proceedings of the Knowledge for Market Use 2008 Conference, Olomouc, Czech Republic, 6–7 September 2018*; Slavíčková, P., Talášek, T., Eds.; Palacký University Olomouc: Olomouc, Czech Republic, 2018; pp. 75–81.
7. Fernandez, C.A. Self-financing and Crowdfunding: New Ways of Production, Distribution and Exhibition of Independent Spanish Cinema after Spanish Financial Crisis. *Hist. Comun. Soc.* **2014**, *19*, 387–399. [CrossRef]
8. Tera Consultants. The Economic Contribution of the Creative Industries to the EU in Terms of GDP and Jobs. 2014. Available online: http://www.teraconsultants.fr/en/issues/The-Economic-Contribution-of-the-Creative-Industries-to-EU-in-GDP-and-Employment (accessed on 31 October 2018).
9. United Cities and Local Governments. Culture: Fourth Pillar of Sustainable Development. 2010. Available online: http://www.agenda21culture.net/sites/default/files/files/documents/en/zz_culture4pillarsd_eng.pdf (accessed on 3 November 2018).
10. United Nations. Sustainable Development Goals. Available online: https://sustainabledevelopment.un.org/ (accessed on 25 November 2018).
11. European Commission. Crowdfunding. Available online: https://ec.europa.eu/info/business-economy-euro/growth-and-investment/financing-investment/crowdfunding_en#what-is-crowdfunding (accessed on 31 October 2018).
12. Hossain, M.; Oparaocha, G.O. Crowdfunding: Motives, Definitions, Typology and Ethical Challenges. *Entrep. Res. J.* **2017**, *7*, 20150045. [CrossRef]
13. Statista. Available online: https://www.statista.com/statistics/412372/europe-alternative-finance-funding-amounts-country/ (accessed on 30 October 2018).
14. Statista. Available online: https://www.statista.com/statistics/612857/central-eastern-europe-countries-alternative-finance-reward-based-crowdfunding-volume/ (accessed on 1 November 2018).

15. Statista. Available online: https://www.statista.com/statistics/612861/central-eastern-europe-countries-alternative-finance-equity-based-crowdfunding-volume/ (accessed on 1 November 2018).
16. Soltes, M.; Stofa, T. Crowdfunding—The Case of Slovakia and the Czech Republic. *Qual. Innov. Prosper.-Kval. Inov.* **2016**, *20*, 89–104. [CrossRef]
17. Crowd 101. Available online: https://www.crowd101.com/crowdfunding-success-statistics-raise-money-online/ (accessed on 31 October 2018).
18. Statista. Available online: https://www.statista.com/statistics/562061/usa-leading-crowfunding-categories/ (accessed on 30 October 2018).
19. Statista. Available online: https://www.statista.com/statistics/757477/no-of-crowdfunding-campaigns-completed-by-sector-europe/ (accessed on 1 November 2018).
20. Štofa, T.; Zoričak, M. Selected Success Factors of Crowdfunding Projects. In *European Financial System 2016, Proceedings of the 13th International Scientific Conference, Brno, Czech Republic, 27–28 June 2016*; Krajíček, J., Nešleha, J., Urbanovský, K., Eds.; Masaryk University: Brno, Czech Republic, 2016; pp. 752–759.
21. Świerczyńska-Kaczor, U.; Kossecki, P. The Role of Polish Crowdfunding Platforms in Film Productions—An Exploratory Study. In Proceedings of the 2016 Federated Conference on Computer Science and Information Systems, Gdansk, Poland, 11–14 September 2016; Ganzha, M., Maciaszek, L., Paprzycki, M., Eds.; IEEE: Piscataway, NJ, USA, 2016; pp. 1289–1296.
22. Davis, B.C.; Hmieleski, K.M.; Webb, J.W.; Coombs, J.E. Funders' Positive Affective Reactions to Entrepreneurs' Crowdfunding Pitches: The Influence of Perceived Product Creativity and Entrepreneurial Passion. *J. Bus. Ventur.* **2017**, *32*, 90–106. [CrossRef]
23. Bao, Z.S.; Huang, T.Z. External Supports in Reward-Based Crowdfunding Campaigns: A Comparative Study Focused on Cultural and Creative Projects. *Online Inf. Rev.* **2017**, *41*, 626–642. [CrossRef]
24. Sacco, P.L.; Ferilli, G.; Tavano Blessi, G. From Culture 1.0 to Culture 3.0: Three Socio-Technical Regimes of Social and Economic Value Creation through Culture, and Their Impact on European Cohesion Policy. *Sustainability* **2018**, *10*, 3923. [CrossRef]
25. Herbert, E. Black British Women Filmmakers in the Digital Era: New Production Strategies and Re-presentations of Black Womanhood. *Open Cult. Stud.* **2018**, *2*, 191–202. [CrossRef]
26. Loriguillo-Lopez, A. Crowdfunding Japanese Commercial Animation: Collective Financing Experiences in Anime. *Int. J. Media Manag.* **2017**, *19*, 182–195. [CrossRef]
27. Lopez-Golan, M.; Tapia, A.C.V.; Pedreira, J.F. Crowdfunding via Digital Platforms, Is Patronage in the 21st Century an Alternative for the Ecuadorian Cinema? In Proceedings of the 2016 11th Iberian Conference on Information Systems and Technologies, Gran Canaria, Spain, 15–18 June 2016; Rocha, A., Reis, L.P., Cota, M.P., Suarez, O.S., Goncalves, R., Eds.; IEEE: New York, NY, USA, 2016.
28. Hobbs, J.; Grigore, C.; Molesworth, M. Success in the Management of Crowdfunding Projects in the Creative Industries. *Internet Res.* **2016**, *26*, 146–166. [CrossRef]
29. Martinez Gallardo, F.D.; Alberich Pascual, J. Crowdfunding Platforms and Crowdsourcing Film Projects in Spain. *Hist. Comun. Soc.* **2013**, *18*, 85–95. [CrossRef]
30. Booth, P. Crowdfunding: A Spimatic Application of Digital Fandom. *New Media Soc.* **2015**, *17*, 149–166. [CrossRef]
31. Coronado Ruiz, C.; Larranaga Rubio, J. Financing Audiovisuals through Crowdfunding: The Case of Juan y la Nube. *Doc. Las Cienc. Inf.* **2015**, *38*, 203–221. [CrossRef]
32. Sorensen, I.E. Crowdsourcing and Outsourcing: The Impact of Online Funding and Distribution on the Documentary Film Industry in the UK. *Media Cult. Soc.* **2012**, *34*, 726–743. [CrossRef]
33. Siapera, E.; Papadopoulou, L. Radical Documentaries, Neoliberal Crisis and Post-Democracy. *Triplec-Commun. Capital. Crit.* **2018**, *16*, 1–17. [CrossRef]
34. Kocer, S. Social Business in Online Financing: Crowdfunding Narratives of Independent Documentary Producers in Turkey. *New Media Soc.* **2015**, *17*, 231–248. [CrossRef]
35. Papadimitriou, L. Transitions in the Periphery: Funding Film Production in Greece since the Financial Crisis. *JMM-Int. J. Media Manag.* **2017**, *19*, 164–181. [CrossRef]
36. Dollani, A.; Lerario, A.; Maiellaro, N. Sustaining Cultural and Natural Heritage in Albania. *Sustainability* **2016**, *8*, 792. [CrossRef]

37. Baranova, D.; Lugmayr, A. Crowd Intelligence in Independent Film Productions. In Proceedings of the 17th International Academic Mindtrek Conference: Making Sense of Converging Media, Tampere, Finland, 1–4 October 2013; Lugmayr, A., Franssila, H., Karkkainen, H., Paavilainen, J., Eds.; Assoc. Computing Machinery: New York, NY, USA, 2013.

38. Gascon, J.F.F.; Rodriguez, J.R.; Monfonte, J.M.; Lopez, E.S.; Masip, P.M. Crowdfunding as a Formula for the Financing of Projects: An Empirical Analysis. *Rev. Cient. Hermes* **2015**, *14*, 24–47. [CrossRef]

39. Siuda, P.; Troszynski, M. Natives and Tourists of Prosumer Capitalism: On the Varied Pro-Consumer Activities of Producers Exemplified in the Polish Pop Culture Industry. *Int. J. Cult. Stud.* **2017**, *20*, 545–563. [CrossRef]

40. Ritzer, G.; Jurgenson, N. The Nature of Capitalism in the Age of the Digital 'Prosumer'. *J. Consum. Cult.* **2010**, *10*, 13–36. [CrossRef]

41. Alderete, M.V. The Age of Prosumerism: Some Micro-Economic Analysis. *J. Appl. Election. Commer.* **2017**, *12*, 1–12. [CrossRef]

42. Ritzer, G. The 'New' World of Prosumption: Evolution, 'Return of the Same', or Revolution. *Sociol. Forum* **2015**, *30*, 1–17. [CrossRef]

43. Fuchs, C. Labor in Informational Capitalism and on the Internet. *Inf. Soc.* **2010**, *26*, 179–196. [CrossRef]

44. Dusi, D. Investigating the Exploitative and Empowering Potential of the Prosumption Phenomenon. *Sociol. Compass* **2017**, *11*, e12488. [CrossRef]

45. Stanko, M.A.; Henard, D.H. Toward a Better Understanding of Crowdfunding, Openness and the Consequences for Innovation. *Res. Policy* **2017**, *46*, 784–798. [CrossRef]

46. Fanea-Ivanovici, M. Crowdfunding—A Viable Alternative Source of Finance for the Film Industry? *Rev. Econ.* **2018**, *70*, 79–88.

47. Goodell, G. *Independent Feature Film Production: A Complete Guide from Concept through Distribution*; St. Martin's Griffin: New York, NY, USA, 1981; ISBN 0-312-41307-6.

48. Boeuf, B.; Darveau, J.; Legoux, R. Financing Creativity: Crowdfunding as a New Approach for Theatre Projects. *Int. J. Arts Manag.* **2014**, *16*, 33–48.

49. Kim, T.; Por, M.H.; Yang, S.B. Winning the Crowd in Online Fundraising Platforms: The Role of Founder and Project Features. *Electron. Commer. Res. Appl.* **2017**, *25*, 86–94. [CrossRef]

50. Kunz, M.M.; Bretschneider, U.; Erler, M.; Leimeister, J.M. An Empirical Investigation of Signaling in Reward-Based Crowdfunding. *Electron. Commer. Res.* **2017**, *17*, 425–461. [CrossRef]

51. Stamule, T. Trade Comparative Analysis: Republic of Moldova and Other Relevant Countries. In Proceedings of the International Conference on Business Excellence, Bucharest, Romania, 30–31 March 2017; De Gruyter Poland SP ZOO: Warsaw, Poland, 2017; pp. 569–576.

52. European Crowdfunding Network. Review of Crowdfunding Regulation 2017. 2017. Available online: https://eurocrowd.org/wp-content/blogs.dir/sites/85/2017/10/ECN_Review_of_Crowdfunding_Regulation_2017.pdf (accessed on 7 January 2019).

53. Romanian Film Centre. Cinema Yearbook. 2017. Available online: http://cnc.gov.ro/wp-content/uploads/2018/04/1-Productie-de-filme-2017.pdf (accessed on 8 November 2018).

54. Andrei, A.G.; Zait, A. The Sharing Economy in Post-communist Societies: Insights from Romania. In *Knowledge Management in the Sharing Economy. Knowledge Management and Organizational Learning*; Vătămănescu, E.M., Pînzaru, F., Eds.; Springer International Publishing AG: Cham, Germany, 2018; Volume 6, pp. 39–55, ISBN 978-3-319-66889-5.

55. Gerber, E.M.; Hui, J.L. Crowdfunding: Motivations and Deterrents for Participation. *ACM Trans. Comput.-Hum. Int.* **2013**, *20*, 34. [CrossRef]

56. Marchegiani, L. From Mecenatism to Crowdfunding: Engagement and Identification in Cultural-Creative Projects. *J. Herit. Tour.* **2018**, *13*, 143–151. [CrossRef]

57. Statista. Available online: https://www.statista.com/statistics/412255/europe-market-size-alternative-finance/ (accessed on 31 October 2019).

58. Cai, C.W. Disruption of Financial Intermediation by FinTech: A Review on Crowdfunding and Blockchain. *Account. Financ.* **2018**, *58*, 965–992. [CrossRef]

59. Macchiavello, E. Financial-Return Crowdfunding and Regulatory Approaches in the Shadow Banking, FinTech and Collaborative Finance Era. *Eur. Co. Financ. Law Rev.* **2017**, *14*, 662–722. [CrossRef]
60. Brown, R.; Mawson, S.; Rowe, A.; Mason, C. Working the Crowd: Improvisational Entrepreneurship and Equity Crowdfunding in Nascent Entrepreneurial Ventures. *Intl. Small Bus. J.* **2018**, *36*, 169–193. [CrossRef]

# Achieving Cultural Sustainability in Museums: A Step Toward Sustainable Development

**Izabela Luiza Pop [1,\*], Anca Borza [2], Anuța Buiga [2], Diana Ighian [1] and Rita Toader [1]**

[1] North University Center of Baia Mare, Faculty of Sciences, Technical University of Cluj-Napoca, 76 Victoriei St., 430122 Baia Mare, Romania; diana.ighian@cunbm.utcluj.ro (D.I.); rita.toader@cunbm.utcluj.ro (R.T.)

[2] Faculty of Economics and Business Administration, Babeș-Bolyai University, 58-60 Teodor Mihali St., 400591 Cluj-Napoca, Romania; anca.borza@econ.ubbcluj.ro (A.B.); anuta.buiga@econ.ubbcluj.ro (A.B.)

\* Correspondence: izabela.pop@cunbm.utcluj.ro; Tel.: +40-765-228-389

**Abstract:** Cultural sustainability is increasingly being perceived as a fourth dimension of sustainable development. So far, some studies have debated the way in which cultural sustainability can lead to economic, social, and environmental benefits, while others have highlighted how the classic pillars of sustainability can help museums to achieve their core cultural mission. However, empirical studies regarding cultural sustainability in museums are scarce. Thus, one of the aims of our research was to fill this gap by developing several econometric models that explain the influence of heritage exposure; environmental behavior; openness to the public; and effectiveness and performance in collecting, preserving, and researching the cultural heritage. A second aim was to advance the current knowledge in this field by creating an integrated frame that explains the interconnections between different variables that help museums become sustainable, as well as the place and role of cultural sustainability within the overall framework of sustainable development. To achieve these goals, an in-depth analysis of the literature was followed by a survey of 86 Romanian museums. The results show that the ability of museums to reach cultural sustainability is influenced by components of their social and economic performance, while environmental behavior proved to be insignificant.

**Keywords:** sustainability; museums; heritage; cultural sustainability; effectiveness; environment; attractivity

## 1. Introduction

Sustainable development is increasingly seen as being composed of four dimensions; namely, economy, society, environment, and culture [1]. There are multiple reasons for adding culture to the traditional three-pillar construct of sustainability. Culture includes the beliefs, values, practices, and aspirations of a society; the way in which values are expressed and applied concretely in the day-to-day life of that society; and the processes and mediums through which the preservation and further transmission of values take place [2].

In order to reach environmental responsibility, social justice, and economic development, a certain set of values and behaviors should be developed among individuals [3]. As a sustainable society depends on a sustainable culture, any action to achieve sustainable development goals must take into account not only the natural, social, and economic environment, but also the cultural environment. If the culture of a society disintegrates, so will all its other components [2]. Thus, 'culture is essential for a sustainable society to be possible' [4].

On the basis of these considerations, in 2001, UNESCO's Universal Declaration on Cultural Diversity launched a process that aimed to add culture as the fourth dimension of sustainability [5]. Cultural sustainability was first defined by the World Commission on Culture and Development as

inter- and intra-generational access to cultural resources [6]. Cultural sustainability also implies that development takes place in a way that respects the cultural capital and values of society [7]. Cultural sustainability is based on the principle that the current generation can use and adapt cultural heritage only to the extent that future generations will not be affected in terms of their ability to understand and live their multiple values and meanings [8]. Thus, this dimension of sustainability is primarily concerned with ensuring the continuity of cultural values that link the past, present, and future [9].

As the concept of cultural sustainability began to develop, researchers' attention focused on identifying and analyzing the practical tools and ways through which culture could be preserved, controlled, and modeled in such a way that the general objectives of sustainable development are fulfilled. An important contribution to this purpose was made by the Council of the European Union through the Digital Agenda for Europe and in particular through the European Digital Library, Europeana [10]. Cultural heritage digitisation is one of the best solutions to preserve social and collective memory and extend the public access to collections at the same time. Therefore, the aim of Europeana is to increase access to cultural heritage by allowing the public to easily find in the portal any cultural item preserved by European cultural institutions [11]. However, the process of digitisation is far from being completed and it is highly dependent on the digitization actions adopted by each country and cultural institution [12].

Given the mission of museums to collect, preserve, and research cultural artefacts [13,14], as well as to use the heritage for educational, study, and enjoyment purposes [15], they have started to be regarded as having a key role in shaping our sustainable future [16]. Firstly, museums have the task of preserving cultural resources and making these resources known to current and future generations [17]. Globalization, linguistic, ethnic, and identity changes, as well as new livelihood practices, are factors that threaten the preservation and further transmission of cultural heritage [18]. Thus, one of the fundamental tasks of museums is to collect and preserve tangible and intangible cultural heritage so that cultural knowledge and skills, as well as memory and identity issues, can be passed on [5].

Secondly, through their educational function, museums can contribute both to keeping alive and further transmitting the beliefs and practices of a community, as well as to encouraging the development of new values, attitudes, and behaviors within society [3,19]. Through their exhibitions and their involvement in discussions and debates regarding climatic and environmental changes [20, 21], museums have the capacity to influence people's attitudes towards their natural environment [22], which can have a positive impact on the protection of local biodiversity [23,24]. Museums can also organize public activities and events that are focused on creating social value by promoting the adoption of 'socially responsible behaviors' in the community [14,25]. To fulfil their cultural, social, and environmental mission efficiently, museums can use modern technologies [26] that are specially designed for digital collection management [27], hands-on interactive exhibits [28], virtual reality [29], and E-museums [30]. Technological innovation allows museums to become more attractive, use their resources more efficiently, and increase exposure using online distribution and communication channels [31]. Besides attracting a higher number of visitors and a raise in the museums' own income [32], modern technologies help museums to better conserve the cultural items they hold, which has a positive influence on their sustainability.

As museums preserve, but also create culture, they are different from any other organization [4]. Thus, cultural sustainability in museums can be defined in either narrow or broad terms [33]. In narrow terms, it consists of collecting, preserving, conserving, and researching the material and immaterial cultural heritage [34,35] to ensure the access of present and future generations to cultural resources [36]. In broad terms, cultural sustainability in museums involves not only the preservation of cultural heritage, but also the use of heritage to create a certain set of values, attitudes, and behaviors among individuals, which leads to cultural vitality [3,18]. Cultural vitality is a result of cultural activities carried out by museums and a way through which museums can contribute to the achievement of economic, social, and ecological sustainability [37]. However, because cultural vitality cannot be achieved without cultural heritage, cultural sustainability is most often associated with the preservation

and conservation of cultural capital [35]. Hence, collecting, preserving, conserving, and researching cultural heritage are the core components of cultural sustainability in museums, which is why in this work, we focus on cultural sustainability in narrow terms.

Although the connection between museums and cultural sustainability is highly recognized, the studies on cultural sustainability in museums are limited to theoretical concepts and qualitative research [35]. Some scholars have focused their attention on highlighting how museums can contribute to the economic, social, and environmental goals of sustainable development by being or becoming culturally sustainable. Thus, culture has been approached as an instrument for the traditional three pillars of sustainability [38,39]. The cultural heritage of museums reflects local history and collective memories [37]. Therefore, museums can use their cultural heritage to strengthen the cultural identity of a community [19]; give a sense of place, rootedness, and belongingness to the residents; ensure continuity of traditional practices [37]; represent cultural diversity; promote intercultural dialogue, understanding, and tolerance; achieve a higher degree of social inclusion and cohesion [40]; and foster quality of life [41]. Moreover, cultural heritage is an essential resource for economic development. Museums are an important attraction for visitors and play a critical role in the field of cultural tourism [25]. Cultural heritage can also be used to develop educational programs and exhibitions that highlight the human–nature relationship and shape the values, attitudes, and behaviors of people, so as to include an ecological focus [18].

Other researchers have placed culture on an equal footing with the economy, environment, and society [35,38]. The independent role of culture in sustainability is explained by the importance of preserving, conserving, and maintaining different forms of cultural capital [3], given the fact that cultural heritage can be used to accomplish the social, ecological, and economic goals of sustainable development only after the necessary steps have been taken to preserve it [42]. A third approach sees culture as an 'overarching dimension of sustainability', which encloses the other three pillars of sustainability and leads to development as a cultural process [38].

A newer view is expressed by Loach et al. [4], who emphasize the need to analyze how the measures taken by museums to become economically, socially, and ecologically sustainable contribute to the fulfillment of their core cultural mission and, in this way, to the achievement of cultural sustainability. This approach is justified by the fact that financial constraints and the intense competition for attracting funds have led many museums in recent years to change their focus from cultural heritage to market [43]. In order to collect resources for their survival, museums have started to apply management strategies that often seek to maximize the economic, social, and cultural value they provide for their users [17,44]. Such strategies allow museums to gain a competitive advantage and financial support from tourists, authorities, and community members. Thus, sustainable management can be a tool that helps museums earn money for preserving the heritage by satisfying the visitors' needs and contributing to the community well-being [14]. However, 'the pressure to meet targets and demonstrate value' by becoming socially, economically, and environmentally sustainable can lead museums to neglect their original mission of acquiring, preserving, and researching collections [4].

Given this background, several questions arise: What is the place of cultural sustainability within the sustainable development framework in museums? Is it an instrument for achieving economic, social, and environmental sustainability, or is it supported by economic, social, and environmental sustainability? Can the four pillars be placed on equal levels/positions?

While the role of culture in achieving social, economic, and environmental sustainability has more frequently been debated in the literature, the opposite approach, according to which the three pillars of sustainability help a museum to become culturally sustainable, has received scant discussion. For this reason, our empirical study seeks to test the theoretical model proposed by Loach et al. [4], in which the three classic dimensions of sustainability contribute to the achievement of cultural sustainability in museums. Therefore, our aim is to develop the current knowledge in this field by trying to answer the following questions: What are the factors that influence cultural sustainability in museums? To what

extent do the social, environmental, and economic sustainable goals of museums support their core cultural mission of keeping the heritage objects safe?

Starting from these questions, our study provides an integrated approach that places cultural heritage in a central position of the sustainable development process in museums. In our view, cultural sustainability can influence social, economic, and environmental sustainability, but it is also influenced by components of these three classic dimensions of sustainable development. Thus, culture is a resource for economic, social, and environmental sustainability, but also a result of the three pillars, which support the cultural mission of museums as well.

Besides proposing a theoretical framework that reunites the input and output approaches of cultural sustainability in relation to the economy, society, and environment, this paper extends previous research by providing empirical evidence regarding the factors that can influence cultural sustainability within museums. To our knowledge, the previous research regarding cultural sustainability has not statistically examined and validated the different possible connections claimed to exist between cultural sustainability and the other three pillars of sustainable development in museums. Thus, the value of this paper is enhanced by the fact that the theoretical findings are empirically tested using econometric techniques. More precisely, the regression models we developed highlight how a museum's characteristics and results (i.e., relevance of collections, number of visitors, heritage exposure, openness to the public, effectiveness, and performance) can influence its cultural sustainability, viewed as the ability to fulfil its cultural mission of acquiring, preserving, and researching the cultural heritage. Paradoxically, although environmental hazards may seriously damage the cultural heritage, the environmental behavior of a museum turned out to be insignificant in relation to cultural sustainability.

The paper is structured as follows: the second section sets the theoretical foundation for defining the hypotheses and describes the survey structure, museum sector in Romania, survey methodology, and sample profile; the third section presents the findings of the empirical research; and the final section discusses the results, summarizes the conclusions, and proposes several suggestions for future research.

## 2. Materials and Methods

### 2.1. Defining the Hypotheses

Measures adopted to increase effectiveness and performance are an important part of economic sustainability [14] that allow a museum to fulfill a larger number of cultural objectives with the same amount of resources. Despite the variety of economic, social, cultural, and environmental benefits generated by museums, one of the great problems for these institutions is under-funding [17]. Consequently, during the last economic crisis, many museums were compelled to apply strategies to improve their competitive advantage and effectiveness [43]. Those who failed to implement such strategies were forced to sell works from their collections, or even merge with other museums to survive [17]. Given the limited and often insufficient financial resources of museums and the fact that they must incur certain costs in order to perform conservation and restoration activities [45], we assume that an increase in effectiveness and performance can positively influence cultural sustainability.

**Hypothesis 1 (H1).** *Cultural sustainability is positively related to effectiveness and performance.*

Cultural sustainability involves the protection of museum heritage. To preserve the artefacts, museums must install safety and security systems and ensure adequate microclimate conditions in exhibitions and warehouses [14]. Light, humidity, and temperature are the most important parameters, which require special attention. By using modern devices, museums should not have difficulties in keeping these parameters between the recommended limits. However, other factors caused by climate changes and natural imbalances are more difficult to control and may seriously damage museums' collections. Drought, floods, fires, hurricanes, and landslides are just some of these factors [46]. Therefore, to protect the integrity of their cultural assets, one of the first duties of museums is to keep the natural environment safe [47] (pp. 7,8). Green practices help to control the microclimate conditions

inside and outside the museum, which contributes to the achievement of heritage preservation objectives [47] (p. 2). Hence, we argue that there is a positive connection between the environmental behavior of museums and their cultural sustainability.

**Hypothesis 2 (H2).** *Cultural sustainability is positively related to environmental behavior.*

The social contribution of museums to sustainable development consists of building new relationships with their communities and particular groups of people [48], so as to stimulate intercultural understanding and acceptance [49], social cohesion, and a sense of belonging [50,51]. In this context, inclusiveness and openness are basic requirements for a socially responsible museum [48]. Beside improving the quality of people's lives, a socially responsible museum, with a visitor-centric perspective, is more attractive to community members and tourists [25]. This can lead to an increase in the financial resources the museum manages to attract from various sources (visitors, government, donors, sponsors). As a result of this financial support, the museum can successfully fulfill its primary mission of enriching, preserving, and researching cultural heritage. Therefore, we can state that a positive connection exists between cultural sustainability and the museum's openness to the public.

**Hypothesis 3 (H3).** *Cultural sustainability is positively related to openness to the public.*

Social interaction and interconnection between people from all social classes and ethnic communities [51] (p. 359) take place within exhibitions or at other events and activities organized by museums around their collections [52,53]. Therefore, heritage exposure is the primary way in which museums use the cultural resources they hold to serve the society and generate cultural vitality. At the same time, exhibitions are the basic product that differentiates museums from other cultural institutions and the reason most visitors choose to enter a museum. Related services such as restaurants or educational programs can improve the quality of visiting experience, but in the absence of exhibitions, they would not have the capacity to produce the same socio-cultural impact in the community. Also, exhibitions can increase the attractiveness of a museum, and in this way, the revenue attracted by it. In turn, high incomes allow a museum to achieve its heritage conservation goals to a greater extent. Because exhibitions are an important way to generate a high social impact, but also to financially sustain a museum, worldwide museum strategies focus on increasing the exposure of collections over the limits imposed by a museum's space. The practical application of this strategy involves organizing temporary exhibitions in other locations or even opening exhibition centers or satellite museums abroad [54–56]. On the basis of these considerations, we argue that there can be a positive link between cultural sustainability and heritage exposure.

**Hypothesis 4 (H4).** *Cultural sustainability is positively related to heritage exposure.*

*2.2. Survey Structure*

To test the hypotheses regarding the factors that might have an influence on cultural sustainability in museums, we opted for a quantitative analysis based on the application of a questionnaire at national level. The reasons that prompted us to opt for this research tool are that it requires less time and financial resources than other tools and allows more data to be collected from an extended geographical area. At the same time, the possible weaknesses of a questionnaire-based research, such as the fact that the qualitative level of the data collected depends on the honesty of the respondents and the degree to which they understand the questions, are similar to those of other research instruments [57].

The first step in designing the survey was to search and identify in the literature other relevant questionnaires regarding the sustainable development of museums. Thus, we noticed that previous research focused on assessing museum effectiveness and performance [58], improving energy

efficiency [59], identifying sustainability initiatives and measures adopted by museums [60], and evaluating the satisfaction of museum visitors [61]. Although those studies include some economic, environmental, and social sustainability issues, none of them cover all four dimensions of sustainability, and the cultural pillar is almost absent within them. Therefore, starting from the theoretical findings and the previous empirical research conducted in the field of museum sustainability, we designed a new questionnaire able to collect relevant data for testing our hypotheses. Before distributing the questionnaire at national level, it was first refined and improved based on the opinions expressed by three faculty members, a statistician, and several museum employees. The clarity of the items and the ability of museums to answer them was checked by applying the survey within the County Museum of Art 'Baia Mare Artistic Centre'.

The final version of the questionnaire consists of two parts. The first part includes 27 items that use a five-point Likert scale (1—total disagreement, 5—total agreement). Six items are related to cultural sustainability and investigate the ability of museums to collect, preserve, and research cultural heritage. Effectiveness and performance are measured through seven items that assess different output–input ratios (the results of the museum compared with the resources used to achieve the results). The five items dedicated to environmental behavior focus on the measures taken by museums to improve the use of electrical and thermal energy, fuel, water, and materials. Social relevance was split into two variables: heritage exposure (two items) and openness to the public (seven items). Heritage exposure measures the efforts made by a museum to make its heritage available to the public by organizing exhibitions inside and outside of the museum walls. Openness to the public evaluates the ability of a museum to offer attractive products and services on the market, satisfy the cultural needs and desires of its users, collaborate with community members for organizing various exhibitions and events, and attract a wide and diversified audience that is representative of all community groups and ethnic minorities [14]. The second part of the survey includes 16 questions related to the characteristics of the respondents and of the museum to which they belong. The questionnaire used for this research can be consulted in Appendix A.

In addition, the contact details of the respondent are requested at the end of the questionnaire (name, address, email). Despite the potential risk that the response rate would be affected by requesting this information, the reasons we decided to keep the contact data in the questionnaire are to avoiding duplication of answers from the same institution, the possibility of having a clear list of responding and non-responding museums, the possibility of re-contacting institutions that have not responded before a certain time, and the possibility of asking for clarifications in the case of incomplete questionnaires. Respondents were assured that their responses would be kept confidential and without their prior agreement, no material would be published suggesting a possible link between their museum and their answers.

*2.3. Museum Sector in Romania*

After setting up the research hypotheses and developing the questionnaire, our next step was to analyze the size, structure, and main characteristics of museums in Romania in order to identify the conditions that must be fulfilled by the sample.

According to the National Institute of Statistics (NIS) [62], the Romanian network of museums and public collections included 431 units in 2015 (without branches and satellite museums). Given the characteristics of our research, from this total, we excluded monuments, botanical gardens, zoos, aquariums, dendrological parks, and natural reservations (41 units). However, no data were available regarding the number of museums and the number of public collections. Thus, despite the mission, aims, and activities of museums being more complex than those of collections, in the lack of separate evidence regarding the two categories, we had no choice but to continue our analysis based on the premise that in Romania, there are 390 museums and public collections. The structure of these museums and collections depending on their type, the heritage objects they own, and the number of visitors recorded by them in 2015 is presented in Table 1.

**Table 1.** The structure of Romanian museums and public collections in 2015.

| Type | Museums and public collections | | Heritage objects | Visitors in 2015 |
|---|---|---|---|---|
| Art | 96 | 24.62% | 483,409 | 2,543,467 |
| Archeology and history | 59 | 15.13% | 4,342,209 | 3,033,069 |
| Natural history and science | 10 | 2.56% | 3,221,822 | 592,112 |
| Technology and science | 14 | 3.59% | 71,899 | 156,620 |
| Ethnography and anthropology | 119 | 30.51% | 1,111,344 | 1,425,414 |
| Specialized | 29 | 7.44% | 813,150 | 867,378 |
| General and mixed | 63 | 16.15% | 3,987,383 | 1,221,600 |
| TOTAL | 390 | 100.00% | 14,031,216 | 9,839,660 |

Source: adapted from Iagăr [63].

Considering the relevance of the heritage, the Romanian network of museums and public collections is structured as follows: 70% local museums and collections, 13% county museums and collections, 5% regional museums and collections, and 12% national museums and collections. Regarding the ownership, 18.79% of museums and collections are private, while 81.21% are public [63].

*2.4. Survey Methodology*

As the NIS does not provide the names and contact details of the museums included in their statistical reports, in order to further perform our research, we tried to identify the total population of Romanian museums. At this stage, the database 'Museums and Collections in Romania', made available online by the National Heritage Institute (http://ghidulmuzeelor.cimec.ro), proved to be particularly useful. This database allows museums and collections to be sorted by county, locality, and type, and also provides their contact information. Unfortunately, we found that many museums do not have an email address or website, which made it impossible to send the questionnaire online to these museums. By accessing each unit in this database, we were able to create a list with 186 museums that have an email address and a distinct manager/administrator. Museums with the same manager were counted only once because they were part of the same organizational structure, and the survey questions were designed for an organization as a whole.

On 3 October 2016, the questionnaire was sent by email to the museums included in the list. Given that the research was conducted at national level, we opted to manage the online questionnaire distribution using the facilities offered within the Google Drive platform. At the same time, printed questionnaires were collected from the museum managers who attended the National Conference of Cultural Managers (Bucharest) and the General Meeting of the National Network of Romanian Museums (Sibiu) from 29 October to 2 November 2016. The data collection ended on 29 November 2016, with 87 responses and a response rate of 46.77%. The Google Form survey was set up to accept the submission only if all the required questions were answered. In this way, very few cases of partial response were recorded. However, one of the printed questionnaires had to be removed as a result of incomplete answers. Therefore, the statistical analysis is based on 86 valid responses.

*2.5. Sample Profile*

Museums from all eight development regions of Romania completed the survey. The smallest number of answers (five) come from the Southwest Region and the highest number of completed questionnaires were collected from the Northwest Region (17). The last column of Table 2 shows the representativeness of each region, calculated as a ratio between the number of responses received and the number of museums and public collections in the region.

**Table 2.** Sample representativeness of each region.

| Region | Number of responses | Number of museums and public collections | Sample representativeness |
|---|---|---|---|
| Bucharest-Ilfov Region | 7 | 28 | 25.00% |
| Center Region | 14 | 123 | 11.38% |
| Northeast Region | 11 | 57 | 19.30% |
| Northwest Region | 17 | 38 | 44.74% |
| West Region | 8 | 39 | 20.51% |
| Southwest Region | 5 | 43 | 11.63% |
| South Region | 14 | 43 | 32.56% |
| Southeast Region | 10 | 19 | 52.63% |
| Total | 86 | 390 | 22.05% |

Thus, if we take as a reference the total number of museums and public collections, it can be seen that each region's sample representativeness is over 11%. Because of the large number of museums in the Center Region (123), it has the lowest representativeness (11.38%), even though it recorded more responses than other regions (14). At the opposite end is the Southeast Region, with the fewest museums (19) and the highest sample representation (52.63%). Overall, the ratio between the collected responses and the total number of museums and public collections that exist at national level is 22.05%. Therefore, given that the answers come from all regions of the country, and the fact that a significant part of the 390 units is public collections and not museums, we believe that the research results can be considered representative at national level.

Table 3 shows the structure of the responses according to museum type. Of the total number of replies, most come from general and mixed museums, followed by art museums and history and archeology museums.

**Table 3.** Sample representativeness of museums by type.

| Type | Museums and Public Collections | | | | Representativeness (Number of Responses/Total Number of Units) |
|---|---|---|---|---|---|
| | Number of Responses | | Total Number of Units in Romania | | |
| Art | 12 | 13.95% | 96 | 24.62% | 12.50% |
| Archeology and history | 12 | 13.95% | 59 | 15.13% | 20.34% |
| Natural history and science | 9 | 10.47% | 10 | 2.56% | 90.00% |
| Technology and science | 5 | 5.81% | 14 | 3.59% | 35.71% |
| Ethnography and anthropology | 9 | 10.47% | 119 | 30.51% | 7.60% |
| Specialized | 4 | 4.65% | 29 | 7.44% | 13.79% |
| General and mixed | 35 | 40.70% | 63 | 16.15% | 55.56% |
| TOTAL | 86 | 100% | 390 | 100% | 22.05% |

Table 3 shows that almost all museums of natural history and science completed the questionnaire (90%). They are followed by general museums and technology museums with a representative rate of 55.56% and 35.71%, respectively. Ethnography museums and art museums have the smallest degree of representation. This is explained by the fact that the vast majority of public collections that could not be excluded from the total population belong to these two categories. Also, specialized museums are slightly under-represented (13.79%), because many of them are managed by private enterprises and could not be contacted or did not want to respond.

Regarding the relevance of collections, the sample has the following distribution: county museums—30 answers; local museums—21 answers; national museums—23 answers; and regional museums—12 answers. If we analyze this structure in relation to the number of existing units at national level, we can notice a good degree of representation of national museums (46%), regional museums (57.14%), and county museums (52.63%). Because most public collections are of local relevance and could not be excluded from the analysis, the representativeness of local museums could not be accurately established. In the literature, it has frequently been stressed that museums with

a heritage of high cultural and artistic relevance are more likely to have a higher degree of public success [39,64]. Thus, we used the museum's relevance as a control variable in order to increase the accuracy of our results.

Regarding the number of visitors in 2015, 27.9% of the interviewed museums reported fewer than 5000 visitors, 37.2% registered between 5000 and 30,000 visitors, and 34.9% exceeded 30,000 visitors. As the number of visitors is an important criterion according to which the attractiveness of a museum is appreciated [17,65], in order to not influence the research results, we used the number of visitors as a control variable.

At the same time, it was found that museums belonging to the National Network of Romanian Museums (NNRM) were more open to completing the questionnaire. Of the 186 museums included in the list, only 64 were members of the NNRM. However, 53 of the 86 responses came from museums belonging to the NNRM. For this reason, we believe that NNRM membership is a possible influencing factor on museum sustainability, which is why we use it as a control variable.

Because of the variety of the collected data, we concluded that the sample can be considered representative of Romanian museums. Therefore, we continued our statistical analysis in order to test the hypotheses. The most important findings are presented in the next section.

## 3. Results

The relationship between cultural sustainability (CS) and the independent variables discussed above was empirically examined using the following hypothetical research model:

$$CS = \beta_0 + \beta_1 EP + \beta_2 EB + \beta_3\, OP + \beta_4 HE + \beta_5 R + \beta_6 V + \beta_7 NW + \varepsilon. \tag{1}$$

CS (cultural sustainability) is the dependent variable (DV) and denotes the ability of museums to collect, preserve, and research the heritage; EP, EB, OP, and HE are the four independent variables (IVs) that indicate a measure of effectiveness and performance (EP), environmental behavior (EB), openness to the public (OP), and heritage exposure (HE); R (relevance), V (the number of visitors), and NW (member of the NNRM) are the three control variables; $\beta_0$ to $\beta_7$ are the model coefficients; and $\varepsilon$ is the error term added to show the inaccuracy of the model.

The statistical processing of the collected data and the analysis of the relationship between the DV and the IVs were performed using IBM SPSS 22.0 software.

Initially, the dependent variable was analyzed in order to evaluate the distribution of the collected data. The descriptive statistics for the items included in the cultural sustainability scale show that mean and median are almost equal, while the highest standard deviation is 1.246 (Table 4). The negative values of the skewness coefficient indicate in all cases a deviation to the right from the empirical distribution. This means that a greater number of museums declared that their heritage is very well preserved, compared with the number of museums that did not agree with this statement. The kurtosis is used to measure the 'flatness' or the 'peakedness' of a distribution, and a value close to zero denotes a normal distribution. In our case, three items recorded positive values of kurtosis, which indicates that the distribution of the answers in these cases is more peaked than normal, while the other three items recorded negative kurtosis coefficients, which is a sign of 'flatness'. The lowest kurtosis value can be noticed in the case of the fifth item, which denotes that Romanian museums tend to have difficulties regarding the inclusion of their heritage in a digital database. This result is in line with a previous research conducted by Fanea-Ivanovici [10], who revealed that Romania has only 154,830 items included in Europeana, which places it in 24th position out of a total number of 44 providing countries. However, besides the first item, the skewness and kurtosis coefficients have values between $\pm 2$, which are considered acceptable [66].

**Table 4.** Descriptive statistics for the items included in the variable 'cultural sustainability'.

| Item | Mean | Median | Std. deviation | Skewness | Kurtosis |
|---|---|---|---|---|---|
| The heritage objects held by the museum are very well preserved | 3.895 | 4 | 0.736 | −1.281 | 3.177 |
| All the heritage objects are stored in good conditions | 3.825 | 4 | 1.118 | −1.039 | 0.511 |
| Conservation files are available for all heritage objects | 3.127 | 3 | 1.135 | −0.503 | −0.742 |
| Research files are available for all heritage objects | 3.441 | 4 | 1.184 | −0.576 | −0.557 |
| All the heritage objects are recorded in DOCPAT [1] | 2.895 | 3 | 1.246 | −0.319 | −1.190 |
| During the last year, the microclimate conditions were within the minimum and maximum admissible limits | 3.883 | 4 | 1.056 | −0.989 | 0.494 |

[1] DOCPAT is a computer program offered by the Romanian National Institute that helps museums to organize and manage a digital database with all their material cultural heritage.

The next step was to verify the reliability and internal consistency of each scale included in the questionnaire using the Cronbach's alpha coefficient [67]. The results of the reliability analysis indicate a good internal consistency of the 'cultural sustainability' component (Cronbach's alpha coefficient 0.85), the 'effectiveness and performance' component (0.841), the 'environmental behavior' component (0.922), the 'openness to the public' component (0.783), and the 'heritage exposure' component (0.727) (Table 5). The items included in the five scales are also intercorrelated (Cronbach's alpha coefficient for the total scale is 0.922), which means they can be used to measure the sustainability of museums.

**Table 5.** The results of the reliability analysis and adequacy of the sample. KMO—Kaiser–Meyer–Olkin.

| Dimension | Items | Cronbach's alpha | KMO | Variance extracted (%) |
|---|---|---|---|---|
| Cultural sustainability (CS) | 6 | 0.850 | 0.794 | 57.795 |
| Effectiveness and performance (EP) | 7 | 0.841 | 0.808 | 51.470 |
| Environmental behavior (EB) | 5 | 0.922 | 0.876 | 76.327 |
| Openness to the public (OP) | 7 | 0.783 | 0.780 | 45.004 |
| Heritage exposure (HE) | 2 | 0.727 | 0.524 | 76.177 |

The adequacy of the sample for each variable included in the model was measured using the Kaiser–Meyer–Olkin (KMO) test. The results of the KMO test exceed the minimum level of 0.5 [68] (Table 5) and the Bartlett's Test of Sphericity proved to be significant as well ($p < 0.001$), which means the collected data are suitable for structure detection (factor analysis).

Therefore, we used confirmatory factor analysis (CFA) to evaluate the extent to which the items explain the latent variables [69]. The last column of Table 5 shows that for the variable 'cultural sustainability', the six items explain the variance by 57.795%. For the variable 'effectiveness and performance', the seven items explain the variance by 51.470%. For the variable 'environmental behavior', the five items explain the variance by 76.327%. For the variable 'openness to the public', the seven items explain the variance by 45.004%. In the case of 'heritage exposure', the two items explain the variance of the latent variable by 76.177%.

The results of the CFA indicated that latent variables can be expressed as a linear combination of items. Thus, based on the items included in each scale, we generated five synthetic variables. Subsequently, to verify the links that exist between latent variables, the correlation coefficient was calculated. This coefficient may have values between −1 and +1. Values close to +1 indicate that there are direct positive relationships between two variables, while values close to −1 indicate the existence of negative associations [70] (p. 24).

The coefficients presented in Table 6 show the existence of positive, significant correlations between cultural sustainability and all four exogenous variables. Because the coefficient does not tell us the extent to which one variable depends on another, the results can be interpreted in a double sense. On the one hand, a museum that has taken all necessary steps to preserve, conserve, and research its collections has greater potential to organize attractive exhibitions for the public and to carry out social and environmental actions and activities. In turn, the social performance of the museum can lead to an increase in the number of visitors and financial resources it attracts, while environmentally responsible

behavior can reduce the consumption of natural and material resources. Thus, effectiveness and performance indicators are positively influenced by increasing output and decreasing input.

**Table 6.** The correlation coefficient between different variables.

|  | EP | EB | OP | HE | CS |
|---|---|---|---|---|---|
| Effectiveness and performance (EP) | 1 | | | | |
| Environmental behavior (EB) | 0.436 *** | 1 | | | |
| Openness to the public (OP) | 0.533 *** | 0.607 *** | 1 | | |
| Heritage exposure (HE) | 0.096 | 0.354 ** | 0.313 ** | 1 | |
| Cultural sustainability (CS) | 0.509 *** | 0.437 *** | 0.534 *** | 0.493 *** | 1 |

** Correlation is significant at the 0.01 level (two-tailed); *** correlation is significant at the 0.001 level (two-tailed).

On the other hand, organizing attractive exhibitions and meeting the community's needs are factors that have the capacity to help a museum attract the financial resources needed to fulfill its goals of preserving, conserving, and researching the cultural heritage. Furthermore, increasing effectiveness and manifesting environmentally responsible behavior by reducing the consumption of natural resources (energy, water, materials, etc.), reusing resources as much as possible, and recycling what can no longer be used in the current form [47] (p. 6) allow a museum to achieve more cultural objectives with the same amount of financial, human, and material resources.

In order to find out if there is any difference between the cultural sustainability of museums with various characteristics, we have used the analysis of variance (ANOVA). The ANOVA test infers whether there are any significant differences in the means of the corresponding population groups [71]. The null hypothesis assumes that all the museum groups have an equal cultural sustainability mean. Thus, by performing this test we intended to answer the following questions:

(1) Does the number of visitors have any effect on cultural sustainability? Do museums from the three categories differ significantly in achieving cultural sustainability? Which group has a higher cultural sustainability?

(2) Does the relevance of museums, according to their cultural heritage, have any effect on cultural sustainability?

(3) Does membership of the NNRM have any effect on cultural sustainability?

The results presented in Table 7 indicate that there are significant differences between the cultural sustainability of museums with different numbers of visitors. An annual number of visitors fewer than 5000 has a negative influence on the cultural sustainability of a museum. A large number of visitors (above 30,000) positively influences the cultural sustainability, but in a lower measure compared with the interval of 5000–30,000. Therefore, we can conclude that the best performances regarding cultural sustainability are obtained by museums with an annual number of visitors of between 5000 and 30,000. These results are in line with previous theoretical findings. According to Pop and Borza [72], a very high number of visitors contributes to the financial prosperity of a museum (which helps it to take all the necessary measures for keeping the heritage in good conditions), but may also represent a risk for the proper conservation of the exposed objects, especially if the exhibiting area is small [73,74]. Conservation of cultural objects requires a constant climate and large visitor numbers may cause an imbalance in temperature and humidity within exhibitions [75]. Also, visitors are a source of hydrogen sulfide, which affects silver and copper objects [76]. On the other hand, museums with low numbers of visitors may encounter difficulties in attracting the financial resources they need for preventive conservation and restoration of their collections.

**Table 7.** The analysis of variance (ANOVA) test for cultural sustainability and control variables. NNRM—National Network of Romanian Museums.

| Control variable | Categories | Frequency (%) | Mean variable CS | Test F-value | *p*-value |
|---|---|---|---|---|---|
| The annual number of visitors | <5000 | 27.9 | −0.544 | 5.581 | 0.005 |
| | 5000–30,000 | 37.2 | 0.267 | | |
| | >30,000 | 34.9 | 0.150 | | |
| The relevance of museums according to their cultural heritage | local | 24.4 | −0.343 | 2.709 | 0.050 |
| | county | 34.9 | 0.307 | | |
| | national | 26.7 | 0.125 | | |
| | regional | 14.0 | −0.409 | | |
| Is the museum a member of the NNRM? | yes | 61.6 | 0.174 | 1.643 | 0.203 |
| | no | 38.4 | −0.109 | | |

Significant differences were also found regarding the cultural sustainability of the local, county, national, and regional museums. The average cultural sustainability is higher among county and national museums, while the local and regional relevance of collections proved to negatively influence the cultural sustainability of a museum. The better results of national museums compared with local museums can be attributed to the fact that the former succeed in attracting larger resources because of the historical and cultural value of their collections. However, the fact that county museums record an average cultural sustainability higher than regional museums is surprising. A possible explanation may be the fact that county museums are financed by county councils and national museums are usually financed by national authorities (e.g., the Ministry of Culture), while regional museums do not have an equivalent regional authority to whom they belong. Our research revealed that most of the regional museums included in the sample are financed by county or local councils. County councils seek to fulfill goals relevant to the well-being and interests of their county community members. On the other hand, regional museums hold heritage objects that are relevant to a broader area, not only to the county that finances them (a region includes more counties), and implicitly, their mission and goals refer to the entire region. Thus, it is likely that county authorities have less motivation to spend money on regional museums compared with county museums, simply because regional museums do not reflect the county values, identity, and history in the way that county museums do. The same explanation can be provided for justifying the higher cultural sustainability of county museums compared with national museums. While most of the national museums are financed by the Ministry of Culture or another ministry, in six cases, the respondents declared that they function under the authority of a county council.

Although we expected to see a higher level of cultural sustainability among the museums that belong to the NNRM, the ANOVA test proved to be insignificant in this case (*p*-value > 0.05), which means that this characteristic does not significantly influence the cultural sustainability of a museum.

On the basis of these preliminary results, the next step was to perform multiple linear regression in order to explore the relationship between DV and IVs [25]. Because there is a correlation between the exogenous variables (predictors) (see Table 6), we proposed two models to explain the link between the predictors and the DV, so that the multicollinearity effect can be avoided.

Table 8 shows that the second model, which includes heritage exposure, effectiveness and performance, and openness to the public as significant predictors, achieved the highest value in the likelihood ratio (LR) test (67.356) and the highest R squared (0.33) of the two models. Although cultural sustainability is correlated with each of the four independent variables (Table 6), when their cumulative effect on cultural sustainability is analyzed, we note that environmental behavior becomes insignificant. This result can be explained by the fact that measures taken by museums to protect the natural environment, such as material recycling, the use of energy-efficient devices and systems, and encouraging an eco-friendly attitude among visitors and employees [77], influence cultural sustainability mainly through economy of financial resources, which allows for greater investment in the acquisition, preservation, and conservation of heritage. In the first model (Table 8), this effect is likely to have been taken over by the effectiveness and performance variable, given the significant

positive correlation that exists between environmental behavior and effectiveness and performance (see Table 6). Consequently, the second hypothesis, that there is a positive relationship between cultural sustainability and environmental behavior, is rejected. Thus, in the case of Romanian museums, it is found that green practices adopted by museums do not have a significant effect on controlling the climatic conditions and avoiding the natural imbalances that could pose a threat to the safety of collections.

**Table 8.** Summary of estimated models for cultural sustainability.

| Model Variable | Model 1 | | Model 2 | |
|---|---|---|---|---|
| | Coeff. | Wald Test | Coeff. | Wald Test |
| Member of NNRM (yes) | −0.291 * | 3.175 | −0.275 * | 2.906 |
| Number of visitors | | | | |
| >30,000 | −0.076 | 0.105 | −0.088 | 0.149 |
| 5000–30,000 | 0.203 | 0.922 | 0.207 | 0.994 |
| <5000 | - | - | - | - |
| Relevance of museum | | | | |
| regional | 0.181 | 0.502 | 0.172 | 0.470 |
| national | 0.458 ** | 4.215 | 0.448 ** | 4.244 |
| county | 0.504 ** | 5.760 | 0.444 ** | 4.622 |
| local | - | - | - | - |
| Heritage exposure | 0.362 *** | 18.256 | 0.352 *** | 18.861 |
| Environmental behavior | 0.024 | 0.066 | - | - |
| Effectiveness and performance | 0.397 *** | 15.959 | 0.352 *** | 12.626 |
| Openness to the public | - | - | 0.194 ** | 4.268 |
| Intercept | −0.193 | 1.816 | −0.184 | 0.875 |
| R squared | 0.32 | | 0.33 | |
| Likelihood ratio test (LR) | 64.639 *** (df = 9) | | 67.356 *** (df = 9) | |

* Indicates significance at 10% level or less, ** significance at 5% level, *** significance at 1% level.

The first hypothesis, according to which cultural sustainability is positively related to effectiveness and performance, is accepted. Museums that optimize the ratio between their results (e.g., the number of events, the number of visitors, the revenue level) and the inputs they have used to achieve the results (e.g., the number of employees, the number of exhibited objects, the level of expenditure) will have a higher chance of accomplishing their mission of protecting the cultural capital.

The third and fourth hypotheses, according to which cultural sustainability is positively related to openness to the public and heritage exposure, are accepted as well. These findings show that the ability of museums to preserve, conserve, and research the cultural heritage can be enhanced by organizing attractive exhibitions inside and outside of the museum's walls, exhibiting a high proportion of the artefacts they possess, providing services and products according to visitors' needs and desires, offering participative and interactive educational programs, developing accessible and inclusive programs, collaborating with the community members for organizing various events, having a diversified structure of employees and volunteers so as to reflect the structure of the local community, and attracting new users and/or disadvantaged groups of people. Museums can offer attractive exhibitions and interactive educational programs by using modern technologies, such as audio–visual media, guided presentations, interactive navigation stations, simulation media, interactive films, 3D graphics, and virtual reality [78]. By performing these actions, museums will create the opportunity for a wider number of people to 'perceive, understand, and appreciate' the value of cultural heritage, the conservation of which is important for future generations [79].

## 4. Discussion

Museums are public institutions whose general mission is to serve society [80,81]. Given this mission, museums seek to have a positive impact on sustainable development. Financial

constraints have forced museums to turn their attention toward becoming organizationally sustainable. According to Moldavanova [17], organizational sustainability includes both institutional survival and intergenerational sustainability, which is understood as the ability of a museum to fulfill its cultural mission in the long run. Beside the fact that sustainable management helps museums to prove their importance and to survive, our study showed that this approach also has a positive impact on museums' ability to achieve their cultural goals.

While most of the previous research presents the importance of cultural heritage in the process of sustainable development through its role in achieving social relevance and economic prosperity, influencing visitors to practice green activities, and developing their pro-environmental behavior [69,77], this paper adopts a less debated perspective, namely the examination of possible factors that can help museums to reach cultural sustainability by better accomplishing their goals related to the preservation, conservation, and research of cultural heritage. The factors included in the analysis were defined starting from the three classic dimensions of sustainability. The variable 'effectiveness and performance' was chosen for economic sustainability, 'heritage exposure' and 'openness to the public' were selected for social sustainability, and 'environmental behavior' was a factor associated with environmental sustainability. Using this approach, we aimed to evaluate the role of economic, social, and environmental sustainability in supporting the cultural mission of museums. Quantitative research was conducted to meet the aims of the study. The statistical results allowed us to accept three out of the four hypotheses referring to the positive connection between the DV and IVs.

The findings of the present study indicate that museums' effectiveness and performance, openness to the public, and heritage exposure have a positive impact on cultural sustainability. These findings are in line with the assertions of Loach et al. [4] and Errichiello and Micera [35], who hypothesized that economic and social dimensions of sustainability can be used by museums as tools for 'implementing cultural sustainability-oriented strategies'. Sustainable museums succeed in making better use of their resources, but at the same time, they have a higher financial capital available to collect, preserve, conserve, and research the cultural artefacts. Our results are also consistent with the findings of Pencarelli et al. [14], who emphasized that Italian museums are motivated to invest in social sustainability policies, because in this way, they can ensure their future. At the same time, socially responsible behavior allows museums to receive a higher level of public funding, which has a positive influence on their performance in terms of cultural heritage preservation [45].

Even though the correlation between environmental behavior and cultural sustainability proved to be significant, environmental behavior had no direct impact on museum cultural sustainability. Museum collections are not better preserved and conserved merely because they have an eco-friendly attitude and behavior. Therefore, the assumed impact of museum environmental behavior on protecting cultural heritage was not supported. The influence of pro-environmental behavior on cultural sustainability is rather indirect, through the economy of resources, which leads to higher effectiveness and, in this way, to cultural sustainability.

In conclusion, cultural heritage can be used as a resource for achieving economic, social, and environmental goals, but at the same time, our study has shown that some components of social and economic sustainability have the capacity to influence cultural sustainability within museums. Therefore, cultural sustainability has the role of both input and output in relation to the other pillars of sustainability, which reinforces the conclusions of previous studies that culture can be regarded as a fourth independent pillar of sustainability, equal to the economic, social, and environmental pillars [35,38], as illustrated in Figure 1.
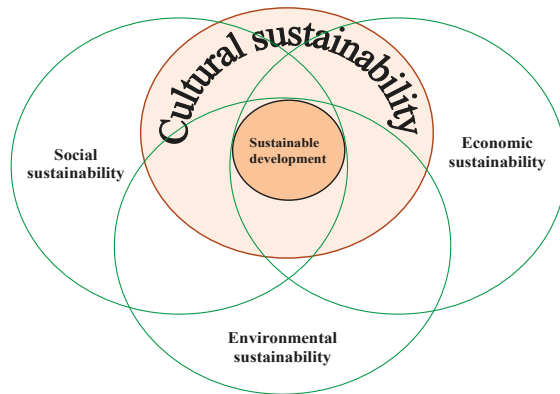
**Figure 1.** The four pillars of sustainable development in museums.

In museums, culture, economy, society, and environment together create an ecosystem in order to achieve sustainable development. These structures are all resources/instruments and destinations/goals at different points in the cycle. Museums are financed by local communities and cultural vitality is the way in which museums reward the community for its effort. First, society invests money and resources in a museum. Second, the museum acquires, conserves, preserves, and researches cultural heritage artefacts. Third, the museum repays the community by using the heritage to create cultural vitality and economic development and to develop pro-environmental and socially responsible behaviors among its visitors (Figure 2). The value created by the museum motivates authorities, sponsors, donors, and other stakeholders to continue to support it. The cycle is then repeated.
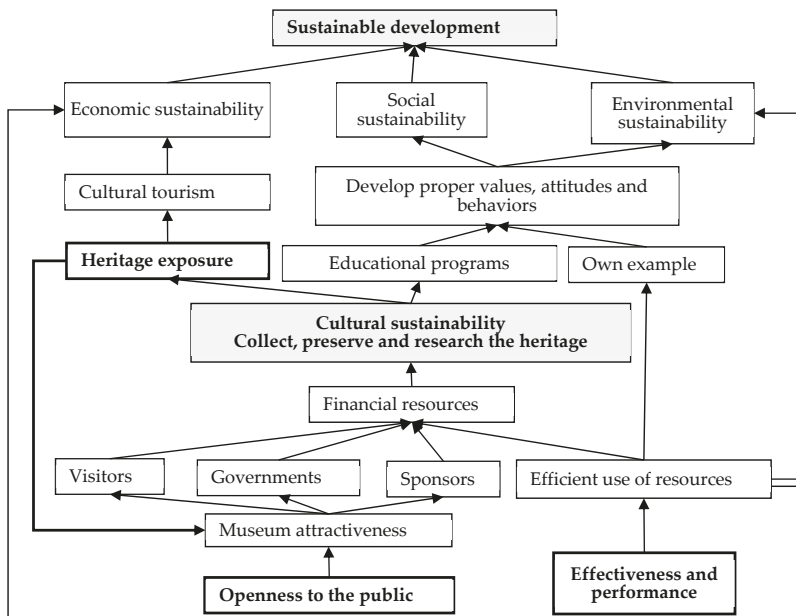


**Figure 2.** The input–output approach of cultural sustainability in museums.

However, it should be clarified that effectiveness and performance, openness to the public, and heritage exposure are not the only factors that have an influence on cultural sustainability. Guccio et al. [42] pointed out that the efficiency of cultural heritage preservation works is influenced by the professional characteristics of the specialists who take the decisions to carry out conservation work. The authors highlighted that specialized heritage authorities that belong to central government are less efficient in implementing conservation contracts than less specialized authorities. Errichiello and Micera [35] also examined the role of public–private partnerships and collaborations between cultural organizations and local stakeholders in achieving cultural sustainability. Another important factor is the national support offered to cultural institutions for digitizing their heritage. As Fanea-Ivanovici [10] highlighted, in Romania, the lack of funds is the main reason for which the number of objects included in Europeana per number of inhabitants is one of the lowest in Europe.

Given this background and the results of our research, future studies should focus on exploring the influence of other possible factors on cultural sustainability in museums. Because market orientation, innovation, and the high value offered to customers have a positive impact on economic and social sustainability of museums [82], they might influence cultural sustainability as well. In particular, technological innovation was found to be a source of competitive advantage for museums [32] and, consequently, it could have a great impact on cultural sustainability as well. Other possible factors could include web-based services and digital tools [67], which were found to be relevant regressors of the museums' attractiveness [25]; financial structure and organizational size, which impact the level of performance in museums [45]; and retailing activities, which are a source of self-generated revenue [44].

In addition, the conclusions of the present study should be confirmed through research conducted in other countries and geographical areas with different cultural and environmental background. In Romania, the occurrence of natural hazards is low, which is why their negative effect on cultural heritage is almost missing, and implicitly, the measures taken by museums for environmental protection have proven to have an insignificant effect on the preservation of cultural heritage. However, the results could be different in countries that are frequently confronted with problems related to natural hazards caused by climate instabilities.

The results may also differ according to the level of cultural consumption that exists among various countries. Figure 3 illustrates the percentage of people of the age of 16 years or over who participated in cultural activities offered by European cultural sites (historical monuments, museums, art galleries, or archaeological sites) in 2015, by country of origin.
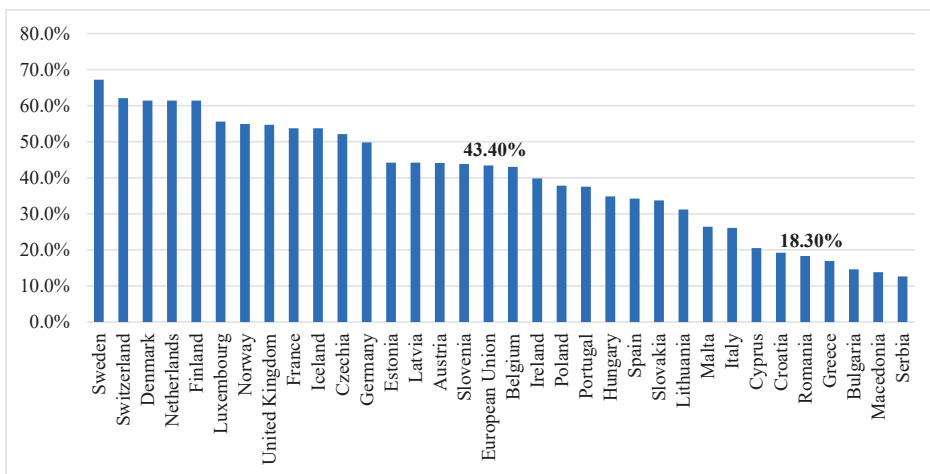


**Figure 3.** Participation in cultural activities offered by cultural sites in 2015; source: [83].

While in EU countries, 43.40% of the sample population participated at least once in cultural activities in 2015, in Romania, this percentage is only 18.30%. The main reasons for non-participation in cultural activities offered by Romanian cultural sites were the following: financial reasons—20.1%, no interest—26%, none in the neighborhood—22.3%, and other—31.5% [84]. A very interesting aspect is that, compared with other European countries, Romania has the highest percentage of people who declared that they have not participated in cultural activities because of the fact that there 'is none in the neighbourhood' (22.3%). This means that Romanian cultural institutions should increase the number of exhibitions and activities organized in different locations in order to support the development of cultural sustainability.

**Author Contributions:** Conceptualization, I.L.P.; Formal analysis, A.B. (Anuța Buiga); Investigation, I.L.P.; Methodology, I.L.P. and A.B. (Anca Borza); Project administration, A.B. (Anca Borza); Supervision, I.L.P.; Writing—original draft, I.L.P., A.B. (Anca Borza), A.B. (Anuța Buiga), D.I., and R.T.; Writing—review & editing, I.L.P., A.B. (Anca Borza), A.B. (Anuța Buiga), D.I., and R.T.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A  The questionnaire

Please rate the degree to which you agree or disagree with each of the following statements related to the management and sustainability of your museum, by using the following 5-point Likert scale:

1 – Strongly disagree
2 – Disagree
3 – Neither agree, nor disagree
4 – Agree
5 – Strongly agree

| No. | Statements | Answer | | | | |
|---|---|---|---|---|---|---|
| | **CULTURAL SUSTAINABILITY** | 1 | 2 | 3 | 4 | 5 |
| 1. | The heritage objects held by the museum are very well preserved | | | | | |
| 2. | All the heritage objects are stored in good conditions | | | | | |
| 3. | Conservation files are available for all heritage objects | | | | | |
| 4. | Research files are available for all heritage objects | | | | | |
| 5. | All the heritage objects are recorded in DOCPAT | | | | | |
| 6. | During the last year, the microclimate conditions were within the minimum and maximum admissible limits | | | | | |
| | **SOCIAL SUSTAINABILITY—Heritage exposure** | 1 | 2 | 3 | 4 | 5 |
| 1. | The museum exhibits a very high proportion of its heritage objects | | | | | |
| 2. | The heritage objects which are not exhibited in the museum can be visited at exhibitions organized in other locations or museums | | | | | |
| | **SOCIAL SUSTAINABILITY—Openness to the public** | 1 | 2 | 3 | 4 | 5 |
| 1. | The permanent exhibition/exhibitions of the museum are very attractive to the public | | | | | |
| 2. | Messages left by visitors in the museum's guestbook and/or Facebook page are reviewed in order to adopt improvement measures | | | | | |
| 3. | The museum's exhibitions and programs are accessible and inclusive | | | | | |
| 4. | The museum allows community members to organize various events, local meetings, and exhibitions in its spaces and buildings | | | | | |
| 5. | The museum aims to attract new users and/or disadvantaged groups of people | | | | | |
| 6. | The museum staff and volunteers are diversified enough to reflect the structure of the local community | | | | | |
| 7. | The museum offers participative and interactive educational programmes | | | | | |
| | **ENVIRONMENTAL BEHAVIOUR** | 1 | 2 | 3 | 4 | 5 |
| 1. | The museum has implemented measures to increase the efficiency of electricity consumption | | | | | |
| 2. | The museum has implemented measures to increase the efficiency of thermal energy consumption | | | | | |
| 3. | The museum has implemented measures to improve the efficiency of water consumption | | | | | |
| 4. | The museum has implemented measures to improve the efficiency of office materials consumption | | | | | |
| 5. | The museum has implemented measures to improve the efficiency of fuel consumption | | | | | |

| No. | Statements | Answer |
|---|---|---|
| | **ECONOMIC SUSTAINABILITY—Effectiveness and performance** | |
| 1. | The ratio between the annual number of events organized by the museum and the average number of employees is high | |
| 2. | The ratio between the annual number of visitors registered by the museum and the average number of employees is high | |
| 3. | The ratio between the annual income earned by the museum and the average number of employees is high | |
| 4. | The average number of visitors registered by the museum per square meter of exposure area is high | |
| 5. | The ratio between the museum's revenue from the sale of tickets and the number of objects exhibited in the museum is high | |
| 6. | The ratio between the annual number of visitors and the museum's total expenditure is high | |
| 7. | The share of own revenues in the total revenue earned by the museum is high | |

**Information about organisation and respondent**

**1. Is the museum part of a museum complex?**
☐ Yes          ☐ No

**2. The museum is:**
☐ Private          ☐ Public

**3. Is the museum a member of the National Network of Romanian Museums?**
☐ Yes          ☐ No

**4. The type of museum according to the importance of its collections is:**
☐ National museum          ☐ Regional museum
☐ County museum          ☐ Local museum

**5. The museum's profile is:**
☐ Natural Sciences     ☐ Art          ☐ History          ☐ Science and technology
☐ Ethnography          ☐ Mixed        ☐ Memorial         ☐ Archaeology          ☐ Other: ____

**6. The upper hierarchical institution of the museum is:**
☐ Ministry of Culture     ☐ County Council          ☐ Another museum          ☐ Other: _____
☐ Local Council          ☐ A private company          ☐ A university/faculty          ☐ The museum does not have a superior hierarchical institution

**7. Does the museum have its own legal personality?**
☐ Yes          ☐ No

**8. The museum where you work has:**
☐ Less than 11 employees (very small museum)          ☐ Between 11 and 20 employees (small museum)
☐ Between 21 and 50 employees (medium museum)          ☐ Between 51 and 150 employees (large museum)
☐ More than 150 employees (very large museum)

**9. Does the museum have its own income and expenditure budget?**
☐ Yes          ☐ No *(go to question 12)*

**10. The total revenues recorded by the museum in 2015 were**: ……………….. lei.

**11. How many percent are the museum's own revenues from total revenue?**
☐ Under 6%          ☐ Between 6% and 10%          ☐ Between 11% and 20%          ☐ Between 21% and 30%
☐ Between 31% and 40%          ☐ Between 41% and 50%          ☐ Between 51% and 60%          ☐ Between 61% and 80%
☐ More than 80%

**12. Was the museum in which you work open to visitors in 2015?**
☐ Yes          ☐ It was only partially open          ☐ No *(go to question 14)*

**13. The number of visitors registered last year by the museum was:**
☐ Under 5000          ☐ Between 5000 and 15,000          ☐ Between 15,001 and 30,000
☐ Between 30,001 and 50,000          ☐ Between 50,001 and 70,000          ☐ Between 70,001 and 100,000
☐ Between 100,001 and 150,000          ☐ Between 150,001 and 300,000          ☐ More than 300,000

**14. The number of heritage objects owned by the museum at the end of 2015 was**: …………

**15. What are the main issues affecting the sustainability of your museum (you can choose more options)?**
☐ Insufficient financial resources          ☐ Lack of museum specialists
☐ The legislative system applicable to museums          ☐ Lack of motivation among employees
☐ Excessive internal bureaucracy          ☐ Excessive bureaucracy in relation to other institutions
☐ Reduced autonomy of the institution          ☐ Insufficient storage and exposure space
☐ Others_____

**16. How long have you been working at the museum?**
☐ Less than a year     ☐ 1–3 years          ☐ 3–7 years          ☐ 7–15 years          ☐ Over 15 years

**Contacts:**

The function of the respondent . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

The name of the museum . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

Museum address . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

Museum e-mail address . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

*Please be advised that the data collected in this questionnaire is confidential and, if published, will not allow association with your museum without prior written consent.*

*Thank you for your time!*

## References

1. Swanson, K.K.; DeVereaux, C. A theoretical framework for sustaining culture: Culturally sustainable entrepreneurship. *Ann. Tour. Res.* **2017**, *62*, 78–88. [CrossRef]
2. Hawkes, J. *The Fourth Pillar of Sustainability: Culture's Essential Role in Public Planning*; Common Ground Publishing: Melbourne, Australia, 2001; ISBN 978-1-8633-5050-1.
3. Janhonen-Abruquah, H.; Topp, J.; Posti-Ahokas, H. Educating Professionals for Sustainable Futures. *Sustainability* **2018**, *10*, 592. [CrossRef]
4. Loach, K.; Rowley, J.; Griffiths, J. Cultural sustainability as a strategy for the survival of museums and libraries. *Int. J. Cult. Policy* **2017**, *23*, 186–198. [CrossRef]
5. Axelsson, R.; Angelstam, P.; Degerman, E.; Teitelbaum, S.; Andersson, K.; Elbakidze, M.; Drotz, M.K. Social and cultural sustainability: Criteria, indicators, verifier variables for measurement and maps for visualization to support planning. *Ambio* **2013**, *42*, 215–228. [CrossRef] [PubMed]
6. Järvelä, M. Social and Cultural Sustainability. In *Dialogues on Sustainable Paths for the Future*; Kohl, J., Ed.; Finland Futures Research Centre: Helsinki, Finland, 2008; pp. 46–64, ISBN 978-951-564-555-5.
7. Mpofu, P. The dearth of culture in sustainable development: the impact of NGOs' agenda and conditionalities on cultural sustainability in Zimbabwe. *J. Sustain. Dev. Afr.* **2012**, *14*, 191–205.
8. Pereira, H.N. Contemporary trends in conservation: culturalization, significance and sustainability. *City Time* **2007**, *3*, 15–25.
9. Al-Hagla, K.S. *Cultural Sustainability: An Asset of Cultural Tourism Industry*; Working Paper No. 6/2005; EBLA Center: University of Turin, Italy, 2005.
10. Fanea-Ivanovici, M. Culture as a Prerequisite for Sustainable Development. An Investigation into the Process of Cultural Content Digitisation in Romania. *Sustainability* **2018**, *10*, 1859. [CrossRef]
11. Guccio, C.; Martorana, M.F.; Mazza, I.; Rizzo, I. Technology and Public Access to Cultural Heritage: The Italian Experience on ICT for Public Historical Archives. In *Cultural Heritage in a Changing World*; Borowiecki, K., Forbes, N., Fresa, A., Eds.; Springer: Cham, Switzerland, 2016; pp. 55–75, ISBN 978-3-319-29544-2.
12. Preuss, U. Sustainable Digitalization of Cultural Heritage—Report on Initiatives and Projects in Brandenburg, Germany. *Sustainability* **2016**, *8*, 891. [CrossRef]
13. Hsu, C.C.; Tsaih, R.H.; Yen, D. The Evolving Role of IT Departments in Digital Transformation. *Sustainability* **2018**, *10*, 3706. [CrossRef]
14. Pencarelli, T.; Cerquetti, M.; Splendiani, S. The sustainable management of museums: an Italian perspective. *Tour. Hosp. Manag.* **2016**, *22*, 29–46. [CrossRef]
15. Bertacchini, E.E.; Dalle Nogare, C.; Scuderi, R. Ownership, organization structure and public service provision: the case of museums. *J. Cult. Econ.* **2018**, *42*, 619–643. [CrossRef]
16. Blagoeva-Yarkova, Y. The Role of Local Cultural Institutions for Local Sustainable Development. *Case-Stud. Bulg. Trakia J. Sci.* **2012**, *10*, 42–52.
17. Moldavanova, A. Two narratives of intergenerational sustainability: A framework for sustainable thinking. *Amer. Rev. Public Adm.* **2016**, *46*, 526–545. [CrossRef]
18. Soini, K.; Birkeland, I. Exploring the scientific discourse on cultural sustainability. *Geoforum* **2014**, *51*, 213–223. [CrossRef]
19. Härkönen, E.; Huhmarniemi, M.; Jokela, T. Crafting Sustainability: Handcraft in Contemporary Art and Cultural Sustainability in the Finnish Lapland. *Sustainability* **2018**, *10*, 1907. [CrossRef]
20. Friman, H. A museum without walls. *Mus. Int.* **2006**, *58*, 55–59. [CrossRef]
21. Hebda, R.J. Museums, climate change and sustainability. *Mus. Manag. Curator.* **2007**, *22*, 329–336. [CrossRef]
22. Sutter, G.C. Promoting sustainability: Audience and curatorial perspectives on the human factor. *Curator Mus. J.* **2008**, *51*, 187–202. [CrossRef]

23. Yuqin, D. The Role of Natural History Museums in the Promotion of Sustainable Development. *Mus. Int.* **2008**, *60*, 20–28. [CrossRef]

24. Nassauer, J.I. Monitoring the success of metropolitan wetland restorations: Cultural sustainability and ecological function. *Wetlands* **2004**, *24*, 756–765. [CrossRef]

25. Manna, R.; Palumbo, R. What makes a museum attractive to young people? Evidence from Italy. *Int. J. Tour. Res.* **2018**, *20*, 508–517. [CrossRef]

26. Camarero, C.; Garrido, M.J. The role of technological and organizational innovation in the relation between market orientation and performance in cultural organizations. *Eur. J. Innov. Manag.* **2008**, *11*, 413–434.

27. Mamrayeva, D.G.; Aikambetova, A.E. Information technology in museums. *Educ. Sci. Bord.* **2014**, *5*, 33–35.

28. Gül, S.N.; Akmehmet, K.T. Interactive spaces in art museums: A landscape of exhibition Strategies. *Solsko Polje* **2015**, *26*, 141–155.

29. Lepouras, G.; Vassilakis, C. Virtual museums for all: Employing game technology for edutainment. *Virtual Real.* **2004**, *8*, 96–106. [CrossRef]

30. Laine-Zamojska, M.; Zielonka, K.; Kuśmidrowicz-Król, A.; de Rosset, A. E-Museums Project. Making Polish Cultural Heritage Accessible Online. *Int. J. Herit. Digit. Era* **2014**, *3*, 701–711. [CrossRef]

31. Bell, L. Engaging the Public in Technology Policy A New Role for Science Museums. *Sci. Commun.* **2008**, *29*, 386–398. [CrossRef]

32. Pop, I.L.; Borza, A. Technological innovations in museums as a source of competitive advantage. In Proceedings of the 2nd International Scientific Conference SAMRO 2016: News, Challenges and Trends in Management of Knowledge-Based Organizations, Păltiniş, Romania, 14–16 October 2016; Oprean, C., Țîțu, M.A., Eds.; Editura Tehnică: Bucharest, Romania, 2016; pp. 398–405.

33. Lord, B.; Lord, G.D.; Martin, L. *Manual of Museum Planning: Sustainable Space, Facilities, and Operations*, 3rd ed.; AltaMira Press: Plymouth, UK, 2012; ISBN 978-0-7591-2147-8.

34. Stylianou-Lambert, T.; Boukas, N.; Bounia, A. Politics, tourism and cultural sustainability. In *Theory and Practice in Heritage and Sustainability: Between Past and Future*; Auclair, E., Fairclough, G., Eds.; Routledge: Abingdon, UK, 2015; pp. 176–189, ISBN 978-1-315-77161-8.

35. Errichiello, L.; Micera, R. Leveraging Smart Open Innovation for Achieving Cultural Sustainability: Learning from a New City Museum Project. *Sustainability* **2018**, *10*, 1964. [CrossRef]

36. Throsby, D. Cultural sustainability. In *A Handbook of Cultural Economics*; Towse, R., Ed.; Edward Elgar: Cheltenham, UK, 2003; pp. 183–186, ISBN 978-1-84064-338-2.

37. Wu, S.R.; Fan, P.; Chen, J. Incorporating culture into sustainable development: A cultural sustainability index framework for green buildings. *Sustain. Dev.* **2016**, *24*, 64–76. [CrossRef]

38. Soini, K.; Dessein, J. Culture-sustainability relation: Towards a conceptual framework. *Sustainability* **2016**, *8*, 167. [CrossRef]

39. Ernst, D.; Esche, C.; Erbslöh, U. The art museum as lab to re-calibrate values towards sustainable development. *J. Clean. Prod.* **2016**, *135*, 1446–1460. [CrossRef]

40. Stylianou-Lambert, T.; Boukas, N.; Christodoulou-Yerali, M. Museums and cultural sustainability: Stakeholders, forces, and cultural policies. *Int. J. Cult. Policy* **2014**, *20*, 566–587. [CrossRef]

41. Sutter, G.C.; Sperlich, T.; Worts, D.; Rivard, R.; Teather, L. Fostering cultures of sustainability through community-engaged museums: The history and re-emergence of ecomuseums in Canada and the USA. *Sustainability* **2016**, *8*, 1310. [CrossRef]

42. Guccio, C.; Pignataro, G.; Rizzo, I. Evaluating the efficiency of public procurement contracts for cultural heritage conservation works in Italy. *J. Cult. Econ.* **2014**, *38*, 43–70. [CrossRef]

43. Tsai, P.H.; Lin, C.T. How Should National Museums Create Competitive Advantage Following Changes in the Global Economic Environment? *Sustainability* **2018**, *10*, 3749. [CrossRef]

44. Larkin, J. 'All Museums Will Become Department Stores': The Development and Implications of Retailing at Museums and Heritage Sites. *Archaeol. Int.* **2016**, *19*, 109–121. [CrossRef]

45. Camarero, C.; Garrido, M.J.; Vicente, E. How cultural organizations' size and funding influence innovation and performance: the case of museums. *J. Cult. Econ.* **2011**, *35*, 247. [CrossRef]

46. Zhou, W.; Chen, F.; Guo, H. Differential radar interferometry for structural and ground deformation monitoring: A new tool for the conservation and sustainability of cultural heritage sites. *Sustainability* **2015**, *7*, 1712–1729. [CrossRef]

47.   Brophy, S.S.; Wylie, E. *The Green Museum: A Primer on Environmental Practice*; AltaMira Press: Plymouth, UK, 2013; ISBN 978-0-7591-2323-6.

48.   Janes, R.R. Museums, social responsibility and the future we desire. In *Museum Revolutions: How Museums Change and Are Changed*, 1st ed.; Knell, S.J., MacLeod, S., Watson, S., Eds.; Routledge: Abingdon, UK, 2007; pp. 160–172, ISBN 978-0-203-93264-1.

49.   Bridaa, J.G.; Meleddub, M.; Pulinac, M. Understanding urban tourism attractiveness: the case of the archaeological Ötzi museum in Bolzano. *J. Travel Res.* **2012**, *51*, 730–741. [CrossRef]

50.   Hawke, S.K. Local residents exploring heritage in the North Pennines of England: sense of place and social sustainability. *Int. J. Herit. Sustain. Dev.* **2011**, *1*, 32–40.

51.   Swarbrooke, J. Built attractions and sustainability. In *The Routledge Handbook of Tourism and Sustainability*; Hall, C.M., Gossling, S., Scott, D., Eds.; Routledge: Abingdon, UK, 2015; pp. 356–364, ISBN 978-0-203-07233-2.

52.   Dempsey, N.; Bramley, G.; Power, S.; Brown, C. The social dimension of sustainable development: Defining urban social sustainability. *Sustain. Dev.* **2011**, *19*, 289–300. [CrossRef]

53.   McKenzie, S. Social sustainability: towards some definitions. *Hawke Res. Inst. Work. Pap. Ser.* **2004**, *27*, 1–29.

54.   Fabelová, K. Museums for Sale: The Luvru and Guggenheim in Abu Dhabi. *New Presence Prague J. Cent. Eur. Aff.* **2010**, *12*, 53–58.

55.   Hazime, H. From city branding to e-brands in developing countries: An approach to Qatar and Abu Dhabi. *Afr. J. Bus. Manag.* **2011**, *5*, 4731–4745.

56.   Pop, I.L.; Borza, A. Increasing the sustainability of museums through international strategy. *Econ. Ser. Manag.* **2014**, *17*, 248–264.

57.   Passmore, C.; Dobbie, A.E.; Parchman, M.; Tysinger, J. Guidelines for constructing a survey. *Fam. Med. Kans. City* **2002**, *34*, 281–286.

58.   Legget, J.A. Mapping what matters in New Zealand museums: Stakeholder perspectives on museum performance and accountability. Ph.D. Thesis, Massey University Albany, Auckland, New Zealand, 2006.

59.   Perrin, T.; Druzik, J.; Miller, N. SSL adoption by museums: Survey results, analysis, and recommendations. 2014. Available online: https://energy.gov/sites/prod/files/2015/02/f19/gateway_museums-report_0.pdf (accessed on 10 July 2016).

60.   Xu, S.; Brophy, S.; Chang, R. Sustainability Tracking Survey Results. In Proceedings of the American Alliance of Museums and Professional Interest Committee on Green Summit on Sustainability Standards in Museums, Baltimore, MD, USA, 19–22 May 2013.

61.   Lundgaard, I.B.; Jensen, J.T. *Museums. Citizens and Sustainable Solutions*; Danish Agency for Culture: Copenhagen, Denmark, 2015; ISBN 978-87-90572-24-2.

62.   National Institute of Statistics. The activity of cultural-artistic units in 2015. Press release no. 161/30 June 2016. Available online: http://www.insse.ro/cms/sites/default/files/com_presa/com_pdf/activunitculart_r2015.pdf (accessed on 10 July 2016).

63.   Iagăr, E.M. *Activitatea Unităţilor Cultural-Artistice Anul 2015*; National Institute of Statistics: Bucharest, Romania, 2016; ISSN 2066-4087.

64.   Frey, B.S.; Meier, S. The economics of museums. In *Handbook of the Economics of Art and Culture*; Ginsburg, V.A., Throsby, D., Eds.; Elsevier North Holland: Amsterdam, The Netherlands, 2006; Volume 1, pp. 1017–1047, ISBN 978-0-444-50870-6.

65.   Siu, N.Y.M.; Zhang, T.J.F.; Dong, P.; Kwan, H.Y. New service bonds and customer value in customer relationship management: The case of museum visitors. *Tour. Manag.* **2013**, *36*, 293–303. [CrossRef]

66.   Darren, G.; Mallery, P. *SPSS for Windows Step by Step: A Simple Guide and Reference*, 4th ed.; Pearson: Boston, MA, USA, 2003; pp. 144–164, ISBN 0-205-37552-9.

67.   Wróblewski, Ł.; Bilińska-Reformat, K.; Grzesiak, M. Sustainable Activity of Cultural Service Consumers of Social Media Users—Influence on the Brand Capital of Cultural Institutions. *Sustainability* **2018**, *10*, 3986. [CrossRef]

68.   Williams, B.; Onsman, A.; Brown, T. Exploratory factor analysis: A five-step guide for novices. *Australas. J. Paramed.* **2010**, *8*, 1–13. [CrossRef]

69.   Han, H.; Hyun, S.S. Fostering customers' pro-environmental behavior at a museum. *J. Sustain. Tour.* **2017**, *25*, 1240–1256. [CrossRef]

70.   Opariuc-Dan, C. *Statistică Aplicată în ştiinţele Socio-umane. Analiza Asocierilor şi a Diferenţelor Statistice*; Arhip Art: Sibiu, Romania, 2011; pp. 24–25, ISBN 978-606-8164-19-9.

71. Moore, D.S.; McCabe, G.P.; Craig, B.A. *Introduction to the Practice of Statistics*, 6th ed.; WH Freeman: New York, NY, USA, 2009; pp. 579–699, ISBN 978-1-4292-1621-0.
72. Pop, I.L.; Borza, A. Factors Influencing Museum Sustainability and Indicators for Museum Sustainability Measurement. *Sustainability* **2016**, *8*, 101. [CrossRef]
73. La Gennusa, M.; Lascari, G.; Rizzo, G.; Scaccianoce, G. Conflicting needs of the thermal indoor environment of museums: In search of a practical compromise. *J. Cult. Herit.* **2008**, *9*, 125–134. [CrossRef]
74. Paulus, O. Measuring museum performance: A study of museums in France and the United States. *Int. J. Arts Manag.* **2003**, *6*, 50–63.
75. Camuffo, D.; Van Grieken, R.; Busse, H.J.; Sturaro, G.; Valentino, A.; Bernardi, A.; Blades, N.; Shooter, D.; Gysels, K.; Deutsch, F.; et al. Environmental monitoring in four European museums. *Atmos. Environ.* **2001**, *35*, S127–S140. [CrossRef]
76. Ankersmit, H.A.; Tennent, N.H.; Watts, S.F. Hydrogen sulfide and carbonyl sulfide in the museum environment—Part 1. *Atmos. Environ.* **2005**, *39*, 695–707. [CrossRef]
77. Han, H.; Kim, W.; Lee, S. Drivers of museum visitors' willingness to practice green activities. *Soc. Behav. Personal. Int. J.* **2018**, *46*, 233–247. [CrossRef]
78. Roussou, M.; Efraimoglou, D. High-end interactive media in the museum. In *Proceedings of the 26th International Conference on Computer Graphics and Interactive Techniques: ACM SIGGRAPH 99 Conference abstracts and applications, Los Angeles, CA, USA, 8–13 August 1999*; ACM: New York, NY, USA, 1999; Volume 8, pp. 59–62.
79. Cerquetti, M.; Ferrara, C. Marketing Research for Cultural Heritage Conservation and Sustainability: Lessons from the Field. *Sustainability* **2018**, *10*, 774. [CrossRef]
80. Pop, I.L. *Managementul și Dezvoltarea Sustenabilă a Muzeelor*; Presa Universitară Clujeană: Cluj-Napoca, Romania, 2017; pp. 61–66, ISBN 978-606-37-0288-4.
81. Rentschler, R.; Gilmore, A. Museums: Discovering services marketing. *Int. J. Arts Manag.* **2002**, *5*, 62–72.
82. Recuero, V.N.; Blasco López, M.F.; San-Martín, S. How can European museums reach sustainability? *Tour. Rev.* **2017**, *72*, 303–318. [CrossRef]
83. European Commission. Frequency of participation in cultural or sport activities in the last 12 months by sex, age, educational attainment level and activity type. Available online: https://ec.europa.eu/eurostat/web/products-datasets/-/ilc_scp03 (accessed on 6 February 2018).
84. European Commission. Reasons of non-participation in cultural or sport activities in the last 12 months by sex, age, educational attainment level and activity type. Available online: https://ec.europa.eu/eurostat/web/products-datasets/-/ilc_scp05 (accessed on 6 February 2018).

*Article*

# Event and Sustainable Culture-Led Regeneration: Lessons from the 2008 European Capital of Culture, Liverpool

**Yi-De Liu**

Graduate Institute of European Cultures and Tourism, National Taiwan Normal University, Taipei 106, Taiwan; yideliu@ntnu.edu.tw

**Abstract:** Culture-led regeneration has been widely accepted by European cities as an important component of urban renewal and sustainable development. However, the instrumental role of culture in urban regeneration has revealed several controversies. The study aims at contributing to the debate on urban cultural policy and management by answering two research questions: What are the key success factors for sustainable culture-led regeneration? How can cities strike a balance between the dilemmas of culture-led regeneration? Based on a case study of Liverpool as the 2008 European Capital of Culture, this research draws on long-term and multi-faceted data. The study period is from 2007 to 2018, with a view to tracking the long-term impact of event. Liverpool's strategies for sustainable culture-led regeneration are investigated from three aspects: cultural funding dilemma, economic dilemma and spatial dilemma. The findings reveal that incorporating events in a city's long-term regeneration trajectory, continued support and enhancement of local cultural processes and structures, and highlighting community involvement and development are major factors to ensure the cultural sustainability of event.

**Keywords:** event; sustainability; culture-led regeneration; European Capital of Culture; Liverpool

---

## 1. Introduction

In recent years, cities are gradually integrating culture into one of the cores of sustainable planning and policy discussions. Culture is also becoming a part of the emerging sustainable development model [1]. Cultural regeneration refers to "the continued support and strengthening of local cultural processes and structures" [2] (p. 396). At the same time, culture is seen as an important means of improving urban competitive advantage and solving political, social and economic problems in urban areas, thus creating an unprecedented importance [3,4]. As Evans [5] (p. 968) states, culture can be used as a "catalyst and engine for regeneration". Culture-led urban regeneration, including investments in large-scale cultural events and facilities, has been widely accepted by European cities as an important component of urban renewal and local economic development. When policy makers, city marketers, and cultural institutions all praise the contribution of culture to regeneration, scholars show a more cautious and even critical attitude towards its effectiveness. Over the years, in addition to developing various theoretical frameworks about culture-led urban regeneration, the academic community has also proposed a series of dilemmas and challenges that this approach may encounter [6]. Bianchini and Parkinson [7] first launch this debate to explore the dilemmas that cultural applications may face in urban regeneration. They point out that, in order to maintain sustainable development, cities need to strike a balance in investing on 'ephemeral' activity (e.g., events or festivals) and 'permanent' activity (e.g., facilities or infrastructures); between cultural production and consumption; as well as between the development of city centre and its periphery. They call these "cultural funding dilemma", "economic dilemma", and "spatial dilemma." Some studies have mentioned these dilemmas, such as [6,8–13].

However, empirical research seldom attempts to explore how cities could address and overcome these problems.

Event-led strategy is regarded as an important contributor to the cultural economy because of its significant economic, social and cultural impacts and its potential in the positioning of urban competition [14,15]. Launched by the European Union in 1985, the European Capital of Culture (hereinafter referred to as ECOC) is a cultural initiative, which designates each year different European cities with this title on a rotation basis, with more than 40 cities awarded so far. The origin of ECOC is purely cultural; however, as the program develops, the city uses it in different ways. In general, hosting the ECOC events gives a city an opportunity for social, cultural and economic regeneration, and has a generally positive impact on the city as a whole [16]. According to García [17], in addition to environmental, economic and social influences, scholars have begun to study the fourth impact of ECOC, namely the cultural impact. The case of this study—Liverpool, has been the gateway of UK to the rest of the world. However, in the late 1970s and early 1980s, the city suffered from a national recession, resulting in economic and social decline. Consequently, Liverpool saw the 2008 ECOC as a good chance to trigger renaissance of the city [18,19]. The 2008 ECOC is considered to represent a culture-led approach to regeneration [20,21] and is a key symbol of tangible and intangible revitalisation of Liverpool [22].

Despite the link between cultural event and urban regeneration increasing in policy rhetoric, a detailed examination of the relationship between culture, events, and sustainability is rare in the academic field. Although there is an increasing literature exploring why cities pursue culture-led strategies in urban regeneration and how culture can trigger different aspects of urban regeneration, few studies focus on key issues related to the dilemmas and challenges that cities may face. In addition, few people focus on long-term assessment and monitoring of regeneration programmes. Therefore, this article aims to contribute to these critical issues. The author attempts to fill the research gaps by adopting Liverpool—the 2008 ECOC—as a case study, which is widely regarded as a successful case of culture-led regeneration. Conducting such a study ten years after the end of the event helps to answer more objectively the following two research questions: What are the key success factors for sustainable culture-led regeneration? To what extent does Liverpool strike a balance between the three dilemmas noticed by Bianchini? The author will first examine the relevant literature extensively, including culture and sustainable development, culture-led regeneration and its dilemma. Then, the case studied and data sources will be explained. Finally, Liverpool's strategy and its long-term impact on urban regeneration will be investigated from three aspects: cultural funding dilemma, economic dilemma and spatial dilemma, followed by demonstrating the theoretical and empirical contributions of this study.

## 2. Literature Review

### 2.1. Culture and Sustainability

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (as cited in [2] (p. 384)) is one of the most commonly accepted definitions of sustainability, derived from the report of World Commission on Environment and Development in 1987. Policy and decision makers are widely adopting this concept to plan the future of our society [1]. Initially, this concept referred mainly to environmental issues; however, other areas have also been included in the scope of sustainable development over the years [23]. Until recently, the discussion of sustainable development still tended to focus on the three major issues, namely environment, economy and society, thus forming the so-called three-pillar model of sustainability, but cultural sustainability has not received much attention [2]. In recent years, as a culture's contribution to broader sustainable development has become clearer, there has been a new discussion and reflection on sustainable development. Culture can be seen as a key element of the concept of sustainability and can link different policy areas [24]. The role of culture in sustainability

or sustainable development has become a hot topic in some disciplines [1]. Hawkes [25] argues that: "culture is emerging as the 'fourth pillar' of sustainable development and plays a vital role in achieving sustainability" (as cited in [2] (p. 385)). These arguments have also gradually infiltrated into public policy discussions [26]. For instance, in the UK, the Department of Culture, Media and Sports [27] (p. 1) states: "enjoyment of and participation in the arts is fundamental to the core of successful sustainable development ... Arts have always been used to engage and inform as well as entertain, and using imagination and creativity encourages attitudinal change, as well as social and environmental transformation, all of which are necessary to make truly sustainable development possible." In Europe, "*In The Margins*", issued by European Commission, also contributed significantly to the articulation between culture and sustainable development [28].

Many researchers have recognised the impact of culture on sustainable development—for example, [24,25,29–32]. In recent years, an increasing number of documents have contributed to the dimensions of cultural sustainability. For example, Throsby [33] discusses the role of culture in sustainability and provides three frameworks about culture and sustainability, including: cultural capital as a sustainable resource, interaction between culture and the environment, and sustainability of urban cultural heritage. United Cities and Local Governments (UCLG) [34] proposes that the relationship between culture and sustainable development can be approached in two ways: through the development of the cultural sector itself (e.g., art, cultural and creative industries) and ensuring that culture has a place in other public policies (e.g., education, economics and urban planning). Both ways help to conceptualise the role that culture plays in sustainable development. Soini and Dessein [35] provide a framework for cultural sustainability: (1) culture is the fourth pillar of sustainable development; (2) culture plays a mediating role in achieving economic, social and ecological sustainability; and (3) culture is the necessary foundation for achieving the overall goal of sustainable development. Duxbury et al. [1] carry out a comprehensive summary of the relevant literature and provide four main axes to understand the role of culture in sustainable development, including: (1) culture as capital, both tangible and intangible; (2) culture as a process and way of life; (3) culture as a central element for providing the value of sustainable action; and (4) culture as a creative expression offering insights into sustainability issues.

## 2.2. Culture-Led Regeneration

Son [6] provides a review of the historical evolution of the link between culture and urban regeneration. Before the 1960s, the meaning of culture was closely related to "high culture" and did not involve economic meanings. However, between the 1960s and the 1970s, authorities started to recognise the need of combining culture with economy and turned to a more effective way to increase the influence of culture [36]. Since the 1970s, in response to the trend of deindustrialisation and post-industrialisation, many European cities have begun to realise that culture can be a stimulating factor of improving their competitiveness, attracting inward investment, and serving as an incentive to improve the overall economy [7,37]. Since the 1990s, culture has been widely noticed and used as a way of developing creative cities. The interest in "creative" economy has also grown. In this regard, it is recognised that cultural policies cannot exist in isolation, but should be closely integrated with other fields to enhance the effectiveness of urban regeneration. In the academic field, scholars investigate the issue of culture-led regeneration through various standpoints, such as culture and urban planning, cultural and economic development, cultural consumption, and sustainable regeneration, etc. [38].

The strategy of culture-led regeneration is rapidly expanding globally (see [5,7,10,37], etc.). This phenomenon is mainly based on the economic and social benefits brought to the policy makers. In addition, the potential of revitalising post-industrial cities has been well proven by several successful stories, such as Glasgow, Barcelona and Bilbao [5,10,39]. From an economic perspective, Evans and Shaw [40] argue that culture can contribute directly or indirectly to inward investment, job creation, new industry development, and public-private partnerships. In terms of socio-culture domain, culture-led urban regeneration not only helps to reposition cities, attract tourists and retain

talents, but also serve as a way to improve the quality of life of local people, such as providing better culture facilities and leisure activities [14].

However, culture-led regeneration is not a cure-all. According to Dinardi [41], in the academic community, the judgments towards this issue always oscillate between blame and praise. On the one hand, policy-oriented research is dedicated to measuring and demonstrating the magic of culture in renewing and regenerating cities and providing best practice guidance, e.g., [10,42–44]. Another type of research focuses on questioning or critically evaluating the rhetoric about culture. For example, Evans [5] (p. 960) criticises: "the attention to the high-cost and high-profile culture-led regeneration projects is in inverse proportion to the strength and quality of evidence of their regenerative effects". García [10] (p. 314) critically points out that "culture today is an economic asset, a commodity with a market value and a valuable producer of marketable city space". According to Gunay and Dokmeci [45], culture-led strategies continue to create a platform where culture is produced and consumed. This phenomenon is called a "carnival mask" or "selling places for pleasure", since it is believed that culture-led approach may have the risk of aggravating cultural commodification. Zukin's [4] criticism: "Whose culture? Whose city?" clearly highlights the role of culture in this conflict.

Vickery [46] emphasises that integrating cultural elements into urban strategies is a unique character of a culture-led approach for regeneration, where the term culture encompasses various categories, such as architecture, design, art, cultural activities, and creativity. Basset et al. [47] define three functions of culture in urban regeneration: (1) developing cultural resources in urban marketing strategies; (2) contributing to the urban economy by creative industries or quarters; and (3) enhancing social cohesion and local identity. García [10] argues that culture-led regeneration strategies include investing in major cultural events (such as ECOC), building iconic cultural facilities (such as the Guggenheim Museum in Bilbao), and developing creative and cultural quarters (such as Temple Bar in Dublin). Similarly, while considering regeneration issues, Throsby [33] divides urban cultural policies into two interrelated categories: providing cultural infrastructure and encouraging creative industries and cultural activities.

Given the historical evolution, cultural potential and diversity of cities, there are different potential ways to achieve culture-led regeneration. Many of the theories and practices of culture-led regeneration have evolved from models provided by European cities [7]. Evans and Shaw [40] point out the following three relationships between culture and urban regeneration. According to Ferilli et al. [48], culture plays different roles in each of these three pathways, and the results are quite different. Among them, the impact of "culture-led regeneration" is the most sustainable, followed by "cultural regeneration" and finally the "culture and regeneration" model. Evans [20] believes that the case of the 2008 ECOC Liverpool should be classified as a "culture-led regeneration".

(1) *Culture-led regeneration*. Culture is seen as a catalyst or engine of regeneration in this model. With its high profile, culture is often seen as a symbol of regeneration. It could be a new or reused building for public or commercial use (such as Tate Modern in London or Guggenheim Museum in Bilbao), the development of unused spaces (such as garden events or Expo venues) or cultural events (such as ECOC) used to reshape city image.

(2) *Cultural regeneration*. Here, culture is more fully integrated into other regional development strategies, with a closer connection with environmental, social or economic issues. This approach is also closely related to cultural planning approach of regeneration, with culture being prioritised in the urban planning process [49].

(3) *Culture and regeneration*. In this model, culture has a specific but limited role and is not fully integrated into urban plans or strategies. It is often because culture and regeneration projects belong to different sectors, or culture is undervalued. Policy interventions are usually small-scale, such as hiding a historical museum in the corner of industrial site or setting up public art projects after the design of a building. Sometimes, local residents, businesses, or cultural organisations may make their own intervention to this vacuum.

*2.3. Dilemmas of Culture-Led Regeneration*

(1) *Cultural funding dilemma*. Physical development of facility and holding events are two major strategies for urban regeneration. Infrastructure legacy is an important part of event's cultural sustainability, but investing in an event programme can also be sustainable when it matches with a holistic strategy of cultural planning [2,10]. The complexity lies in how to achieve the right balance of investment between event-led and facility-led regeneration as to ensure sustainability [10]. Due to its permanent and highly visible character, the iconic cultural facility can serve as a pioneer in reshaping city brand and attracting tourists, such as the Guggenheim Museum in Bilbao [49]. Richards and Palmer [2] also point out that cultural facilities built for hosting events may also bring important impetus to the cultural life of the city, and are often regarded as a core element of the event's succession planning. However, there are many examples of unsustainable facility development. For example, Bianchini [50] argues that investing in landmark cultural facilities may create expensive, underutilised construction (also known as "white elephants") and lead to gentrification in surrounding areas. Evans [49] criticises these facilities for often ignoring the social or cultural needs of the locals and having limited impact on economic recovery and employment in the long run. In addition, flagship projects can be difficult to use, require significant investment and subsequent operating costs, and hinder the development of local culture or participatory community activities [10]. Conversely, investing in "soft", event-led regeneration can immediately enhance the city's image, attract tourists, contact people and place, and also bring sustainable benefits to the local community [14]. However, the impact of hosting events may be short-lived. Even with well-planned cultural activities, the community participation rate may be low due to lack of information or promotion, resulting in a low visibility and collective memory of the event [6]. Richards and Palmer [2] add that the achievement of event might be not sustainable due to budget cuts, change of administration or shift or policy priority.

(2) *Economic dilemma*. The second—economic dilemma—referring to the balance between stimulating cultural consumption and supporting cultural products, is closely related to the first dilemma. Funding either flagship projects or major events aims to promote urban tourism, encourage community participation and meet local residents, which may have a potentially significant impact on the development of cultural and creative industries [10]. According to research by Binns [51], various cultural consumption-oriented policies have been developed, including the investment of hallmark cultural facilities such as museums or art galleries, or large events such as ECOC. After decades of industrial recession and the booming of experience economy, it can be understood that cities may prefer to develop consumption-oriented policies and construct an urban image that appeals to tourists, investors and "creative class" [52]. This approach may also have "knock-on" effects on other economies. However, investing in iconic facilities or events is either expensive or momentary [10]. It is believed that, in the long run, cultural consumption strategies are likely to be less sustainable, as most jobs created by the cultural or tourism sector are low-paid and often temporary. The other side of the coin is to promote a production-based strategy involving the development of a range of sectors that produce cultural goods (cultural industries) and non-cultural products (creative industries) [53]. According to Sepe and Di Trapani [54], creative resources are often more durable than physical resources. For example, the attraction of monuments and museums often fades, but creative resources can be constantly updated. In addition, the creative industry doesn't need to rely on the concentration of cultural resources, so it is more mobile and the production can be anywhere [55]. In addition, the development of the cultural industry can also stimulate cultural consumption [8]. However, some researchers have revealed the negative aspects of cultural production approach. For example, Hajer [56] emphasises that existing blue-collar classes often have no access to emerging employment in new cultural or creative sectors. Therefore, a culture-based, production-led regeneration strategy may bring limited benefits to the disadvantaged groups.

(3) *Spatial dilemma*. The last dilemma discovered by Bianchini [50] is called "spatial dilemma", which refers to the balance between the development of the city centre and the periphery. Culture-led regeneration usually does not benefit everyone in the city and can have a negative impact on some

people. The biggest problem associated with urban renewal projects is the displacement of existing communities, with the aim of building flagship buildings or hosting major events [57]. Spatial dilemma is often associated with the topic of "urban image", as it is only possible to build flagship venues or hold large events in the city centre to improve the image of the city and attract large investments, media coverage and tourists [38]. Therefore, it may lead to the problem of "gentrification", that is, the resettlement of high-income groups, while pushing the low-income group to the edge, even if the latter is not forced to leave. Since the regeneration project aims to improve the local, it often leads to rising house prices or living costs. It is argued that culture-led projects should benefit existing communities rather than new ones [57]. However, the most marginalised community displaced may be an unanticipated outcome of regeneration programmes. Another common challenge is the inability to use iconic cultural investments (infrastructure or events) to reduce the poverty of local communities [10]. Compared with residents, local elites tend to have a greater influence on cultural policies, so cultural regeneration in urban centres often overlooks marginalised or suburban low-income groups [6]. As a result, local communities may feel that they are unable to benefit from an improved city centre and this can lead to tensions between specific social groups. Compared with the above-mentioned regeneration strategies that focus on the city centre, recent research, e.g., [58–60], emphasises the impact of culture on individuals and communities at the social level [38]. Ensuring that local community has an "ownership" is a key factor in ensuring the sustainability of events [16].

## 3. Research Methods

The case studied—Liverpool—has historically been an important harbour city with a strong industrial base. With the support of the industrial revolution and overseas trade during the British Empire, the city grew substantially in the 19th and early 20th centuries. However, since the early 1970s, Liverpool suffered a severe economic downturn due to the decline in the importance of docks and its manufacturing, leading to high unemployment and social poverty [61]. Over the past 40 years, Liverpool has experimented with various experiments and innovations in urban regeneration, possibly more than any other city in the UK or Europe. However, due to the continued weak demand and investors' lack of confidence in the local economic recovery, the process of urban regeneration in Liverpool has been limited or delayed. In addition, some reconstructions lacked clear objectives and did not appear within the overall regeneration framework of the city [62]. Evans [20] criticises Liverpool's regeneration strategy of lacking cultural aspects in city centre redevelopment. Culture has hardly integrated into the mainstream urban design, planning or economic development agenda. Liverpool saw therefore the 2008 ECOC as an unprecedented chance to achieve the city's regenerative goals and accelerate city's physical development. In addition to providing impetus for physical regeneration and economic development, culture was seen as an effective way to engage people in the urban renewal process. Another important goal was to reshape Liverpool as a tourist destination, improve city image in the eyes of media and general public, and support social development through culture [61]. According to Evans [10], Liverpool's ECOC is considered to be a culture-led regeneration strategy. Today, Liverpool has made significant achievements of applying the ECOC title as a trigger for broader regeneration of the city. For example, Liverpool Vision became the first urban regeneration company in the UK, bringing together some of the city's master plans, including the Paradise Street regeneration project, branded as part of the shopping complex—Liverpool One. Liverpool Vision was a key partner of the ECOC's parallel regeneration project—the Kings Waterfront, with Arena and Convention Centre Liverpool (ACCL) as the most notable initiative. So as to the research sources, research questions are answered by long-term and multi-faceted data. The study period is from 2007 to 2018, with a view to tracking the long-term impact of the 2008 ECOC. More precisely, the research data consists of the following two strands.

(1) *Quantitative data*. Five types quantitative data were derived from the databases of Impacts 08 and Impacts 18 research projects, provided by the Institute of Cultural Capital in Liverpool. First, repeat surveys were conducted in different communities in Liverpool to investigate the perceptions

of residents about the 2008 ECOC. The research sample is based on four neighbourhoods (Aigburth, City Centre, Kirkdale and Knotty Ash) with various socio-economic and geographical backgrounds. Although these four communities cannot represent all the existing communities in Liverpool, they allow giving a comparison of how ECOC influenced a broader cross-section of population. The repeat household survey was carried out in 2007, 2008, 2009 and 2018 in each neighbourhood. A total of 3052 residents were surveyed over the four points of time. Second, to provide a picture of volunteers' motivations and benefits gained during the 2008 ECOC, two postal surveys were collected in 2007 and 2009, with valid sample of 312 in total. The third strand of data is based on content analysis of media, including coverage of Liverpool in general and mentioning the Liverpool ECOC specifically. The first issue covers a sample of 5783 articles published between 1996 and 2017, and the second issue amounts to 1739 between 2000 and 2017. The purpose is to examine the legacy of the ECOC on city image and reputation. Fourth, to identify the legacy that the Liverpool ECOC might leave for Liverpool's creative industries, two online surveys were undertaken in 2007 and 2009, with a total of 123 responses from local creative professionals. Finally, surveys of grassroots cultural organisations were done in 2007 and 2018, with the aim of exploring the vitality and sustainability of cultural system and creative industries in Liverpool. It provides a snapshot of change in cultural vibrancy over the last ten years.

(2) *Qualitative data*, including ECOC impact assessment reports and academic papers. These data are qualitative in nature, derived from either narratives of interviewees or discourses of scholars. In order to add to the completeness of analysis, the study refers to three evaluation reports on the 2008 ECOC and the ECOC programme as a whole. The first report, issued by Palmer/RAE Associate and commissioned by the European Commission, aimed to assess the ECOC's impacts on different European cities or regions between 1995 and 2004. The second report was conducted by the other consultant called Ecorys, also commissioned by the European Commission. Since 2007, Ecorys took charge of yielding individual impact study for each ECOC host city. The third report, entitled as "*European Capital of Culture: Success strategies and long-term effects*", was commissioned by the European Parliament and published by García and Cox [63]. As a comprehensive assessment, this report examines the long-term impacts of the ECOC program over the past 30 years and explores successful strategies and "best practices". In addition, over the past decade, a number of academic journals and book chapters have been devoted to exploring Liverpool's experience as the 2008 ECOC Liverpool. These academic publications help to validate and supplement the above assessment reports. For instance, Campbell [64] and Campbell et al. [65] provide insightful and critical perspectives about the 2008 ECOC and the development of Liverpool's creative industries. The studies of Connolly [66], O'Brien [67,68], Cox and O'Brien [21] and Evans [20] offer reflections on cultural planning, cultural policy and governance of the 2008 ECOC Liverpool. Boland [69] challenges the official rhetoric of Liverpool as the 2008 ECOC.

## 4. Research Findings

### 4.1. The Issue of Cultural Funding Dilemma

Hosting cultural events such as the ECOC is an alternative strategy for projecting a cultural image of the city to potential investors or visitors [51]. The ECOC title can be seen as a "hard branding" that can be used to market cities [49]. Reviewing the history of ECOC, different cities have adopted different approaches to ensure the sustained effects of ECOC. The most common way was improving cultural facilities or developing programmes of cultural activities [16]. Since the mid-1990s, with the culture-led regeneration strategy becoming a unique urban cultural policy, the cities started to link the ECOC title with other physical regeneration, such as the constructions of infrastructure or cultural venues [10]. Liverpool identified tourism development as one of the main goals of the 2008 ECOC, hoping to attract tourists, reposition and rebrand the city, promote the city as a cultural destination, and launch the underdeveloped tourism framework [63]. Given the city's current quality and quantity of cultural supply, Liverpool did not need to expand and finance the cultural infrastructure for the 2008

ECOC. Over the past two decades, Liverpool's extensive physical regeneration has provided many cultural opportunities, such as Tate Liverpool, the Maritime Museum and the Liverpool Museum in the redeveloped Albert Dock [61]. However, the ECOC's position offered a focal point for accelerating existing projects, including a large concert/convention centre—ACCL (see above)—and the refurbished Bluecoat Art Centre, providing venues for subsequent cultural activities. The ECOC also incorporated future projects, including the new Museum of Liverpool and World Heritage Waterfront. To facilitate the reading, Table 1 illustrates the key agencies, networks, events, initiatives and parallel regeneration projects of the Liverpool ECOC.

**Table 1.** The key elements of the 2008 ECOC Liverpool.

| Types | Key Elements |
| --- | --- |
| Agencies | Liverpool Culture Company → Culture Liverpool |
| Networks | Liverpool Arts Regeneration Consortium (LARC), Mersey Partnership |
| Events | Eight themed years: Year of Learning (2003), Year of Faith (2004), Year of Sea (2005), Year of Performance (2006), Year of Heritage (2007), ECOC Year (2008), Year of Environment (2009), and Year of Health, Well-Being & Innovation (2010) |
| Initiatives | Creative Community, Four Corners, 08 Welcome, 08 Volunteer |
| Parallel regeneration | Arena and Convention Centre Liverpool (ACCL), Liverpool ONE, Museum of Liverpool, Bluecoat Art Centre |

The event programmes of Liverpool 2008 were by far one of the most ambitious and extensive ECOC programme. The budget of Liverpool 2008 was particularly high, with a multi-year event for eight consecutive years from 2003 to 2010, and subsidising cultural organisation, including event hosting and sustainable development funds [63]. In addition, a so-called 08 Welcome program was developed with an aim of improving the visitor experience, with more than 10,000 front-line employees trained [61]. However, in general, with the end of a major event, the frequency of cultural activities in the next few years may be reduced due to the shortfall of funds, and even some activities may be cut [2]. The City of Liverpool and its partners were committed to continue funding for culture for two more years after 2008. Liverpool Cultural Company also subtly combined existing and new cultural programmes through partnerships to attract local and external audiences [61]. As a result, the media impact is very high. The ECOC title created absolutely positive media coverage between 2003 and 2008. The media's coverage of the city itself has also changed, with the number of positive reports on Liverpool increasing by 71% between 2007 and 2008 [70]. In addition, 80% of residents agreed that the ECOC has improved Liverpool's positive image. Externally, 79% thought that Liverpool is a rising city [61]. In the post-ECOC period (2008–2018), positive stories of urban icons and culture became common topics in media coverage, replacing previous negative reports on social issues. The media coverage of social issues (often negative) was also significantly lower in the post-ECOC period. Proportionally, media coverage related to urban imagery has received relatively more attention, and reports are mostly positive [70].

These changes in the external images are important, not only for one-off visits, but also for long-term tourism and inward investment [63]. It seems that the activities organised under the Liverpool 08 banner were important factors in promoting the transformation of city image. One of the key success factors was Liverpool Culture Company's aggressive marketing strategies and continuity of events. Moreover, the indirect legacy of ECOC is undoubtedly improving Liverpool's cultural and tourism offers. One of the key success factors in this regard was the strong coordination and synergy between Liverpool's ECOC program and other regeneration initiatives, as reflected in the Liverpool Vision's Regeneration Strategy launched in 2000. The ECOC also helped to initiate or accelerate large investment projects already under consideration, such as the Liverpool ONE retail complex. ECOC provided an extra boost to seeing what changes can be made through culture. However, this project would continue to be carried out regardless of whether there was public investment.

Consequently, Liverpool experienced a significant increase in inbound visitor numbers. Based on the statistics collected from Visit Britain – the tourist board of Great Britain – Figure 1 illustrates the trend of Liverpool's inbound visitor numbers. Visitor numbers started to rise once Liverpool was awarded the ECOC title in 2003, and reached the highest point in 2008, with 553,000 staying visits. However, as with other ECOC host cities, Liverpool experienced a significant decline in visitor numbers in 2009 and 2010. In 2012, however, the number of inbound visitors returned to the 2008 level. In 2017, visitor numbers reached a new record level, with 839,000 staying visits. There is also a steady improvement in terms of Liverpool's ranking compared with other UK cities. In 2017, Liverpool was the fifth most popular destination in the UK for international visitors, right after London, Edinburgh, Manchester and Birmingham [71].
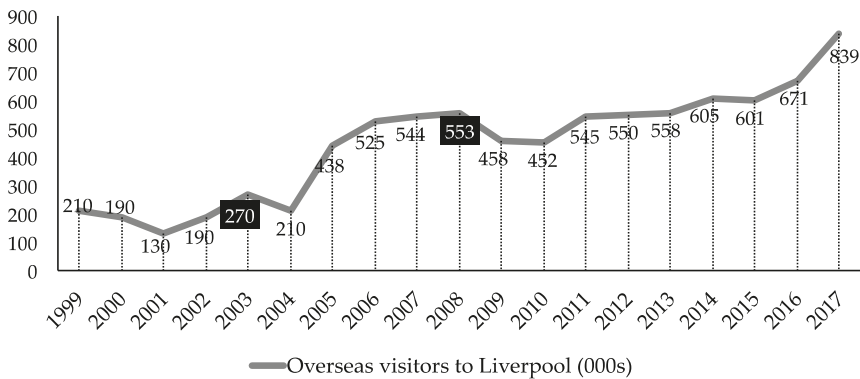


**Figure 1.** Trend of Liverpool's inbound visitor numbers, 1999–2017.

*4.2. The Issue of Economic Dilemma*

As argued by Campbell et al. [65], in the long run, there is a risk for cities relying on the consumption-oriented culture-led regeneration. Even though this approach may benefit from raising awareness and attracting tourists in the short term, attracting tourists and external investment are increasingly dependent on factors that the city cannot control. In addition, the employment in retail and hospitality sectors created by the "customer effect" brought about by cultural policies is often low-paying and part-time, characterised by low job satisfaction, legal rights and working conditions [50]. Therefore, the success of applying cultural policies to urban regeneration should consider the enhancement of cultural production. The 2008 ECOC resulted in an improvement of the "climate" of cultural production in Liverpool, with more public sector support and stronger networking. Since then, Liverpool continued to develop cultural activities. This positive impact does require a relatively level of political commitment and stability. García and Cox [63] note that Liverpool demonstrated strong determination and plans for a long-term strategy and funding for culture beyond the ECOC year. This includes the development of a new cultural strategy up to 2012; maintaining the level of funding for cultural organisations at pre-2008 level; planning to extend cultural and artistic activities to 2009 and beyond; obtaining European funding through the North West Development Agency (NWDA) Grants; and continued community and school engagement programmes. In addition, Liverpool Arts Regeneration Consortium (LARC) has successfully won several national grants (such as the Thrive program) to provide additional projects from 2009, supported by the strengthened partnership built during 2008 ECOC [61].

At the governance level, the establishment of "Cultural Liverpool" as the central organisation for post-ECC development to develop, host and manage cultural activities is the main factor in ensuring the sustainability of the event programme. The Liverpool Cultural Company provided an effective operational mechanism and helped improve cultural management during the title year, but was

dissolved after 2008. In order to maintain and improve the capacity for governance of the cultural sector, Culture Liverpool was established as the successor to Liverpool Culture Company. The aim is to build stronger relationships between City Council and cultural organisations. In order to ensure the legacy of ECOC and the continuation of large-scale event program, the city has developed a cultural strategy up to 2012. The role of Cultural Liverpool is to deliver the cultural strategy of City Council and serve as a sustainable platform for cultural events [61]. In addition, the ECOC status helped to promote greater cooperation and stronger partnerships among organisations, thereby stimulating more effective multi-agency approach in the long run. As mentioned above, the most prominent example is LARC, also known as the "Big Eight", which consists of Liverpool's eight largest non-commercial arts and cultural organisations emerged in 2005/2006 [63]. First, the 2008 ECOC encouraged LARC to work together to increase revenue from other sources. For example, LARC received additional external funding (£1.34 million) from the Arts Council Thrive program. This funding enabled LARC to offer a range of programmes aiming to enhance the role of the cultural sector in citizen leadership and urban cultural agendas. LARC also worked with other non-cultural institutions and partnerships such as the Local Strategic Partnership and the Mersey Partnership [61].

In addition to the cultural sector, increasing cities bidding for the ECOC are placing stronger emphasis on the potentials to develop creative industry. As Oerters and Mittag [72] point out, the cultivation of creative industries can be seen as a way to address the challenges of urban regeneration and regional transformation, especially those post-industrial cities and regions face. In the case of Liverpool, the 2008 ECOC didn't boost successfully the development of the creative industry. The survey of creative industries conducted right after 2008 shows that Liverpool's external image has been generally improved. It helped to improve the overall morale and credibility of the creative industry. However, the sector believed that Liverpool ECOC had focused on strengthening "culture" and "tourism" offers, but not necessarily extend to the creative industries. There was also a general sense of disappointment that there were no specific ECOC initiatives or clear policies to encourage the procurement from local creative industries [73]. Similarly, Campbell [64] discusses the "ambivalence" of Liverpool's creative workers towards the 2008 ECOC. Although there was a clear intention to strengthen the creative industry during the bidding stage, the benefits for Liverpool creative practitioners were not so clear. Bullen [74] (p. 161) describes her discussions with Liverpool City Council officials on local cultural policies in 2012, which remained on the concept of "business friendly" city, which needs a "great" cultural programme to "sell the city to a global audience". Cultural policy seems to be regarded as an agent with the aim of turning the city into a "destination" that attracts inward investment and tourism. Recently, Campbell et al. [65] argue that Liverpool's need for economic recovery is still urgent, but, in fact, the 2008 ECOC did not attempt to intervene in the local creative industry in a sustainable manner, and the afterthought reflects the growth of business in the creative sector is also limited.

### 4.3. The Issue of Spatial Dilemma

One of the most common criticisms of 2008 ECOC Liverpool is the uneven geographical distribution of events [75]. According to the 2017 neighbourhood survey (see Table 2), 66% respondents believed that "only the city centre will benefit from the ECOC". In addition, 63% respondents thought that ECOC "won't make any difference to the neighbourhood". In some communities, this consent rate was very high. On the other hand, only 42% respondents believed that "everyone in Liverpool will gain from the ECOC". In short, most people didn't think that the ECOC would benefit them at either individual or neighbourhood levels [18]. In fact, from the outset, Liverpool sought to improve cultural access by building community enthusiasm, creativity and participation [61,66]. Liverpool's Creative Community project was Europe's largest public and community art programme, with £11 million funding in four years, involving 160,000 participants, including all Liverpool schools (covering 67,000 children). As part of the Creative Community Project community project, "Four Corners" aimed at using art to explore community life in remote and deprived areas of the city and attracted

27,000 people to join. In addition, Liverpool's 2008 Volunteer Program gave working-class residents an opportunity to be trained as city ambassadors [76]. Liverpool had 9894 volunteers registered in 2008 and 851 completed the training process. They became active volunteers as part of the 08 Welcome Programme, giving 5611 days of volunteering [18]. In addition, as part of the Creative Learning Networks program, Liverpool sought to fully integrate school children. Link Officers for creativity and culture were established in each school to improve communication, maximise opportunities for creative and cultural education, and develop a creative teaching and learning collaboration [63].

**Table 2.** Survey items and results of the three neighbourhood surveys [75,77].

| Survey Items | Survey Result * | | |
| --- | --- | --- | --- |
| | 2007 | 2009 | 2018 |
| Participation in the Liverpool 08 event programmes | n.a. | 66% | n.a. |
| More interested in cultural activities because of the ECOC | n.a. | 37% | 44% |
| Attending galleries | 60% | 69% | n.a. |
| Attending museums | 42% | 52% | n.a. |
| Attending live events | 35% | 53% | n.a. |
| Everyone in Liverpool will gain from the ECOC | 42% | 46% | 63% |
| Only the city centre will benefit from the ECOC | 66% | 56% | n.a. |
| The ECOC won't make any difference to the neighbourhood | 63% | 57% | n.a. |
| The city is a much better place after the ECOC | 56% | 57% | 81% |

* Percentage of agreement.

As a result, the survey shows a positive impact on skills and self-esteem of young people involved in the Creative Community project [61]. Participants in the 08 Volunteer programme also indicated that participation in the ECOC has expanded their cultural interests and helped them to develop confidence and new skills [18]. In general, the participation of disadvantaged groups in culture during 2008 was higher than the past, showing that the ECOC helped positively to increase cultural accessibility. As shown in Table 2, 66% of residents have taken part in at least one ECOC event during 2008, and 14% have also tried some new cultural activities. Apart from event attendance, the percentage of Liverpool residents who have attended other cultural amenities rose between 2007 and 2009, from 60 to 69% for gallery and from 42 to 52% for museum attendance, respectively. In particular, participation in live events rose significantly, from 35% in 2007 to 53% in 2009 [75]. As for the geographical bias, the establishment of the above-mentioned local initiatives helped to solve some local considerations. Event organisers made efforts to promote local programmes and differentiate them from those high profile activities designed particularly for mainstream arts audiences and tourists [61]. By 2009, the perceptions of spatial bias became less entrenched [18]. However, 56% of respondents in 2009 still believed that only the city centre would benefit (a decrease of 10% from 2007 to 2009), 57% of respondents believed that the ECOC had no impact on their community (a decrease of 6% from 2007 to 2009), and 46% of respondents thought that everyone in Liverpool would benefit from the ECOC (an increase of 4% from 2007 to 2009) (see Table 2). These indicate that, although the residents' awareness of the ECOC has improved, they still have some doubts about the widespread benefits of the ECOC [75]. Although neighbours' suspicions about the actual impact of the ECOCs on their communities still exist, it is clear that such improvements are possible because organisers continue to invest in geographically disseminated programmes, such as the Four Comers program, which took places in remote and deprived areas. The continuation of Creative Education and Neighbourhoods posts in the City Council and the outreach officer jointly assigned by the Bluecoat Art Centre and Everyman Theatre both show the potential for sustained impact [61].

Ten years after the end of the 2008 ECOC, a follow-up neighbourhood survey in 2018 shows that residents have a highly positive attitude towards the city and its cultural supply (see Table 2), with 44% more interested in cultural activities because of the ECOC (an increase of 7% from 2009 to 2018), 81% agreed that the city was better because of the ECOC (an increase of 24% from 2009 to 2018), and 63% respondents

agreed that everyone in Liverpool benefited from the ECOC (an increase of 17% from 2009 to 2018) [77]. In addition, between 2005 and 2018, grassroots' cultural assets in the city centre of Liverpool increase by 53%, and by 43% for the whole city. At the same time, the focus of grassroots cultural initiatives has changed dramatically, and, in many cases, these initiatives have expanded from purely creative goals (such as performing arts, music and heritage) to broader social and civic roles (such as education, employment and training) [77].

## 5. Conclusions

It is believed that, despite the conceptual and operational challenges, the paradigm of culture and sustainable development will continue to provide a platform for future discussions on sustainability [2]. As the "fourth pillar" of sustainable development, this paper aims to answer two key research questions related to cultural sustainability: What are the key success factors for sustainable culture-led regeneration? To what extent does Liverpool strike a balance between the three dilemmas of culture-led regeneration? This article is concluded by referring to these two questions, and by outlining the theoretical and empirical implications. The current study contributes to the debate on urban cultural policy and management by drawing the issue about the instrumental role of culture in urban regeneration, investigating an area less investigated. Various challenges and strategies mentioned above can be grouped into the following key lessons.

Although there are many complexities and contradictions in the culture-led regeneration strategy, culture is still one core in urban regeneration policy and will play a gradually important role in future initiatives [6]. After more than 30 years of development, the ECOC can be seen as a source of lessons to guide culture-led urban regeneration. However, despite its good reputation, it is misleading to believe that the title of ECOC can ensure positive and sustainable effects. In the past, many ECOC host cities failed to overcome the three dilemmas proposed by Bianchini [50], which means that there are still some unsolved contradictions in the applications of culture-led regeneration. García [10] attributes these conflicts to the imbalance between cultural and economic priorities in urban cultural policies, that is, culture is used as a tool for economic regeneration, rather than community involvement and development. As a result, the demand for tourists overwhelms that of residents, sometimes resulting in the "spatial" dilemma. Cultural consumption is superior to cultural production, since the former can yield immediate and visible benefits. García [17] further points out that culture needs to return to the core of any discussion about culture-led regeneration; otherwise, ECOC or other cultural projects attempting to link culture to urban regeneration may become meaningless and easily replaced by other initiatives. Therefore, ensuring cultural sustainability is a key element of successful culture-led regeneration.

To answer the first research question, it is necessary to refer to the relationship between culture and sustainable development discussed earlier in the section of literature review. Among them, the argument of UCLG [34] is particularly relevant to the analysis here, that is, the development of cultural sector itself and ensuring that culture has a place in other public policies are two major factors to ensure the sustainable development of culture. As emphasised by Richards and Palmer [2] (p. 396): "the concept of cultural sustainability revolves around the continued support and enhancement of local cultural processes and structures". In the aftermath of the 2008 ECOC, Liverpool's cultural sector was significantly strengthened, including the development of a new cultural strategy and the establishment of Culture Liverpool as a platform for implementing the cultural strategy and planning follow-up cultural activities. Furthermore, the City Council was committed to continue funding for culture for two more years after 2008. All of these contributed to the sustainability of the cultural production of the city. As O'Brien [68] (p. 46) states: "integrating the cultural sector into the administrative and decision-making network for the city" is an important revelation of the ECOC Liverpool to culture-led regeneration. In addition, there were unprecedented collaborations between public and private sectors and among cultural organisations working together to achieve common goals. The most prominent example was the collaborations between city council, LARC and other

non-cultural organisations, as well as revitalise the underdeveloped tourism network. In addition, between 2005 and 2018, grassroots cultural assets in the city centre of Liverpool increase by 53%, and by 43% for the whole city [77].

The other important lesson learned from Liverpool is to integrate the ECOC into existing strategies, at the early stage when the city bid for the ECOC title. Although Evans [20] criticises Liverpool's early regeneration strategy of lacking culture as the core of urban planning, hosting the ECOC did turn culture as a key element in other public policies. It reflects the argument of Soini and Dessein [35], that is, culture plays a mediating role in achieving economic and social sustainability. Liverpool has benefited from continued regeneration, cultural investment, urban infrastructure and creative economic development over the past two decades, including Tate Liverpool, the Maritime Museum and Liverpool Museum in the redeveloped Albert Dock. The 2008 ECOC further accelerated city's physical development, achieved the city's regenerative goals and reshaped Liverpool as a cultural tourism destination. The major achievement was to establish the urban regeneration company—Liverpool Vision—to coordinate a series of parallel regeneration projects, including ACCL, the new Museum of Liverpool and World Heritage Waterfront, and the refurbished Bluecoat Art Centre. To some extent, Liverpool met the standards of "culture-led regeneration" defined by Evans [20] (p. 14): "manage to better integrate their cultural regeneration within economic and social development strategies and master plans, so that investment in cultural facilities, festivals and programmes can be seen as a long -term project rather than one-off event, led by economic development and regeneration rather than cultural agencies and departments". In addition, as Ecorys [61] found, the long-term strategy of incorporating the ECOC into culture-led development is the key to ensuring sustainable development.

The second question in this study is to explore how Liverpool strikes a balance between the three dilemmas of culture-led regeneration, which is regarded as a keystone of sustainable development in culture. As mentioned above, culture-led regeneration is not a panacea. Although Liverpool demonstrates some successes, the study still reveals several challenges to be addressed, especially the issues about economic and spatial dilemmas. In terms of cultural funding dilemma, Liverpool saw tourism development and city branding as one of the primary goals of the 2008 ECOC. Since Liverpool has accumulated several "hard" cultural capitals (i.e., physical cultural infrastructure) from continuous regeneration in the past two decades, the focus of 2008 ECOC is to strengthen the "soft" type of cultural capital. Richards and Palmer [2] (p. 383) argue that investing in multi-year event planning and financial commitment is a key to "sustaining eventfulness". To ensure long-term success, Liverpool attempted to integrate the ECOC into a complete cultural programme, focusing on multi-annual events lasting for eight consecutive years from 2003 to 2010 [61]. At the same time, the continued subsidies for cultural organisations, including event hosting and sustainable development funds, helped also to ensure the sustainability of event. In addition, the 2008 ECOC served as a "milestone" for realising or accelerating existing projects. As Evans [20] (p. 6) argues, "ECOC should be viewed in this longitudinal frame alongside a city's trajectory of culture and regeneration and associated branding through flagship development and infrastructure projects". As mentioned above, coordination and synergy between Liverpool's ECOC program and other regeneration initiatives were highlighted in the Liverpool Vision's Regeneration Strategy launched in 2000. Overall, to overcome the cultural funding dilemma, Liverpool inserted properly the 2008 ECOC in the city's long-term regeneration trajectory, enhanced the city image gradually, and provided an angle for people to see the changes that can be brought by culture. Consequently, ten years after the 2008 ECOC, 91% of residents surveyed agreed that Liverpool is "improving and has a positive future". Over two thirds of survey respondents (73%) felt that the external image of the city had improved, and 91% agreed that the 2008 ECOC gave people outside Liverpool a more positive impression of the city [77].

As for the economic dilemma, cultural regeneration strategies often involve a mix of consumption and production models, but, in practice, balancing these two aspects remains a challenge [39]. In the case of Liverpool, complete cultural facilities and event programmes provide a sound foundation for cultural consumption. To some extent, the 2008 ECOC has also improved Liverpool's cultural

production climate, including formulating a new cultural strategy, funding for cultural organisations, extending cultural events (i.e., themed years over eight consecutive years), and continuing community and school participation programmes (i.e., Four Corners and Creative Learning Networks programmes), whilst the last one may also help to deal with the concerns of spatial dilemma. As Richards and Palmer [2] (p. 398) comment, "the cultural sustainability of events programme is not only linked to the sustainability of individual events. A healthy and productive cultural climate tends to sustain a number of important events over a long period of time". However, on the other side of the coin, Liverpool's creative industry had a sense of being alienated from the 2008 ECOC, although there was an improvement of overall morale and credibility of the creative industry, due to the enhancement of the overall image of Liverpool. In addition, nearly three-quarters of creative industries' enterprises surveyed felt that the Liverpool ECOC would create long-term, positive impacts for their businesses [73]. However, the "real" benefits brought to creative practitioners were less clear. This finding coincides with the arguments of García and Cox [63] (p. 143), that is, "even with sustained and tangible plans, there is unlikely to be a strong legacy of creative industries' development resulted from the recent ECOC programmes". Campbell [64] also points out that, even if there is a link between cultural events and the development of creative industry, the evidence supporting this connection is still questionable. The "marginalisation" of creative industry may attribute to the fact that 2008 Liverpool's major focus was on cultural consumption that brought immediate benefits. The creative industry tends to be more sustainable and have greater effects on local economic structure, but it takes a longer time to be realised. In this case, Liverpool should be classified as the "culture-led regeneration" model as defined by Evans [20], rather than the "cultural regeneration" or the "creative city" model [78].

Regarding the spatial dilemma, Foley et al. [14] (p. 111) emphasise: "policy sustainability must be premised on measures to ensure greater involvement, participation and outcomes for a wider group of stakeholders. However, the challenge is that 'trickle down' benefits are usually limited and the impact is often visual, economic and political rather than social and community based". One of the early criticisms of the 2008 ECOC Liverpool was the geographical bias. Negative reactions from local residents concentrated on two areas of concern: only the city centre can benefit from the ECOC (66% agreed in 2007) and there is no impact on remote communities (63% agreed in 2007) [75]. However, event planners struggled to deal with this spatial issue by spreading out cultural programmes even in the poorest areas of the city (e.g., 08 Welcome, 08 Volunteer, Creative Community and Creative Learning Networks programmes), and by establishing a sustainable structure to maintain the balance. As shown in Table 2, cultural accessibility, cultural participation, and perceived benefits of the 2008 ECOC all improved to certain levels. Liverpool's experience reflects the suggestion of Burksiene et al. [24] (p. 51): "the integration of the ECOC programme into long-term strategies might foster polycentric spatial development involving peripheral areas". Landry et al. [58] also argue that participatory art projects often offer greater flexibility and adaptability to local needs and less costly than capital culture projects. Liverpool's experience tells us that investing in locally owned programmes will help to ensure the cultural sustainability of events. As suggested by Palmer/RAE [16], unlike the mainstream cultural program, community projects provide real value to urban residents. In addition, those community projects often last a longer time because they are rooted well locally and cared for by those who are involved. This issue is also consistent with the alternative model of culture-led regeneration proposed by Binns [51], namely "regeneration via participatory community arts programmes", a strategy that focuses on bottom-up regeneration. However, Binns [51] also emphasises that, although community-based projects can address the "soft" issues of social development, such as building social capital and local awareness, they cannot address the "hard" social issues, such as the lack of cultural facilities or the renovation of dilapidated buildings. The result of the 2018 neighbourhood survey may provide some explanations for this dilemma. Although 81% respondents believe that the city is a much better place after the EOCO, a relatively lower percentage (63%) of residents accept that everyone in Liverpool will gain from the ECOC [77]. This point also reflects Son's [6] criticism of Liverpool's

ECOC, that is, the revamped image of Liverpool through cultural elements does not address the social deprivation or poverty issues.

It is concluded that incorporating events in city's long-term regeneration trajectory, continued support and enhancement of local cultural processes and structures, and highlighting community involvement and development are three major factors to ensure the cultural sustainability of event. Finally, despite presenting some innovative insights into the issues related to events and culture-led regeneration, it is necessary to reveal the limitations of current study. As Evans [20] (p. 6) states: "the culture and regeneration story requires a historical analysis that also maps change and effects over a much longer time period, within which events form only a relatively small part". There are two main and relevant research limitations in this paper. The first is the lack of some actual evidence, especially the data that proves the long-term effects of events. The second is that, even with relevant supporting data, it is difficult to distinguish which ones are subject to the ECOC alone, and which ones are yielded by Liverpool's long-term and multi-faceted regeneration. These two limitations undoubtedly affect the capability to address fully the research questions and the objectivity of analysis. In the future, more research can focus on legacy study, such as the opinions of residents, tourists and media. In addition, comparative and multiple case studies of the ECOC cities may help to discover the appropriate strategies to overcome the dilemmas of culture-led regeneration.

**Conflicts of Interest:** The author declares no conflict of interest.

## References

1. Duxbury, N.; Cullen, C.; Pascual, J. Cities, culture and sustainable development. In *Cultures and Globalization: Cities, Cultural Policy and Governance*; Anheier, H.K., Isar, Y.R., Eds.; Sage: London, UK, 2012; pp. 73–86.
2. Richards, G.; Palmer, R. *Eventful Cities: Cultural Management and Urban Revitalization*; Butterworth-Heinemann: Amsterdam, The Netherlands, 2010.
3. Yudice, G. *The Expediency of Culture: Uses of Culture in the Global Era*; Duke University Press: Durham, NC, USA, 2003.
4. Zukin, S. *Cultures of Cities*; Blackwell Publishers: Oxford, UK, 1995.
5. Evans, G. Measure for measure: Evaluating the evidence of culture's contribution to regeneration. *Urban Stud.* **2005**, *42*, 959–983. [CrossRef]
6. Son, M. 'Urban Regeneration' to 'Social Regeneration': Culture and Social Regeneration through the Culture City of East Asia Event Initiative in Cheongju South Korea. Ph.D. Thesis, University of Sheffield, Sheffield, UK, 2018.
7. Bianchini, F.; Parkinson, M. *Cultural Policy and Urban Regeneration: The West European Experience*; Manchester University Press: Manchester, UK, 1993.
8. Deffner, A.M.; Labrianidis, L. Planning culture and time in a mega-event: Thessaloniki as the European City of Culture in 1997. *Int. Plan. Stud.* **2005**, *10*, 241–264. [CrossRef]
9. Dova, E. Organizing Public Space as a Framework for Re-Thinking the City: Pafos's Bid for the 2017 European Capital of Culture. 2013. Available online: http://hdl.handle.net/11728/8988 (accessed on 1 July 2018).
10. García, B. Cultural policy and urban regeneration in Western European Cities. *Local Econ.* **2004**, *19*, 312–326. [CrossRef]
11. Hudec, O.; Džupka, P. Culture-led regeneration through the young generation: Košice as the European Capital of Culture. *Eur. Urban Reg. Stud.* **2016**, *23*, 531–538. [CrossRef]
12. Nechita, F. *Bidding for the European Capital of Culture: Common Strengths and Weaknesses at the Pre-Selection Stage*; Series VII: Social Sciences, Law, 8; Bulletin of the Transilvania University: Brasov, Romania, 2015.
13. Papanikolaou, P. The European Capital of Culture: The challenge for urban regeneration and its impact on the cities. *Int. J. Humanit. Soc. Sci.* **2012**, *2*, 268–273.
14. Foley, M.; McGillivray, D.; McPherson, G. *Event Policy: From Theory to Strategy*; Routledge: London, UK, 2012.

15.  Crespi-Vallbona, M.; Richards, G. The meaning of cultural festivals: Stakeholder perspectives in Catalunya. *Int. J. Cult. Policy* **2007**, *13*, 103–122. [CrossRef]
16.  Palmer/Rae. *European Cities and Capitals of Culture: Study Prepared for the European Commission*; Part 1; Palmer/Rae Associates: Brussels, Belgium, 2004.
17.  García, B. Deconstructing the city of culture: The long-term cultural legacies of Glasgow 1990. *Urban Stud.* **2005**, *42*, 841–868. [CrossRef]
18.  Impacts 08. *Creating an Impact: Liverpool's Experience as European Capital of Culture*; Impacts 08: Liverpool, UK, 2010.
19.  Nobili, V. The role of European Capital of Culture events within Genoa's and Liverpool's branding and positioning efforts. *Place Brand.* **2005**, *1*, 316–328. [CrossRef]
20.  Evans, G.L. Cities of Culture and the regeneration game. *Lond. J. Tour. Sport Creat. Ind.* **2011**, *5*, 5–18.
21.  Cox, T.; O'Brien, D. The "scouse wedding" and other myths: Reflections on the evolution of a "Liverpool model" for culture-led urban regeneration. *Cult. Trends* **2012**, *21*, 93–101. [CrossRef]
22.  O'Brien, D. Who is in charge? Liverpool, European Capital of Culture 2008 and the governance of cultural planning. *Town Plan. Rev.* **2011**, *82*, 45–59. [CrossRef]
23.  Bramwell, W.; Henry, I.; Jackson, G.; Goytia Prat, A.; Richards, G.; van der Straaten, J. *Sustainable Tourism Management: Principles and Practice*; Tilburg University Press: Tilburg, The Netherlands, 1996.
24.  Burksiene, V.; Dvorak, J.; Burbulyte-Tsiskarishvili, G. Sustainability and sustainability marketing in competing for the title of European Capital of Culture. *Organizacija* **2018**, *51*, 66–78. [CrossRef]
25.  Hawkes, J. *The Fourth Pillar of Sustainability: Culture's Essential Role in Public Planning*; Common Ground Publishing: Altona, Australia, 2001.
26.  Cubeles, X.; Baro, F. *Culture and Sustainability*; Generalitat de Catalunya: Barcelona, Spain, 2006.
27.  DCMS. Sustainable Development Strategy: Arts. Available online: www.culture.gov.uk/images/publications/SDSARTS.pdf (accessed on 1 July 2018).
28.  Council of Europe. *In from the Margins: A Contribution to the Debate on Culture and Development in Europe*; Council of Europe: Strasbourg, France, 1997.
29.  Nurse, K. Culture as the Fourth Pillar of Sustainable Development. *Small States Econ. Rev. Basic Stat.* **2006**, *1*, 28–40.
30.  Fithian, C.; Powell, A. Cultural Aspects of Sustainable Development. Available online: http://webmail.seedengr.com/Cultural%20Aspects%20of%20Sustainable%20Development.pdf (accessed on 1 July 2018).
31.  Sazonova, L. *Cultural Aspects of Sustainable Development: Glimpses of the Ladies' Market*; Friedrich-Ebert-Stiftung: Sofia, Bulgaria, 2014.
32.  Dessein, J.; Soini, K.; Fairclough, G.; Horlings, L. (Eds.) *Culture in, for and as Sustainable Development*; Conclusions from the COST Action IS1007 Investigating Cultural Sustainability; University of Jyväskylä: Jyväskylä, Finland, 2015.
33.  Throsby, C.D. *On the Sustainability of Cultural Capital*; Department of Economics, Macquarie University: Sydney, Australia, 2005; Volume 510.
34.  UCLG. *Culture: Fourth Pillar of Sustainable*; UCLG Policy Statement, UCLG Committee on Culture and World Secretariat Policy Statement for Mexico City, United Cities and Local Governments (UCLG): Barcelona, Spain, 2010.
35.  Soini, K.; Dessein, J. Culture-sustainability relation: Towards a conceptual framework. *Sustainability* **2016**, *8*, 167. [CrossRef]
36.  Navarro, C.J.; Clark, T.N. Cultural policies in European cities. *Eur. Soc.* **2012**, *14*, 636–659. [CrossRef]
37.  Tallon, A. *Urban Regeneration in the UK*; Routledge: London, UK, 2010.
38.  Tay, P.C.; Coca-Stefaniak, J.A. Cultural urban regeneration practice and policy in the UK and Singapore. *Asia Pac. J. Arts Cult. Manag.* **2010**, *7*, 512–527.
39.  Colomb, C. Culture in the city, culture for the city? The political construction of the trickle-down in cultural regeneration strategies in Roubaix, France. *Town Plan. Rev.* **2011**, *82*, 77–98. [CrossRef]
40.  Evans, G.L.; Shaw, P. *A Review of Evidence on the Role of Culture in Regeneration*; Department for Culture Media and Sport: London, UK, 2004.
41.  Dinardi, C. Unsettling the role of culture as panacea: The politics of culture-led urban regeneration in Buenos Aires. *City Cult. Soc.* **2015**, *6*, 9–18. [CrossRef]

42. Evans, G. From cultural quarters to creative clusters: Creative spaces in the New City economy. In *The Sustainability and Development of Cultural Quarters: International Perspectives*; Legner, M., Ed.; Institute of Urban History: Stockholm, Sweden, 2009; pp. 32–59.

43. Montgomery, J. Cultural quarters as mechanisms for urban regeneration. Part 1: Conceptualising cultural quarters. *Plan. Pract. Res.* **2003**, *18*, 293–306. [CrossRef]

44. Montgomery, J. Cultural quarters as mechanisms for urban regeneration. Part 2: A review of four cultural quarters in the UK, Ireland and Australia. *Plan. Pract. Res.* **2004**, *19*, 3–31. [CrossRef]

45. Gunay, Z.; Dokmeci, V. Culture-led regeneration of Istanbul waterfront: Golden horn cultural valley project. *Cities* **2012**, *29*, 213–222. [CrossRef]

46. Vickery, J. *The Emergence of Culture-Led Regeneration: A Policy Concept and Its Discontents*; Centre for Cultural Policy Studies, University of Warwick: Coventry, UK, 2007.

47. Bassett, K.; Smith, I.; Banks, M.; O'Connor, J. Urban dilemmas of competition and cohesion in cultural policy. In *Changing Cities: Rethinking Urban Competitiveness, Cohesion and Governance*; Buck, N., Gordon, I., Harding, A., Turok, I., Eds.; Palgrave: London, UK, 2005; pp. 132–153.

48. Ferilli, G.; Sacco, P.L.; Tavano Blessi, G.; Forbici, S. Power to the people: When culture works as a social catalyst in urban regeneration processes (and when it does not). *Eur. Plan. Stud.* **2017**, *25*, 241–258. [CrossRef]

49. Evans, G. Hard-branding the cultural city: From Prado to Prada. *Int. J. Urban Reg. Res.* **2003**, *27*, 417–440. [CrossRef]

50. Bianchini, F. Remaking European cities: The role of cultural policies. In *Cultural Policy and Urban Regeneration: The West European Experience*; Bianchini, F., Parkinson, M., Eds.; Manchester University Press: Manchester, UK, 1993; pp. 1–19.

51. Binns, L. *Capitalising on Culture: An Evaluation of Culture-Led Urban Regeneration Policy*; Dublin Institute of Technology: Dublin, Ireland, 2005.

52. Florida, R. *The Rise of the Creative Class*; Basic Books/Perseus: New York, NY, USA, 2002.

53. Della Lucia, M.; Trunfio, M. The role of the private actor in cultural regeneration: Hybridizing cultural heritage with creativity in the city. *Cities* **2018**, *82*, 35–44. [CrossRef]

54. Sepe, M.; Di Trapani, G. Cultural tourism and creative regeneration: Two case studies. *Int. J. Cult. Tour. Hosp. Res.* **2010**, *4*, 214–227. [CrossRef]

55. Richards, G.; Wilson, J. Developing creativity in tourist experiences: A solution to the serial reproduction of culture? *Tour. Manag.* **2006**, *27*, 1209–1223. [CrossRef]

56. Hajer, M.A. Rotterdam: Redesigning the public domain. In *Cultural Policy and Regeneration: The West European Experience*; Bianchini, F., Parkinson, M., Eds.; Manchester University Press: Manchester, UK, 1993; pp. 52–67.

57. Holmes, K.; Hughes, M.; Mair, J.; Carlsen, J. *Events and Sustainability*; Routledge: London, UK, 2015.

58. Landry, C.; Greene, L.; Matarasso, F.; Bianchini, F. *The Art of Regeneration: Urban Renewal through Cultural Activity*; Comedia: Stoud, UK, 1996.

59. DCMS. *Culture at the Heart of Regeneration*; Department of Culture, Media & Sports (DCMS): London, UK, 2003.

60. Arts Council England. *Arts and Regeneration: Creating Vibrant Communities*; Arts Council England (ACE): London, UK, 2007.

61. Ecorys. *Ex-Post Evaluation of 2007 & 2008 European Capitals of Culture: Final Report*; Ecorys: Birmingham, UK, 2009.

62. Couch, C. Urban regeneration in Liverpool. In *Urban Regeneration in Europe*; Couch, C., Fraser, C., Percy, S., Eds.; Blackwell: Oxford, UK, 2003; pp. 34–55.

63. García, B.; Cox, T. *European Capitals of Culture: Success Strategies and Long-Term Effects*; Publications Office of the European Union: Luxembourg, 2013.

64. Campbell, P. Creative industries in a European Capital of Culture. *Int. J. Cult. Policy* **2011**, *17*, 510–522. [CrossRef]

65. Campbell, P.; Cox, T.; O'Brien, D. The social life of measurement: How methods have shaped the idea of culture in urban regeneration. *J. Cult. Econ.* **2017**, *10*, 49–62. [CrossRef]

66. Connolly, M.G. The 'Liverpool model(s)': Cultural planning, Liverpool and Capital of Culture 2008. *Int. J. Cult. Policy* **2013**, *19*, 162–181. [CrossRef]

67. O'Brien, D. 'No cultural policy to speak of'–Liverpool 2008. *J. Policy Res. Tour. Leis. Events* **2010**, *2*, 113–128. [CrossRef]

68. O'Brien, D.; Miles, S. Cultural policy as rhetoric and reality: a comparative analysis of policy making in the peripheral north of England. *Cult. Trends* **2010**, *19*, 3–13. [CrossRef]

69. Boland, P. 'Capital of Culture- you must be having a laugh!' Challenging the official rhetoric of Liverpool as the 2008 European cultural capital. *Soc. Cult. Geogr.* **2010**, *11*, 627–645. [CrossRef]

70. Impacts 08. *Media Impact Assessment (Part II): Evolving Press and Broadcast Narratives on Liverpool from 1996 to 2009*; Impacts 08: Liverpool, UK, 2010.

71. Visit Britain. Top Town for Staying Visits by Inbound Visitors. Available online: https://www.visitbritain.org/town-data. (accessed on 1 July 2018).

72. Oerters, K.; Mittag, J. European Capitals of Culture as incentives for local transformation and creative economies. In Proceedings of the Second Annual Conference of the University Network of ECoC, Liverpool, UK, 16–17 October 2008; pp. 16–17.

73. Impacts 08. *Liverpool's Creative Industries: Understanding the Impact of Liverpool European Capital of Culture 2008 on the City Region's Creative Industries*; Impacts 08: Liverpool, UK, 2009.

74. Bullen, C. *European Capitals of Culture and Everyday Cultural Diversity: A Comparison of Liverpool (UK) and Marseilles (France)*; European Cultural Foundation: Amsterdam, The Netherlands, 2013.

75. Impacts 08. *Neighbourhood Impacts: A Longitudinal Research Study into the Impact of the Liverpool European Capital of Culture on Local Residents*; Impacts 08: Liverpool, UK, 2010.

76. European Communities. *European Capitals of Culture: The Road to Success from 1985 to 2010*; Publications Office of the European Communities: Luxembourg, 2009.

77. Impacts 18. Legacies of Liverpool as European Capital of Culture, 10 Years on. Available online: http://iccliverpool.ac.uk/impacts18 (accessed on 1 July 2018).

78. Landry, C.; Bianchini, F. *The Creative City*; Demos: London, UK, 1995.

*sustainability*

MDPI

*Article*

# Research on Tibetan Folk's Contemporary Tibetan Cultural Adaptive Differences and Its Influencing Factors—Taking ShigatseCity, Tibet, China as an Example

**Yang Yongchun [1,2,*], Sun Yan [1] and Wang Weiwei [3,4]**

1    College of Earth and Environmental Sciences, Lanzhou University, Lanzhou 730000, China; saadiya99@126.com
2    Ministry of Education Key Laboratory of West China's Environmental System, Lanzhou University, Lanzhou 730000, China
3    Key Laboratory of Desert and Desertification, Northwest Institute of Eco-Environment and Resources, Lanzhou 730000, China; wangweiyudong@163.com
4    University of Chinese Academy of Sciences, Beijing100049, China
*    Correspondence: yangych@lzu.edu.cn; Tel.: +86-0931-8915-817

**Abstract:** Using qualitative research methods and mathematical statistical analysis, taking Shigatse city in Tibet as a case study area, and based on the affective, behavioral, and cognitive (ABC) model and cultural distance theory, we explore the Tibetan people's cultural adaptive types, differences, and its influencing factors. The results show that there are seven Tibetans' cultural adaptive kinds: Integration, assimilation, isolation, marginalization, tending to Tibetan modern culture, adaptation to Tibetan traditional culture, and unclassified cultural adaptive style. The Tibetans' cultural adaptive tendency mainly integrates between modern and traditional parts in the contemporary Tibetan local cultures. Meanwhile, the Tibetan folk still has a large proportion of modifying to traditional culture. Moreover, the Tibetans' cultural adjusted differences in the affective and cognitive dimensions are smaller than the acculturate features in the behavioral side. However, the cultural adjusted distinctions in the affective and cognitive aspects compared to that in the behavioral field are more complex. Moreover, there are direct and mediating effects that impact the Tibetan folks' cultural adaptability. Studying Tibetan people's cultural adaptation may be conducive to understanding the evolution of Tibetan locality's meaning and the mutual game between the two different parts in local culture as well as comprehending the Tibetan folks' real cultural appeal. The conclusions have important practical significance of the harmony, stability, unity, progress, and information in China ethnic areas' economy, society, and culture.

**Keywords:** ABC model; cultural distance theory; qualitative research methods; integration; Shigatse city

## 1. Introduction

In the context of the parallel development of modernization and post-modernization, contemporary local cultural changes are promoted by urbanization, industrialization, science, and technology, as well as diversification [1,2], combining with power, capital, markets, institutions, technologies, information, networks, and new cultures, which stimulates local cultural transformation [3,4]. As such, the integration between endogenous and exogenous forces boost contemporary local culture to show locality and cultural modernity in terms of time, space, and cultural subjects [5,6]. Meanwhile, the adaptation of meaning, rituals, norms, etc., [7–9] reflects local people's

cultural transition in affective categories, behavioral styles, and cognitive characteristics [10–13]. Hence, local cultural shift and creation have represented a specific political, economic, social, and ecological background, and personal psychological changes and responses [14].

The particularity and modernity of contemporary Tibetan culture has stemmed from the complexity and diversity of Tibetan cultural elements, as well as the role of foreign cultures on the local Tibetan culture by influence, exchange, and integration. Since the reform and opening up, Tibetan modernization has mainly relied on the exogenous overall support to help Tibetan social transformation, which is the large number of "top-down" resources supplied by the central government, national fiscal system, and counterpart assistant from developed provinces (or prefecture-level cities and municipalities directly under the central government in China). It reflects not only in the establishment of a modern civilized order, prompting the obvious change of the Tibetan people's behavior, lifestyle, and value system, but also the religious policy of the Communist Party of China (CCP) and Tibetans' freedom of religion belief protected by law and the government [4]. This fact motivates the profound influence of Tibetan Buddhism on the Tibetan people's cultural values. In addition, due to the role of globalization, information, networking, the special geographical location, and the particular climate in Tibet [15,16], the Tibetan culture is influenced by "bottom-up" power consisting of Chinese non-Tibetan culture, South Asian culture, and Western culture [17–19], which further induces the modernization of Tibetan traditional culture and adaptive differences of Tibetans to varied and distinct cultures.

Under the background of contemporary social development, however, there is restriction of Tibetan local culture. Meanwhile, there coexists a phenomenon of cultural diversification and advancement. The interactions between traditional and modern culture cause Tibetan's differentiated adaptation such as dependence, individuality, independence, compromise, tradition, openness, persistence, etc. [20,21]. At the same time, in the process of contemporary Tibetan local cultural transformation, Tibetan traditional culture faces the crisis of fragmentation, islanding, characteristic dissolution, and even cultural faults. In doing so, cultural adaptive research is a benefit to the social unity, stability, harmony, and development in Tibetan ethnic agglomeration areas [22], and it is avail to build local cultural brands and to construct national emotional ties, which contributes to the exchange between the traditional and modern parts of Tibetan local culture. Meanwhile, it is urgent to explore the ideas, methods, and paths of the Tibetan people's response to the native and local cultural diversity, heterogeneity, as well as sustainable development. In view of that, this paper underlines the Tibetans' cultural adaptive types, differences, and its influencing factors.

However, most Tibetans' cultural adaptive studies have focused on the conceptualization [23]. Although some scholars explored Tibetans' local cultural adjustment from a cultural and ethnic perspective and proposed series of policy suggestions in minor regions' development [24], these previous studies mostly tend to qualitative descriptions and lack quantitative empirical research. Some studies show that theoretical models consisting of affection, behavior, and cognition [13,25] can better explain local folks' cultural adaptive differences to some extents [26], yet the research of cultural adaptive types, difference, and its influencing factors based on Tibetan people's affective, behavioral, and cognitive aspects still needs further investigation. Theoretically, Berry's research indicates that integration, separation, assimilation, and marginalization are the cultural adaptive strategies [27–31]. Cultural distance proposed by Hofstede [32–34] had theoretical and methodological significance to quantify the Tibetans' cultural adaptive differences combined with affection, behavior, and cognition between different components of local culture, which are the important enlightenments of that research idea [35]. Nevertheless, the core point in this paper is whether there are other cultural adaptive kinds and other defining cultural distance's measures. Therefore, based on the affective, behavioral, and cognitive (ABC) model and cultural distance theory, this article uses qualitative research data, applying coefficient of variation weighting method, multiple linear regression analysis, and structural equation modeling to empirically study the Tibetan folks' adaptation between traditional and modern cultural parts, while the research ideas and methods are shown in Figure 1. In order to address such

issues, this paper will give an introduction first. Through a literature review, it then illustrates materials and models; after that the results will be deeply analyzed. The last part focuses on discussions, while the sixth is conclusions, implications, and limitations.
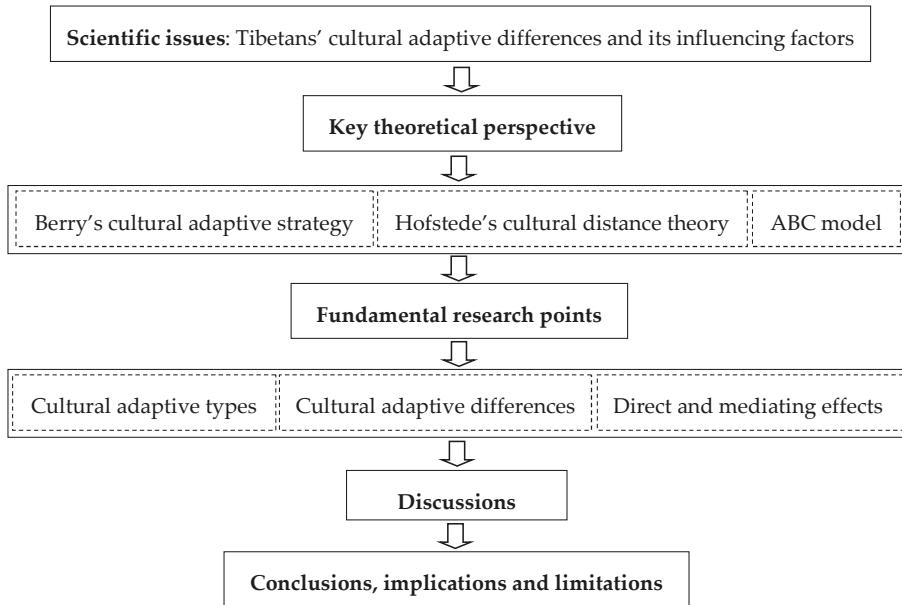


**Figure 1.** The ideas of the Tibetans' cultural adaptive differences research.

## 2. Literature Review

*2.1. Contemporary Local Cultural Adaptive Differences*

Contemporary local cultures are the historical comprehensive products and local imaginations associated with local geographical environment, mode of production, historical relics, traditional graphics, colors, literatures, arts, and folk customs, which have the features of temporal continuity or common tradition linking with its members to a common future as well as the changing cultural identity [36,37]. Local cultures have the regional, peculiar, and irreducible differences [38]. Moreover, local cultures are often a collection of social sharing and logical relevance based on practices when two independent cultures are closely related to each other. The soft and hard characteristics of specific places are usually referred to as living conditions, social sharing knowledge, geographical conditions, residential time, social acceptance, daily interaction, discrimination experience, ethnic self-identity, national personality, as well as the form and practice of social institutions [32,33,39]. These above indicators represent the dialectical unity of the local people's affective, behavioral, and cognitive activities in terms of cultural adaptive differences [40]. In addition, the local culture is the symbol of the wisdom and civilization of a particular place [41], which is used to answer the philosophical thinking of the series: What happened to the local people? What is the people's cultural adaptation? Where do the local cultural adaptive differences come from and how do they represent adaptive differences between the different components of local cultures? Based on the effectiveness of discursiveness, politics, societies, and economies, local cultural adjustment is a dynamic process in which individuals or groups have made constant changes related to attitudes, behaviors, and identities, depending on one or two independent culture(s) mutually contact and cooperation [28,42,43]. Furthermore, it causes the psychological comfortable degrees' adjustment for the original cultural changes [29,44–46].

There are cultural differences between the superficial layer and the profound layer in the cultural adaptation. The superficial cultural differences focus on the visible differences in the local culture, while the profound cultural distinctions mainly refer to the different values. The external cultural differences are adjusted through general cultural adaptations linked with age, gender, food, housing condition, and climate, while deep cultural differences require self-transcendence in values, such as beliefs and values, in communication and work [47]. Cultural similarities and dissimilarities make barriers for communication with heterogeneous cultures [48]. Therefore, in the process of transformation of contemporary local culture, on the one hand, there are "acculturative stress" that lead to the destructive tensions of misunderstandings of motives, misattribution of causes, problematic tensions, uncertainties, mulls, distresses, hostilities, confusions, and anxieties, which dramatically show the "self" and the arbitrarily changing local cultural cognition [8,49–53].Meanwhile, the adaptive process conforms to the "U" or "W" curve, which means that the general cultural adaptive process varies from the initial sense of joy, cultural shock, adjustment, recovery, psychological isolation to adaptive improvement [46]. Contemporary local cultural adaptation is related to how local people express themselves. This importance has risen to the narratological process of self-adaptation to changing local cultures, usually using three dimensions: Affection, behavior, and cognition to study the differences in the adaptability of individuals or groups to different local cultures [5,25]. Meanwhile, the process of people's adaptability to local culture constructs a space for local imagination, belongingness to the place, as well as a sense of historical and cultural situation in the 'suturing into the story' [8]. Thus, local meaning, change, identity, and construction are important foundations of cultural adaptation [54,55].

## 2.2. Measurement of the Contemporary Local Cultural Adaptive Differences

In the context of contemporary society, cultural adaptation is a response to local cultural transformation. The essence of cultural adaptation is to seek the true relationships among the link with people and environment, the individuals' self-internality, as well as the interpersonal interactions [56]. Cultural adjustment among distinct parts of local culture is a social and psychological adaptive process [27,47]. Normally, the contacts in different components of local culture include special skills of learning new culture, management pressures, handling things in unfamiliar environments, changing cultural identity, and enhancing relations among independent cultural groups [26]. Meanwhile, education, project, work, training, mutual visit, rest, celebration, employment, ceremony, media, political participation, religion, language, psychological stress, daily practice, social interaction, and the overall environment are the key elements of measuring folk's cultural adaptation [27,39,42,47,57,58]. Cultural adaptive differences are mainly reflected in cultural behavior, interest standard, belief, race, uncertainty, consciousness, cognition, preference, competition, risk, locality, cultural conflicts, etc. [59]. Cultural adaptation is a process from mutual contact, communication to assimilation, penetration, cooperation, trust, mutual learning, commitment, and changing attitudes between different cultures [60]. This fact represents people's cultural adaptive dissimilarities of identity, values, as well as attitudes between new and old local culture [10]. The ability to fit the satisfaction, behavior, and negotiation of different parts of local culture are the important parameters for the cultural adaptive construction [57]. In addition, the adaptability of contemporary local culture is influenced by ambiguity tolerance, willingness to communication, the ethnocentricity influence adjustment, differences in personal motivation, and effects of previous experience [39]. Therefore, affection, behavior, and cognition become the common dimensions of cultural adaptive difference research [13]. Stress and coping theory, cultural learning theory, and social identification theory are often used to explain the local people's active and passive responses to cultural adjusted distinctions in the affective, behavioral, and cognitive dimensions [61,62]. Among them, the affective dimension represents mental health, which signifies that people have a sense of happiness in different parts of local culture. The behavioral dimension indicates the rationality of social and cultural functions, which refers to the acceptance of unalike parts about contemporary local culture, the adjustment of lifestyle, the exchanges between different cultures as well as the trust, and adaptability in social interaction. The cognitive

dimension expresses the identity between dissimilar cultures, which denotes that differing sides of local culture are arranged in terms of knowledge and interest, the degree of acceptance and judgment of local culture, respect for religious beliefs, contrasting cultural practices, as well as the patience with lifestyle [63,64].

Contemporary Tibetan local culture consists of two parts: Traditional culture and modern culture. Cultural adaptive differences are caused by people's continuous contacts with different cultural characteristics, which leads to primitive cultural change [65]. In this context, there are two basic issues with cultural adaptive strategies: "Is it considered to be of value to maintain traditional local cultural identity and characteristics?", and "is it considered to be worthwhile to keep modern cultural relationships under the background of contemporary society?", and the alternative answers are "Yes" or "No" [30]. These perspectives address two basic issues facing all cultural people: (1) The retention of traditional values and practices as well as (2) the acquisition of modern cultural values and practices [28]. The exchanges between traditional culture and modern culture prompt local people to have two effects on each culture: One is positive support for some kind culture, and the other is a negative abandonment of some style culture. In doing so, four cultural adaptive strategies could be envisaged: (1) Assimilation refers to the rejection of traditional culture and recognition of modern culture; (2) separation denotes the refusal of modern culture and only admission of traditional culture; (3) integration means to the acknowledgement of traditional culture and modern culture; (4) marginalization is the resistance of both cultures [37,66].Therefore, assimilation, separation, integration, and marginalization compose the cultural adaptive analytical framework in the field of ideology [36]. Meanwhile, the above four cultural adaptive strategies may be shown in the three dimensions of affection, behavior, and cognition.

From the perspective of cultural distance, it is of great significance to the common identity, status difference, trust, subjective perception, and learning creation of cultural adaptation [50,62,67]. Furthermore, cultural distance reflects the differences of dissimilar kinds of cultural values among independent groups or individuals [35] and bypasses complexity to assess cultural adaptive differences [68]. As such, cultural adaptive differences could be evaluated on a distinct cultural scale [69]. In general, it uses six dimensions of Hofstede's power distance, collectivism versus individualism, femininity versus masculinity, uncertainty avoidance, long-term versus short-term orientation, and indulgence to calculate cultural distance and represent cultural adaptive differences of independent countries [32,70]. It provides a good reference for the definition of cultural distance between different components of local culture, however, these indicators have limitations in exploring cultural adaptive differences between different components of local culture about some concrete area in one specific country [35,51]. Meanwhile, some studies have shown that the influence of cultural distance on affections, behaviors, and cognitions was attributed to groups or the agglomeration effect, but it did not mean that the cultural distance among different individuals in the same group is all very low [71]. Thus, based on the cultural distance method in the three aspects of affection, behavior, and cognition, it is necessary to comprehensively study people's contemporary local cultural adaptive differences.

### 2.3. Study on the Contemporary Local Cultural Adaptive Differences in Tibet

Tibetan local cultural adaptive differences are a complex construction process in a pluralistic society, including Tibetan folk's sense of belonging, attitude, achievement, practice, identification, and adaptation to the traditional and modern cultural components of local culture [61]. There are two major cultural identity issues in a new Tibetan social and cultural environment: (1) Whether to preserve the original cultural characteristics and ethnic identity of the Tibetans; and (2) whether to agree with modern culture. Moreover, the preservation of traditional culture and the recognition of modern culture are two independent dimensions with each other. In other words, a high recognition of one culture does not mean that the identity of another culture is low. According to the affirmative or negative answers of the Tibetan people to the above two mentioned questions, there are also four

modes of cultural adaptation: (1) Integration is expected to adopt a modern lifestyle, but not to abandon traditional values and identity; (2) assimilation means Tibetans abandon national traditional culture and fully integrate into modern culture;(3) separation indicates that people retain the identity of a minor culture and restrict the close relationship between themselves and modern culture as well as enclose oneself in a unique ethnic culture; (4) marginalization shows that folks neither recognize modern culture nor fully identify their own culture, and their attitudes are at the edge of the two cultures [72]. From the above four aspects of cultural adaptive models, the conservation of ethnic cultural identity and modern cultural cognition remain an interactive effect in a diverse contemporary Tibetan society [73]. Due to the complexity of the local cultural adaptive system, there may be culturally adaptive types in transition. For example, some people only tend to be aware of Tibetan traditional culture, while some folks adapt to be conscious of modern culture, and someone may accept both traditional culture and modern culture. In fact, the abovementioned three adaptive types are intermediate values compared to the extreme cultural adaptive strategies corresponding to integration, assimilation, separation, and marginalization. In addition, there is also the fact that the degree of cultural adaptation is weak and the boundary between the two distinct cultures is not obvious, which makes it impossible to judge the Tibetans' cultural adaptive types.

Hence, Tibetans' cultural adjustment aims to develop what is useful or healthy and discard what is meaningless and disadvantages between "self" and "other" cultures in the process of modernization, which requires people to inject affections, put them into behaviors, and perform dialectical cognitions. Based on the affective, behavioral, and cognitive (ABC) model [13] as well as cultural distance (CD) theory [34,44,50], Tibetan people's cultural adaptation is divided into two parts for analysis in order to build Tibetans' local cultural adaptive strategies and differences: One is the Tibetan traditional cultural adaptation and the other is the modern cultural adjustment; meanwhile, the corresponding variables of these two parts are designed from the three dimensions of affection, behavior, and cognition. On the one hand, variables involved in the Tibetan traditional cultural adaptation are mainly psychological impact adaptation, foods required for daily work and life, clothing, living environment, language, social interaction, restrictions on traditional culture, taboos, and religious beliefs [28]. These indicators effectively include Tibetan individuals' surface cultures and deep spiritual cultures, which are in line with the Tibetan cultural development. Therefore, these indexes can measure Tibetan people's traditional cultural adaptation [74]. On the other hand, the elements related to modern culture mainly consist of cultural openness, language, living environment, modern festivals, national statutory festivals, acceptance and interest of modern culture, in-depth social interaction, as well as intermarriage [22] to reflect the Tibetan folks' non-Tibetan cultural adaptation; moreover, using the above variables to measure Tibetans' modern cultural adaptation is feasible [23].

In the context of modern development, Tibetans' cultural adaptation is influenced by the degree of observing Tibetan traditional culture. Theoretically, a greater degree of compliance with traditional culture leads to more substantial cultural adaptive differences. In addition, cultural adaptations are also affected by modern social culture [12,14]. In other words, a wider power of modern social culture indicates smaller adaptive distinction in theory. Appling modern technology associated with using internet and improving educational level [4] can expand the horizons of people to see the world. In this sense, using technology can reduce the Tibetan cultural adaptive differences. Shigatse city and other cities in Tibet are deeply aided by People's Republic of China (PRC), Chinese developed provinces or cities, as well as state-owned enterprises. Meanwhile, local governments have always been concerned about people's livelihood, promoted exchanges between different cultures, and respected the freedom of religion belief. Thus, state guidelines, counterpart aiding policies, and the action of local governments play an important role in Tibetans' cultural adaptation [56]. Usually, religious beliefs restrict Tibetans' behavior, which influences cultural adaptive differences [65]. Continuous advancement of globalization process affects every corner of the world, so Tibetan local culture is shaped by globalized effects. Because social stability is foundation of a regional development and openness is lubricant for its prosperity, consequently stable and open development also has significance

in the Tibetans' cultural adaptive distinctions [15]. In summary, our purpose is to explore the direct and intermediate effects [75] that impact Tibetans' cultural adaptive differences in seven aspects, including observance of traditional culture, influence of modern culture, application of technology, policies, religious beliefs, globalization, as well as social stable and open development.

## 3. Materials and Methods

### 3.1. Case Study Area

Figure 2 shows Shigatse city's geographical location. The main reasons for selection of the case study area are as follows. First, Shigatse is in the confluence area of YarlungZangbo, Nianchu, and Debra River, and it belongs to the valley city [76]. Since ancient times, it has been concentrated in population as well as having developed agriculture and industry. Meanwhile, Shigatse city's 660 years of history has profound cultural heritages, which is always the place where Panchen (Banchan) locates and makes Tibetan Buddhism deep-rooted in the region [17]. In addition, Shigatse is bordered by India, Nepal, and other countries, the boundary line is long, and Tibetan local culture is deeply influenced by border cultures such as those of Nepal and India [18]. Fourth, since the reform and opening up in China, CCP had held six symposiums on Tibet work and determined the state's financial supporting policies, special preferential policies, and counterpart assistant construction policies [16], which effectively promoted modern development of various undertakings in Shigatse city. In this context, agricultural culture, animal husbandry culture, Tibetan Buddhism culture, border culture, folk culture, Han nationality's traditional culture, modern culture, and post-modern culture have multiple coexisting characteristics. Meanwhile, Tibetans' living environment, mode of production, lifestyle, language environment, and social interactive circle undergo profound changes in affective, behavioral, and cognitive aspects of Tibetan people, which also produces different cultural adaptive types [77]. Consequently, Shigatse city becomes the best case-study area for empirically researching Tibetans' contemporary local cultural adaptive differences and its mechanisms.
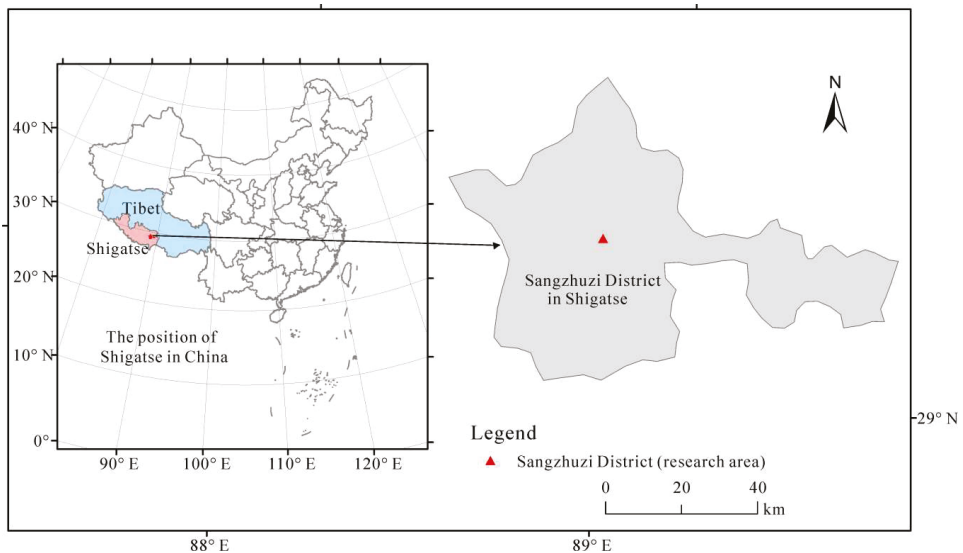


**Figure 2.** Case study area.

*3.2. Survey Design*

Tibetan people's cultural adaptive types, differences, and its influencing factors in affective, behavioral, and cognitive dimensions was assessed. Using in-depth interviews and questionnaire surveys [47], we obtained data and related materials for the Tibetans' cultural adaptive research. In addition, we gained the necessary information on the history, culture, society, and economy of the city from the relevant departments of the government. This survey involves the participants' basic demographic characteristics, and the content related to the Tibetan local cultural adaptation and its influencing factors. The basic personal situation includes gender, age, level of education, occupation, and time spent living or working in Shigatse City. Cultural adaptation-related content included 18 questions in the local traditional cultural part and 9 issues in the modern local cultural part. There are 10 variables that affect cultural adaptive differences. A five-point Likert scale that was "very adjusted, adjusted, generally adjusted, un-adjusted and very un-adjusted" was used for elements involving Tibetans' adaptation to Tibetan traditional local cultural. "Very adaptable" means that the Tibetan people adhere to the Tibetan traditional culture. "Very un-adaptable" denotes that the Tibetans have completely turned to the modern culture, while the rest of the options refer to different intermediate or mixed states. A five-point Likert scale that was "very un-adaptable, un-adaptable, generally adaptable, adaptable and very adaptable" was used for variables involving Tibetans' adaptation to Tibetan modern local culture. "Very un-adaptable" indicates the Tibetan people have fully adjusted to the Tibetan traditional culture, and "very adaptable" indicates that the Tibetan people have completely turned to modern culture. Besides, the influencing indexes are assigned according to the five-point Likert scale of "yes, basically yes, generally yes, basically not, not"; "yes" shows that it fully agrees that some factors affect cultural adaptive differences, and "no" expresses that it does not completely identify that some indictors influence cultural adaptive differences, while the other options are intermediate states.

The adaptability of Tibetan people to Tibetan traditional culture and their adaptation to Tibetan modern culture are designed from three dimensions of affection, behavior, and cognition. In that model, the affective dimension represents Tibetan people's feelings of wellbeing and satisfaction for Tibetan traditional and modern culture. This is an 'ability' to 'fit in' when Tibetan traditional cultures change, modern cultures are immersed in the traditional part, and the tradition and modernization produce interactive effects, while the theory of stress and resolution can explain Tibetans' psychological endurance in dealing with different components of local cultures. The behavioral dimension characterizes Tibetan people's adaptability to social culture, such as the actual expression of language, clothing, food, customs, symbols, festivals, religious beliefs, etc., in daily life and work professions. Behavioral culture is one of psychological mappings, which can be explained by social learning theory. Cognitive dimension indicates the viewpoints of the Tibetan people to the traditional culture as well as the attitudes and understandings of the modern culture arising from foreign cultural stimuli, which can be explained by the social identity theory [13,26,61]. Contemporary Tibetan local cultural adaptable differences' indicators are demographic characteristics, language, clothing, food, customs, symbols, festivals, communication, and religion [27,38,74]. In addition, Tibetan traditional culture adaptive variables focus on psychological pressure generated by foreign cultural impact, traditional cultural limitations, and taboos; modern mainstream cultural adaptive variables to reflect the Tibetan people's adaptability to non-Tibetan culture mainly involve the cultural openness, resident environment, the degree of modern cultural acceptance and interest, and the approval level of intermarriage between Tibetans and non-Tibetans.

Therefore, based on the ABC model [13] and the CD theory [34,44,50], the cultural adaptation of the Tibetan people is divided into two parts for analysis; one is the adaptability of Tibetan traditional culture, and the other is the adaptability of Tibetan modern culture. The corresponding variables of these two parts are designed from three dimensions of affection, behavior, and cognition [43]. The adaptation of the Tibetan people's Tibetan traditional culture and modern culture in the affective, behavioral, and cognitive aspects can be represented by cultural distance [7].

When we choose specific indicators, the specific meaning of the Tibetan people's adaptation to Tibetan traditional culture in affective, behavioral, and cognitive aspects is shown in Appendix A (Table A1). The affective dimension represents the level of psychological stress caused by foreign culture on the impact of Tibetan traditional culture (FIT). The behavioral dimension denotes the level of likeness of Tibetan food and its inheritance (LTF), the level of Tibetan dressing degree and its inheritance (TDI), the level of resident agglomeration with Tibetans (RAT), the level of decoration and inheritance of the Tibetan style of the home (DTH), the frequency or extent of Tibetan language use in daily life (FTL), the frequency or extent of Tibetan language use in social communication (FTS), the level of the number, love, and trust of Tibetan friends (NTF), the level of compliance with Tibetan traditional customs (LTC),the level of compliance with traditional Tibetan marriage etiquette (LTM), the level of compliance with Tibetan traditional funeral (LTF), the level of compliance with traditional Tibetan festivals (TTF), the level of Tibetan culture's restraint on behavior (TRB), and the level of dietary taboo (LDT). Cognitive dimension denotes the level of religious piety or display (RPD), the level of familiarity with the origin and development of Tibetan Buddhism (FTB), the level of familiarity with Zongshan and Tashilhunpo Monastery (ZTM), as well as the level of familiarity, observance, and recognition of Tibetan traditional culture (RTC).

The concrete implication of the Tibetan people's adaptation to modern culture in the three dimensions of affection, behavior, and cognition is shown in Appendix A (Table A2). The affective aspect is the level of modern cultural openness (MCO). The behavioral dimension means the frequency or extent of Chinese language use in work (FCL), the level of recognition about living in a same residential area with non-Tibetans (RNT), the level of familiarity with modern festivals (FMF), the level of familiarity and compliance with national statutory holidays (NSH),as well as the level of familiarity with modern culture (FMC). The cognitive aspect signifies the level of cognition of deep interaction with non-Tibet (DIN), the level of cognition and love for modern culture (CMC), and the level of recognition of intermarriage with non-Tibet (IMN).

Under the background of contemporary social development, it emphasizes that the Tibetans' cultural adaptable differences are affected by the interaction between internal pressures and external forces. These factors mainly include Tibetan traditional cultural observance, modern cultural influence, using technology, policies, globalization, religious beliefs, and stable and open development in society [35,57]. Meanwhile, the policies include three aspects: National policy, counterpart assistance policy, and the role of local government. Based on the influencing factors of the above 7 dimensions, we choose 10 associated variables to analyze the dynamic mechanism of the Tibetans' cultural adaptable differences, which are shown in Appendix A (Table A3). These 10 indicators can be described as follows. The degree of the taboo, etiquette, and custom compliance required by Tibetan traditional culture (CT) is in the dimension about the traditional cultural observance. The aspect of modern cultural influence is associated with the degree of impact and freshness of modern culture in the dimensions of affection, behavior, and cognition (IM). The extent of using internet (UI) and the level of the improvement about education and facilities (IE) are on the side of using technology. Policies consist of the level of national policies' impact (NP), the degree of influence on counterpart assistance to Tibet (AC), and the extent of local government role (LG). The degree of globalization role (GL) denotes the globalization. The extent of influence of Tibetan Buddhism (TB) corresponds to the religious beliefs aspect. In the dimension of stable and open development, the index is the level of social stability, openness, and development (SO).

*3.3. Data Collection*

From May to July 2017, we conducted interviews and research in the fully equipped modern Shigatse city. During the survey, two Tibetan friends helped us with the research work. We had an in-depth conversation with some Tibetan elders. Among them, two Tibetan leaders working in government sectors vividly described their different-aged family members associated with psychological state, behavior, and cognitive characteristics in dealing with modern culture and

traditional culture, which helped us to deeply understand the differences in lifestyles and attitudes between Tibetans who faced traditional and modern cultures.

In order to ensure the quality of the sample, to maintain that the sample is isomorphic to the population during statistical analysis, and to avoid sample bias to effectively reflect the population characteristics and assure equal probability of each family in Shigatse city, we conduct household-to-household surveys of the subjects and use the technique of sampling without replacement in the simple random sampling method. Considering the Tibetans' distribution differences in urban streets, mobility, age, occupation, etc., the respondents of the Tibetan household were chosen. Further, the social characteristics of Tibetans and the habits of Tibetans are considered. Due to the large number of relatives of the Tibetan people, and the fact that Tibetan society belongs to the patriarchal society, the status and prestige of the "parents" in a large family is extremely high, and the cultural values basically follow the views of the "parents" at home. Therefore, we excluded some research objects that may cause repetitiveness in the survey. For example, a family with clan relations in a community randomly selected one of them to conduct research to ensure that each Tibetan in the sample is independent to each other, meaning that there is no particular relevance and exclusion. That can reduce sampling errors, improve sampling precision, and maintain consistency in our sampling procedures. The existing Tibetan population of Shigatse city is 43,588 with an average 3.08 members per household; we exclude some similar samples, so the number of independent urban Tibetan families living in the urban area of Shigatse is 5652 [78]. We successfully distributed a total of 65 questionnaires, including 59 valid questionnaires; the questionnaires were distributed according to the standard ratio of 1:87, and the questionnaires effective rate was 90.77% during the investigation. Furthermore, studies have shown that scientific small-sample data can also explain the scientific problems to be studied [75,79]. Thus, the sample data is representative and can explain the Tibetan people's cultural adaptive differences.

There are 59 valid samples shown in Table 1; males and females accounted for 54.237% and 45.763%. Age is divided into three stages of 19–30 years old, 30–45 years old, and 45–60 years old, and the corresponding proportions are 42.373%, 35.593%, and 22.034%. Occupation is "Staff of state organs, organizations, and institution", "Staff of state-owned enterprises, private enterprises, and independent operators", and "Alien service people", while the related proportions are 47.458%, 25.424%, and 27.119%. The educational levels are "undergraduate and above", "junior college", "secondary technical specialized school, or senior high school", and "Junior middle school and below", and the associated proportions are 30.508%, 23.729%, 20.339%, and 25.424%, respectively. The living time of the Tibetan residents surveyed has five categories: 40 years, 30–40 years, 20–30 years, 10–20 years, and less than 10 years, and the corresponding distributions are 20.339%,20.339%, 18.644%, 10.169%, and 30.508%, respectively.

**Table 1.** Demographic Characteristics of samples (*N*=59).

| | Distribution (%) |
| --- | --- |
| **Gender** | |
| male | 54.237 |
| female | 45.763 |
| **Age** | |
| 19–30 | 42.373 |
| 30–45 | 35.593 |
| 45–60 | 22.034 |
| **Career** | |
| Staff of state organs, organizations, and institution | 47.458 |
| Staff of state-owned enterprises, private enterprises, and independent operators | 25.424 |
| Alien service people | 27.119 |

**Table 1.** *Cont.*

| Level of Education | |
| --- | --- |
| Undergraduate and above | 30.508 |
| Junior college | 23.729 |
| Secondary technical specialized school, or senior high school | 20.339 |
| Junior middle school and below | 25.424 |
| **Length of Residence (Year)** | |
| >40 | 20.339 |
| 30–40 | 20.339 |
| 20–30 | 18.644 |
| 10–20 | 10.169 |
| <20 | 30.508 |

*3.4. Statistical Modeling*

When we calculate the cultural adaptable score, we first assign weights using the coefficient of variation weighting method [80] to the variables corresponding to traditional culture and modern culture. Then, the cultural distance between the traditional and modern part of local culture is calculated [71]. Finally, multiple linear regression analysis and structural equation modeling are used to analyze the influencing factors that caused cultural adaptive differences.

3.4.1. Coefficient of Variation Weighting Model

Calculating the weight of cultural adaptive variables corresponding to Tibetan traditional culture and modern culture is divided into three steps. First, a culturally adaptive variable matrix is established based on the five-point Likert scale. Then, we work out the coefficient of variation about the relevant variables. Finally, the corresponding weighting is quantified. The formulas mentioned above are as follows [53]:

$$X = \left[ x_{ij} \right]_{mn} (I = 1, 2, \ldots \ldots, m;\ j = 1, 2, \ldots \ldots, n) \tag{1}$$

$$\omega_i = D / \overline{x_i} \tag{2}$$

$$D = \sqrt{\frac{1}{n} \sum_{j=1}^{n} (x_i - \overline{x_i})^2} \tag{3}$$

$$W_i = \omega_i / \sum_{i=1}^{m} \omega_i \tag{4}$$

where $x_{ij}$ is $i$th question's acculturate value to $j$th surveyed Tibetan individual, $\omega_i$ is $i$th item's coefficient of variation, $D$ is the mean-square deviation, $\overline{x_i}$ is the average about the $i$th surveyed question corresponding to all participants, and $W_i$ is the $i$th variable's weight.

3.4.2. Cultural Adaptive Score and Related Types Model

Cultural score calculation for studying cultural adaptive differences has theoretical and empirical validity [53]. Therefore, in order to analyze the categories of cultural adaptation, the cultural adaptable score is firstly calculated.

$$S_{ij} = x_{ijW_i} \tag{5}$$

Based on affective, behavioral, and cognitive theories and cultural adaptive strategies, establish a two-dimensional plane rectangular coordinate system, the horizontal axis represents the Tibetan traditional cultural adaptive score, and the vertical axis denotes the Tibetan modern cultural adaptive score. Meanwhile, scatter plots are made in the three dimensions of affection, behavior, and cognition to analyze Tibetans' cultural adaptation, respectively. When the cultural adaptive score in the area of $3 \leq$ (A,B,C)T-Score $\leq 5$ and $3 \leq$ (A,B,C)NT-Score $\leq 5$ is classified as integration; when the score in the

interval of $1 \leq$ (A,B,C)T-Score $\leq 2$ and $3 \leq$ (A,B,C)NT-Score $\leq 5$ is associated with assimilation; and the value in the region of $1 \leq$ (A,B,C)T-Score $\leq 2$ and $1 \leq$ (A,B,C)NT-Score $\leq 2$ belongs to marginalization; and the section of $4 \leq$ (A,B,C)T-Score $\leq 5$ and $1 \leq$ (A,B,C)NT-Score $\leq 2$ is referred to separation.

Where $S_{ij}$ refers to the cultural adaptive score of the $i$th participants $j$th variable, and $S_{ij}$ satisfies $S_{ij} \in \begin{bmatrix} 1 & 5 \end{bmatrix}$; (A,B,C)T-Score represent Tibetans' traditional cultural adaptable score in the affective, behavioral, and cognitive dimensions, respectively; (A,B,C)NT-Score respectively indicates the Tibetan folks' modern cultural adaptive scores in the affective, behavioral, and cognitive dimensions, separately.

### 3.4.3. Cultural Distance Model

Cultural distance is applied in the cultural adaptive differences which has theoretical and empirical feasibility [34], with the subtractive value between traditional and modern cultural score corresponding in affective, behavioral, and cognitive dimensions, respectively, and then calculate the cultural distance [68]. The corresponding calculation formulas are as follows:

$$\Delta S_A = S_{ANT} - S_{AT} \tag{6}$$

$$\Delta S_B = S_{BNT} - S_{BT} \tag{7}$$

$$\Delta S_C = S_{CNT} - S_{CT} \tag{8}$$

$$CD_{iA} = (S_{iNTA} - S_{iTA})^2 / V_A \tag{9}$$

$$CD_{iB} = (S_{iNTB} - S_{iTB})^2 / V_B \tag{10}$$

$$CD_{iC} = (S_{iNTC} - S_{iTC})^2 / V_C \tag{11}$$

$$CD_i = \frac{CD_{iA} + CD_{iB} + CD_{iC}}{3} \tag{12}$$

where the $S_{iNTA}$, $S_{iNTB}$, and $S_{iNTC}$ respectively stand for the index for the $i$th sample's cultural adaptive score at the Affection($A$), behavior($B$), and Cognition($C$) dimension for the non-Tibetan culture; $S_{iTA}$, $S_{iTB}$, and $S_{iTC}$ indicate the $i$th participant's cultural adaptable score in the dimension of $A$, $B$, and $C$, respectively. $\Delta S_A$, $\Delta S_B$, and $\Delta S_C$ refer to the cultural adaptive difference in the $A$, $B$, and $C$ aspects. $V_A$, $V_B$, and $V_C$ are the variance about the Tibetan participants' modern cultural adjustment score in the A, B, and C dimensions, separately. $CD_i$ is the cultural adaptive distance.

### 3.4.4. Linear Regression Model

Before performing linear regression analysis, all raw data is first standardized to ensure that the constant terms in the one or multiple linear regression models based on the least-squares method are 0 [57]. On this basis, the direct effects of cultural adaptable differences are analyzed. In the specific calculation process, combining the Pearson correlation coefficient of the influencing factor variables, some variables are extracted according to the value being significant at the 0.01, 0.05, and 0.1 level. The extracted variables are then subjected to multiple regression analysis to further determine the direct effects' elastic coefficient. The specific model is:

$$CD_i = \beta_i x_i + \varepsilon_i \tag{13}$$

where $\beta_i$ refers to the regression coefficient, $\varepsilon_i$ represents the error term, and $x_i$ are the variables associated with the influencing factors.

### 3.4.5. Structural Equation Model

The structural equation model is used to analyze the relation between attributes and dependent variables [81]. Based on the Pearson correlation coefficient and the number of variables, five structural

equation models are constructed to analyze the mediating effects that affect Tibetans' cultural adaptive differences. Relevant models are as follows:

$$X = \Lambda_X \xi + \delta \tag{14}$$

$$Y = \Lambda_Y \eta + \varepsilon \tag{15}$$

$$\eta = B\eta + \Gamma\xi + \zeta \tag{16}$$

where $x$ and $y$ refer to the vector quality of exogenous and endogenous indicators, respectively, $\Lambda_X$ and $\Lambda_Y$ are factor-loading matrix, $B$ represents the relationship between endogenous latent variables, $\Gamma$ denotes the effect of endogenous latent variables on exogenous latent variables, and $\delta$, $\varepsilon$, and $\zeta$ refer to the residual item.

We useExcel2007 to calculate the weight of the variables, the cultural adaptive score, and the cultural adaptable distance, and apply PASW Statistics 18 computes the reliability and validity of the data, the influencing variables' factor-loading, as well as the Pearson correlation coefficient of the influencing factors; a cultural distance box-plot is drawn by Origin9.1. Stata15is used to make linear regression analysis, which aims to find direct effects in influencing factors. Modeling structural equations through Amos17 is used to analyze the intermediary effects among influencing factors.

## 4. Results

### 4.1. Questionnaire Reliability

Reliability analysis is an important test step to examine the reliability and consistency of the questionnaire data. The results shown in Table 2 indicate that the Cronbach's Alpha of the traditional Tibetan culture is 0.790, while the behavioral and cognitive dimensions' Cronbach's Alphas are 0.688 and 0.686. The Cronbach's Alpha is 0.726, yet the reliabilities in the behavioral and cognitive dimensions are 0.696 and 0.764. However, the affective dimension corresponding to the Tibetan traditional and modern culture has only one index, so the reliability does not calculate. The Cronbach's Alpha of all indicators of Tibetan local culture is 0.801, and the Cronbach's Alpha of all indexes corresponding to the influencing factors is 0.005. So the selected indicators that characterize cultural adaptive differences and influencing factors meet the reliability requirements [81].

**Table 2.** Reliability analysis of cultural adaptive differences' variables and its influencing factors.

| | Cronbach's Alpha | Standardized Cronbach's Alpha |
|---|---|---|
| Tibetan traditional cultural indicators' test | 0.790 | 0.805 |
| Affection | — | — |
| Behavior | 0.688 | 0.719 |
| Cognition | 0.686 | 0.688 |
| Tibetan modern cultural indicators' test | 0.726 | 0.738 |
| Affection | — | — |
| Behavior | 0.696 | 0.701 |
| Cognition | 0.764 | 0.767 |
| Overall indicators' test about Tibetan local culture | 0.801 | 0.810 |
| The influencing factors' test | 0.005 | 0.005 |

Note: "—" means that there is only one variable, so it could not be tested in reliability via PASW Statistics18.

Questionnaire validity is used to consider the statistical analysis results and the authenticity of the intended purpose of the questionnaire design. The testing results are shown in Table 3: The Kaiser–Meyer–Olkin (KMO) of Tibetan traditional culture is 0.737; the KMO in behavioral and cognitive dimensions are 0.700 and 0.691, respectively; the KMO of Tibetan modern cultural data is 0.709; the KMO of behavioral and cognitive dimensions are 0.642 and 0.695. Since the affective

dimension of Tibetan tradition and modern cultural part has only one indicator, its validity could not be calculated. All indicators' KMO of Tibetan local culture is 0.495, and the validity of influencing factors is 0.558. A previous study has shown that further studies can be performed with a KMO greater than 0.3 [81].

**Table 3.** Validity analysis of cultural adaptive differences' variables and its influencing factors.

| | Kaiser–Meyer–OlkinMeasure of Sampling Adequacy | Standardized Cronbach's Alpha | | |
| --- | --- | --- | --- | --- |
| | | Bartlett's Test of NPhericity | df | Sig. |
| Tibetan traditional cultural indicators' test | 0.737 | 329.684 | 153 | 0.000 |
| Affection | — | — | — | — |
| Behavior | 0.700 | 185.124 | 78 | 0.000 |
| Cognition | 0.691 | 38.200 | 6 | 0.000 |
| Tibetan modern cultural indicators' test | 0.709 | 144.894 | 36 | 0.000 |
| Affection | — | — | — | — |
| Behavior | 0.642 | 58.233 | 10 | 0.000 |
| Cognition | 0.695 | 43.254 | 3 | 0.000 |
| Overall indicators' test about Tibetan local culture | 0.495 | 693.750 | 351 | 0.000 |
| The influencing factors' test | 0.558 | 84.080 | 55 | 0.007 |

Note: "—" means that there is only one variable, which could not be tested in validity via PASW Statistics18.

Before constructing the structural equation model, it is necessary to calculate the factor loadings' value and the Pearson correlation coefficients about the variables affecting the cultural adaptive differences and the testing results expressed in Table 4. The values of factor loadings are greater than 0.5, so the structural equation model can be constructed by using the relevant influencing variables. Meanwhile, according to the principle that the sample size is equal to or greater than 10 times the number of variables [82], so five structural equation models are constructed. Model 1 is composed of CT, IM, NP, SO, and CD. Model 2 is based on IE, UI, SO, and CD. Model 3 consists of CT, UI, GL, TB, and CD. Model 4 is constituted of IM, UI, LG, AC, and CD. Model 5 is constructed by IE, TB, IM, AC, and CD. In doing so, we test result shown in Table 5 that the Model 1, Model 3, and Model 4 can be used to study the mediating effects of Tibetan's cultural adaptive differences [81].

**Table 4.** The statistics about factor loadings and Pearson correlation coefficients.

| | Factor Loadings | CT | IM | UI | IE | NP | AC | LG | GL | TB | OC | CD |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CT | 0.800 | 1 | | | | | | | | | | |
| IM | 0.555 | 0.105 | 1 | | | | | | | | | |
| UI | 0.647 | −0.149 | −0.253 | 1 | | | | | | | | |
| IE | 0.605 | −0.042 | −0.424 ** | 0.440** | 1 | | | | | | | |
| NP | 0.851 | −0.004 | 0.026 | 0.107 | −0.075 | 1 | | | | | | |
| AC | 0.594 | 0.000 | 0.148 | 0.027 | 0.031 | 0.070 | 1 | | | | | |
| LG | 0.609 | −0.055 | −0.105 | 0.026 | 0.010 | 0.012 | 0.047 | 1 | | | | |
| GL | 0.599 | 0.144 | 0.079 | 0.002 | 0.001 | −0.057 | −0.163 | −0.181 | 1 | | | |
| TB | 0.731 | 0.218 | 0.257 | −0.019 | −0.128 | 0.002 | −0.182 | 0.073 | −0.015 | 1 | | |
| OC | 0.624 | −0.061 | −0.321* | 0.317* | 0.415** | −0.289* | −0.091 | −0.087 | 0.112 | 0.055 | 1 | |
| CD | 0.706 | 0.289* | −0.374** | 0.249 | 0.267* | −0.085 | −0.023 | −0.032 | −0.045 | 0.019 | 0.243 | 1 |

Notes: *, ** indicate the factors are significant at 0.05, 0.01, respectively.

**Table 5.** Five structural equation models' comprehensive list of fit indexes.

| Indexes | Shorthand | Fitted Values | | | | | Acceptance Criteria |
|---|---|---|---|---|---|---|---|
| | | $M_1$ | $M_2$ | $M_3$ | $M_4$ | $M_5$ | |
| Absolute fit indices | $\chi^2$ | 0.278 | 0.000 | 0.033 | 0.076 | 8.964 | $p>0.05$ |
| | $\chi^2/df$ | 0.093 | — | 0.011 | 0.038 | 2.988 | <2 |
| | GFI | 0.998 | 1.000 | 1.000 | 0.999 | 0.936 | $\geq$0.90 |
| | AGFI | 0.990 | — | 0.999 | 0.996 | 0.680 | $\geq$0.90 |
| | RMSEA | 0.000 | 0.146 | 0.000 | 0.000 | 0.188 | <0.05 |
| | RMR | 0.024 | 0.000 | 0.012 | 0.014 | 0.211 | The smaller, the better |
| Incremental fit indices | NFI | 0.988 | 1.000 | 0.998 | 0.993 | 0.579 | $\geq$0.90 |
| | CFI | 1.000 | 1.000 | 1.000 | 1.000 | 0.471 | $\geq$0.90 |
| Parsimonious fit indices | AIC | 24.278 | 20.000 | 24.033 | 26.076 | 32.964 | The smaller, the better |
| | CAIC | 60.794 | 50.431 | 60.550 | 65.636 | 69.480 | The smaller, the better |
| | CN | 57 | 57 | 57 | 57 | 57 | CN is 10 times VN |
| | VN | 5 | 4 | 5 | 5 | 5 | |

Note: "—" means that there is only one variable, so it could not be tested in reliability via PASW Statistics18.
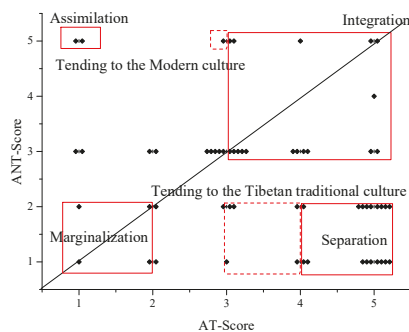
### 4.2. Tibetans'Cultural Adaptive Types in the Affective, Behavioral, and Cognitive Dimensions

In general, there are four cultural adaptive types of integration, assimilation, separation, and marginalization, which are represented in Table 6 and the Figures 3–5. Further, there are some special types of cultural adaptation: Tending to Tibetan traditional culture (3 < (A,C)T-Score $\leq$ 5 and 2 < (A,C)NT-Score $\leq$ 3), tending to modern culture (2 < (A,C)T-Score $\leq$ 3 and 3<(A,C)NT-Score $\leq$ 5), as well as unclassified cultural adjusted categories (2 < (A,C)T-Score < 3 and 2 <(A,C)NT-Score < 3) in the affective and cognitive dimensions.

**Table 6.** Cultural adaptive types and the related distributions.

| Cultural Adaptive Types | Affection | | Behavior | | Cognition | |
|---|---|---|---|---|---|---|
| | Number | Distribution (%) | Number | Distribution (%) | Number | Distribution (%) |
| Integration | 20 | 33.898 | 41 | 69.492 | 19 | 32.203 |
| Assimilation | 2 | 3.390 | — | — | 5 | 8.475 |
| Separation | 16 | 27.119 | — | — | — | — |
| Marginalization | 4 | 6.780 | — | — | — | — |
| Tending to modern culture | 1 | 1.695 | 5 | 8.475 | 13 | 22.034 |
| Tending to Tibetan traditional culture | 5 | 8.475 | 13 | 22.034 | 15 | 25.424 |
| Unclassified cultural adjusted categories | 11 | 18.644 | — | — | 7 | 11.864 |
| **Total** | **59** | **100** | **59** | **100** | **59** | **100** |

Note: "—" refers to the absence of corresponding cultural adaptive types.



**Figure 3.** Cultural adaptive types in affective dimension (Note: AT-Score and ANT-Score refer to the traditional and non-Tibetan cultural adaptive scores).
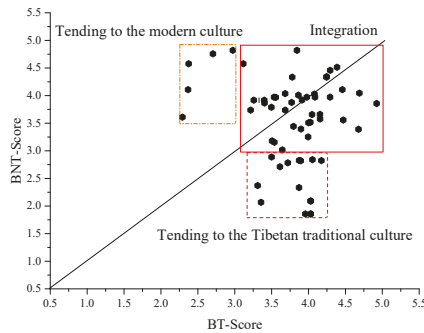
**Figure 4.** Cultural adaptive types in behavior dimension (Note: BT-Score and BNT-Score referred to the traditional and non-Tibetan cultural adaptive scores).



**Figure 5.** Cultural adaptive types in cognitive dimension (Note: CT-Score and CNT-Score referred to the traditional and non-Tibetan cultural adaptive scores).

In the affective dimension, the Tibetans' cultural adaptable types are divided into seven categories: Integration, assimilation, separation, marginalization, tending to modern culture, tending to Tibetan traditional culture, and unclassified cultural adjusted categories, while the corresponding proportions are 33.898%, 3.390%, 27.119%, 6.780%, 1.695%, 8.475%, and 18.644%, respectively. In the behavioral dimension, there are three types in terms of integration, tending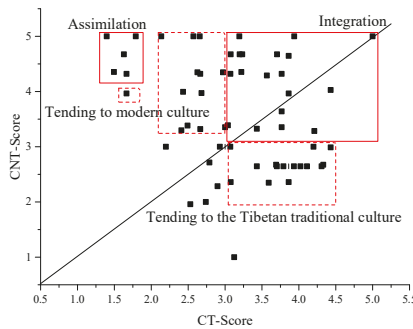 to modern culture, and tending to Tibetan traditional culture, and the related distributions are 69.492%, 8.475%, and 22.034%. In the cognitive dimension: Cultural adaptive classes are integration, assimilation, tending to modern culture, tending to Tibetan traditional culture, and unclassified cultural adjusted categories, with the relevant ratios of 32.203%, 8.475%, 22.034%, 25.424%, and 11.864%.

### 4.3. Tibetans' Cultural Adaptive Differences between the Traditional and Modern Cultural Parts of Contemporary Tibetan Local Culture

The results according to the cultural distance's results by using box-plot analysis are signified in Figure 6 and Table 7. The cultural distance reflects the Tibetan people's cultural adaptable differences. The greater the cultural distance is, the greater Tibetans cultural adaptive difference between the traditional culture and modern culture is. The affective and cognitive dimensions' cultural distance are smaller than its range in the behavioral dimension, and there are some outliers in the affective and cognitive dimension, which indicates the cultural adaptable differences between Tibetan traditional and modern parts in the affective and cognitive dimensions are smaller than that distinctions compared to its related features in the behavioral dimension. However, the cultural adaptive differences in the affective and cognitive dimensions are more complicated than the relevant differences in the behavioral dimension. Additionally, there are abnormal values in total cultural distance, associated with two

outliers are 9.114 and 8.870, and the two abnormal points were eliminated for the Tibetans' cultural adaptive differences' influencing factors analysis.
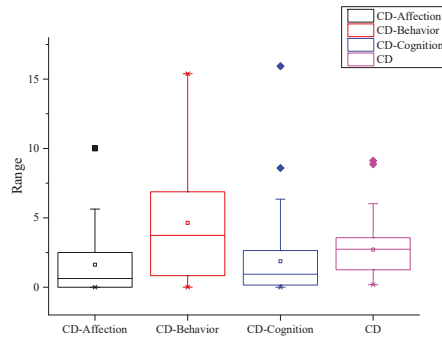


**Figure 6.** Cultural distance box plot analysis (Note: CD-Affection, CD-Behavior, CD-Cognition, and CD represent the Tibetan people's affective, behavioral, cognitive, and total cultural adaptable scores, respectively).

**Table 7.** Box-plot statistics characteristics about cultural distance.

|  |  | CD-Affection | CD-Behavior | CD-Cognition | CD |
|---|---|---|---|---|---|
| minimum |  | 0 | 0.002 | 0 | 0.182 |
| lower quartile | $Q_1$ | 0 | 0.834 | 0.156 | 1 |
| Median | $Q_2$ | 0.626 | 3.736 | 0.937 | 2 |
| Upper quartile | $Q_3$ | 2.504 | 6.882 | 2.644 | 3 |
| Maximum |  | 5.634 | 15.387 | 6.348 | 6.021 |
| Mean |  | 1.174 | 4.641 | 1.507 | 2.491 |
| Inter quartile range | $\Delta Q$ | 2.504 | 6.048 | 2.487 | 2 |
| Mild outlier |  | 10.017 |  | 15.935 | 9.114 |
| Extreme outlier |  |  |  | 8.592 | 8.870 |

*4.4. Analysis of the Direct Effects on the Contemporary Tibetan Local Cultural Adaptive Differences in Tibet*

The Tibetan folks' cultural adaptation differences are explained by the traditional cultural observance, modern cultural influence, using technology, policies, globalization, religious beliefs, as well as the stable and open development in society, which is denoted in Table A3. Through correlation analysis, it is found that the variables directly related to the cultural distance are CT, IM, and IE. The corresponding correlation coefficients are 0.289, −0.374, and 0.269, respectively. On this basis, taking CT, IM, and IE as independent variables, and CD as a dependent variable, multiple linear regression modeling is performed. The results are shown in Table 8: CT and IM have a direct effect on the Tibetans' cultural adaptive differences. The corresponding regression coefficients are 0.332 and −0.353, which is significant at the 0.01 level. Therefore, CT widens the Tibetans' cultural adaptive differences, while IM narrows the Tibetans' cultural adaptable differences. However, the *p* value of the regression coefficient about IE is 0.393, which does not have significant confidence level. In light of this, IE has no direct effect on the Tibetans' cultural adaptive differences.

**Table 8.** The direct effect on the Tibetans' cultural adaptive differences.

| Variables | Coef. | Std. Err. | t | p>ItI | Test of the Linear Regression Model's Rationality | |
|---|---|---|---|---|---|---|
| OT | 0.332** | 0.119 | 2.800 | 0.007 | Number of obs =57 | F(3, 53) = 6.300 |
| IM | −0.353** | 0.131 | −2.70 | 0.009 | Prob > F = 0.001 | R-squared = 0.263 |
| IE | 0.131 | 0.130 | 1.010 | 0.318 | Adj R-squared = 0.221 | |
| _cons | $4.05 \times 10 -9$ | 0.117 | −0.000 | 1.000 | Root MSE =0.882 | |

Notes: ** indicates the value is significant at 0.01 level.

### 4.5. Analysis of the Intermediary Effect on the Contemporary Tibetan Local Cultural Adaptive Differences in Tibet

Structural equation Model 1 is indicated in Table 9 and Figure 7. The results re-demonstrate that CT and IM have a direct effect on Tibetans' cultural adaptive differences. It further means that the abovementioned linear regression results have robustness. Moreover, "NP combined with SO" and "SO associated with IM" influence the cultural adaptive distinctions, and the related elastic coefficients are −0.333 and −0.513, respectively. It indicates that "NP joined with SO" and "SO linked with IM" have mediating effects on Tibetans' cultural adaptive differences. As a result, the two relevant unions can reduce the Tibetan people's cultural adaptable differences. Structural equation Model 3 expressed in Table 9 and Figure 8, which denotes that there is no intermediary effect. However, UI can increase Tibetans' cultural adaptive differences, which conflicts with the above mentioned result by multiple linear regression modeling. Consequently, UI influencing the Tibetans' cultural adaptive differences is unstable. Structural equation Model 4 is shown in Table 9 and Figure 9. There is an intermediary path about "UI associated with IM", and the related elastic coefficient is −0.480. As such, "UI combined with IM" can reduce its differences.

**Table 9.** Path analysis for the intermediary effect of Tibetans' cultural adaptive differences.

| | Path | USTD | S.E. | C.R. | P | STD |
|---|---|---|---|---|---|---|
| | CD<— CT | 0.630** | 0.217 | 2.904 | 0.004 | 0.333** |
| | CD<— IM | −0.451** | 0.151 | −2.997 | 0.003 | −0.362** |
| | CD<— NP | −0.061 | 0.211 | −0.289 | 0.772 | −0.035 |
| Model 1 | CD<— SO | 0.156 | 0.145 | 1.076 | 0.282 | 0.135 |
| | e4<–> e3 | −0.333* | 0.157 | −2.128 | 0.033 | −0.283* |
| | e2<–> e4 | −0.513* | 0.225 | −2.282 | 0.022 | −0.308* |
| | e2<–> e1 | 0.086 | 0.130 | 0.660 | 0.510 | 0.084 |
| | CD<— CT | 0.677 | 0.237 | 2.850 | 0.004 | 0.361 |
| | CD<— UI | 0.306* | 0.124 | 2.470 | 0.014 | 0.302* |
| | CD<— GL | −0.121 | 0.150 | −0.808 | 0.419 | −0.099 |
| Model 3 | CD<— TB | −0.063 | 0.142 | −0.448 | 0.654 | −0.056 |
| | e1<–> e9 | 0.241 | 0.149 | 1.622 | 0.105 | 0.217 |
| | e1<–> e8 | 0.153 | 0.135 | 1.134 | 0.257 | 0.148 |
| | e7<–> e1 | −0.182 | 0.163 | −1.115 | 0.265 | −0.145 |
| | CD<— IM | −0.427** | 0.159 | −2.685 | 0.007 | −0.344** |
| | CD<— UI | 0.165 | 0.128 | 1.291 | 0.197 | 0.163 |
| | CD<— LG | −0.133 | 0.219 | −0.605 | 0.545 | −0.074 |
| Model 4 | CD<— AC | 0.049 | 0.222 | 0.221 | 0.825 | 0.027 |
| | e2<–> e11 | 0.165 | 0.140 | 1.181 | 0.238 | 0.155 |
| | e2<–> e10 | −0.106 | 0.140 | −0.759 | 0.448 | −0.099 |
| | e7<–> e2 | −0.480* | 0.257 | −1.873 | 0.061 | −0.254* |
| | e11<–> e10 | 0.034 | 0.099 | 0.343 | 0.731 | 0.046 |

Note: "USTD", "STD" separately represents the un-standardized and standardized regression coefficients; *, ** indicate the values are significant at 0.05, 0.01 level, respectively.
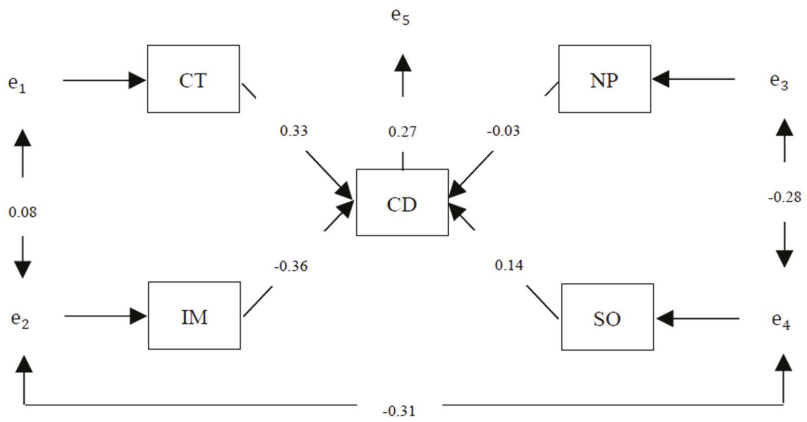
**Figure 7.** Path of structural equation Model 1 (Note: Numbers in figure represent standardized data).
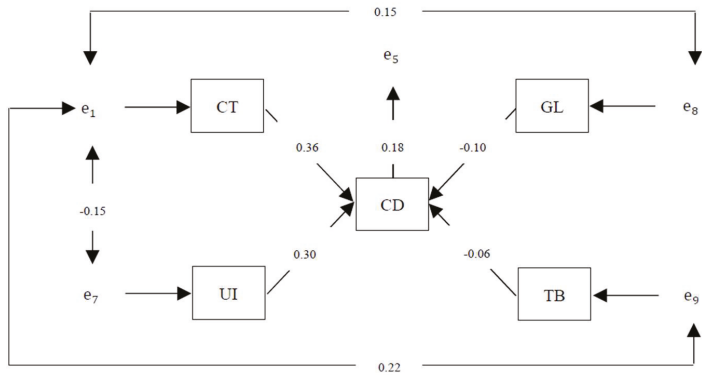


**Figure 8.** Path of structural equation Model 3 (Note: Numbers in figure represent standardized data).
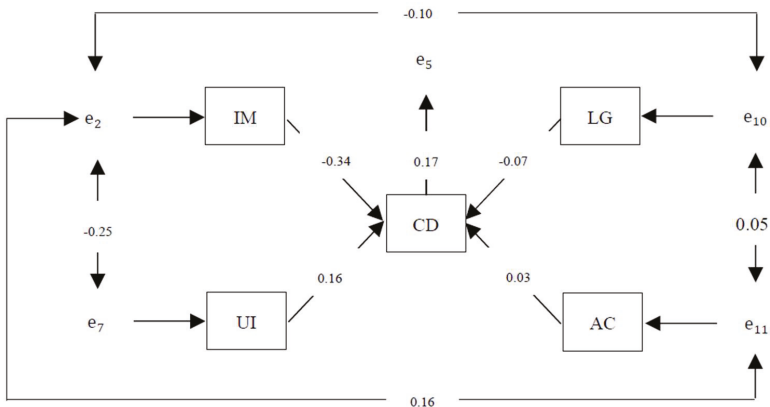


**Figure 9.** Path of structural equation Model 4 (Note: Numbers in figure represent standardized data).

## 5. Discussions

*5.1. Tibetans'Cultural Adaptive Differences Discussions*

Before 1950, temples, sectarian governments, and manors controlled Tibet's social, political, economic, and cultural order. The ruling class used religious power to establish a moral order and legal system to achieve the governing of serf ideology [83]. Moreover, the natural environment of cold temperatures and lack of oxygen had laid the Tibetan people's supreme respect for the god. As a result, the Tibetans' had profound religious sentiment and spiritual sustenance for Tibetan Buddhism, and at the same time, the Tibetan people formed the behavioral characteristics and cognitive styles based on naturalism and transcendent symbolism [11]. Since the 1950's democratic reform in Tibet, Tibetan people have overthrown the local serf system, establishing the development path of socialism with Chinese and Tibetan characteristics, which effectively promoted economic development, social progress, and cultural transformation [84]. Especially since the reform and opening up, Tibet's development, stability, and opening up have enabled foreign culture, modern culture, and post-modern culture to infiltrate all aspects of Tibetan people's work and life, and promoted the slow evolution of Tibetan traditional local culture, leading to the gradual emergence of new local cultures. In this context, the Tibetan people have a new sense of place and reinvented the topophilia [85], which is newborn to the local culture, and constructed a new cultural path-dependence and cultural adaptable persistence chains [86]; this was a comprehensive process of reshaping local cultural characteristics and strengthening contemporary local identity.

Therefore, there is a coexistence of the fixed and variability of contemporary Tibetan local culture, which makes Tibetan traditional and modern culture blending, intertwining, retaining, and changing [70]. The transformation of Tibetan local culture is a transcendence of traditional culture and a dialectical negation of old culture [23], which is characterized by non-synchronization, contingency, and folding. Cultural adaptable differences are the results about the joint action of affection, behavior, and cognition. Affections represent the degree of psychological wellbeing. Behaviors denote the interactive process between traditional and modern culture. Cognitions mean attitudes and values. Cultural adaptation is a spiraling process of pressure–adjustment–growth [25]. There is integration, assimilation, separation, and marginalization of Tibetan people's cultural adaptive categories, and there are also other cultural adaptable types regarding adapting to Tibetan traditional culture, tending to modern culture, and unclassified cultural adaptive types. These can be attributed to the fact that the Tibetan people's understanding of the Tibetan modern culture and Tibetan traditional culture depends on the heterogeneity of the relationship and the heterogeneity of the population. The cultural adaptive categories have the meaning of relativity and multiplicity, and the beliefs, attitudes, and practices of the Tibetan people are related to the three cultural adaptive differences' dimensions of emotions, behavior, and cognition [87]. These comprehensive links constitute a cultural adaptive strategy for Tibetans in three dimensions.

Tibetan people share the norms and meanings of contemporary Tibetan local culture based on affection, behavior, and cognition [88]. As a kind of construction, cultural distance reflects the overall adaptability of different individuals and groups to the characteristics and values of different cultures [33,70,71]. Culturally adaptable differences are the dynamic evolution process between the "self" and "other" cultural boundaries. Cultural adaptation is defined as part of the people's self-concept, which is derived from the self-understanding of other cultures, making another culture that has self-related characteristics, ideological positions, common behaviors, experiences, and history internalized, as well as mainly indicated affective, behavioral, and cognitive aspects in the cultural adaptive process [40,41]. Moreover, the Tibetan people's cultural adaptation in all affective, behavioral, and cognitive dimensions have boundaries, which reflects the degree of complexity and the size of its differences. Meanwhile, there is internal homogeneity and unity in each dimension, and that is not natural, but a unitarily constructive form [8].

Based on gravity theory and stress theory of cultural distances, it is shown that the positive and negative effect on beliefs and values may be easily generated in the affective and cognitive dimensions [89]. That has positive cultural spillovers, learning effects of cultural adaptation, while it has also negative cultural ambiguities, conflicts, splits, and rebounds in the aspects of cultural adjustment [9,42,53]. The positive and negative externalities increase the complexity of Tibetans' cultural adaptive differences in the affective and cognitive dimensions, because the cultural adaptation of affective and cognitive dimensions is the result of a cross space mappings. In the process of the cultural adaptation, Tibetan folks need to be understood and integrate different aspects of information. The size and direction of psychological space mapping displacement, the flexibility of information recognition, and the ability to process information all increase the complexity of Tibetan people's cultural adaptation in the affective and cognitive dimensions [63]. The complexity of actual behavioral culturally adaptive differences may be weakened by the affective and cognitive cultural adaptation of dimensions. However, it can expand the cultural adaptable differences in the behavioral dimension. The specific practice makes the cultural adaptive differences in the behavioral aspect complementary, and it has a synergetic effect [35]. Since the Tibetan people's cultural adaptability in the affective and cognitive dimensions may be unshaped, there are certain difficulties in the cultural adaptable differences of the behavioral dimension to fully respond to the cultural adaptive differences of the affective and cognitive dimensions, and culturally adaptive differences' responses to the effect may have unanticipated amplification in the behavioral dimension. Further, the Tibetan people's cultural adaptive strategies in the affective and cognitive dimensions are more complex than the cultural adaptable strategies in the behavioral dimension. Yet, the cultural adaptable difference in the behavioral dimension is greater than the cultural adaptive differences in the affective and cognitive dimensions.

*5.2. The Influencing Factors that Caused Cultural Adaptive Differences Discussions*

Tibetan people's cultural adaptive differences are explained by the seven dimensions of traditional cultural observance, modern cultural influence, using technology, policies, globalization, religious beliefs, and stable and open development in society. There is possible closed relatedness between the influencing factors of these seven dimensions reflected in the cultural adaptive differences and social cultural adaptation, psychological adaptation, interpersonal relationship adaptation, cultural values, social capital, Tibetan Buddhism, socio-economic development, modern network technology, as well as policy implementation [38,53,86]. The results of our empirical research show that "CT" and "IM" have direct effects on the Tibetans' cultural adaptable differences; "NP associated with SO", "SO combined with IM", and "UI linked with IM" have mediating effects on the Tibetan people's cultural adaptive differences. This is because the cultural adaptive activities of the Tibetan people are divided into two parts: (1) things that continue to pursue traditional cultural parts and (2) businesses that engage in modern cultural parts [63]. Therefore, the factors corresponding to the dimension of traditional cultural observance and modern cultural influence have become the direct factors affecting the Tibetans' cultural adaptive differences, while others acted as intermediary effects influence the Tibetans' cultural adaptable distinctions.

All of CT associated with Traditional cultural observance increase Tibetans' cultural adaptable differences, because Tibetans classifies themselves according to common values, norms, cognitions, attitudes, and behaviors. They are more likely to contact people with similar cultural backgrounds [7], which promotes Tibetan people's harmony-seeking and avoidance of uncertainty [90], in order to improve the positive effects of social connections [44,67]. Meanwhile, Tibetan people's adaptability to traditional local culture has path dependence and convergence and emphasizes the importance of Tibetan traditional culture. In other words, the traditional cultural part in the Tibetan local culture may be resistant to foreign culture, which is a response to the negative bias about the Tibetans' cultural attitudes to the foreign culture [45]. Thus, the protection of traditional local cultural characteristics' appeal has, to an extent, expanded the Tibetan people's adaptive differences between the traditional and modern culture. On one hand, the traditional cultural compliance dimension has the characteristics

of independence and directness in the cultural adaptation difference, which reflects the historical and rooted features of Tibetan traditional culture, and further represents the Tibetans' adherence to traditional culture. On the other hand, Tibetans can accept foreign modern culture, but this acceptance does not mean that foreign cultures are "going native" and abandoning their traditional values and Tibetan Buddhist beliefs [63]. It has further strengthened Tibetans' respect, acceptance, understanding, and protection of traditional culture in the process of dialectical cognition of the traditional culture, which, in turn, increases the cultural adaptive differences.

The dimension of modern cultural influence corresponding to IM can reduce the Tibetans' cultural adaptive differences. The existing research results have shown that there is a negative power exponential relationship between cultural values' differences and social distances [91]. The better the Tibetan people adapt to the modern part of contemporary local culture, the more they can avoid the uncertainty in the process of cultural adaptation [7]. Normally, the relationships between the cultural environment and the folks' communal goals, perceptions, and satisfaction have a moderating effect, and there is a significant positive correlation between the common goals and satisfaction [92]. The more satisfied the Tibetan people are with the experience of the social and cultural environment formed by the modern part of the local culture, the more comprehensive the state's transfer at the Tibetan people's personal internal scale and the interpersonal cultural empathy supported by the behavioral planning theory [91]. That narrows the Tibetan people's cultural adaptive differences between the traditional and modern parts in the local culture.

"NP linked with SO" has a mediating effect that reduces the Tibetans' cultural adaptable differences. Since the reform and opening up 40 years ago, the PRC and the CCP have held six symposiums on Tibet work, and the implementation of the policies have mainly focused on Tibet's economic development, social stability, large-scale infrastructure construction, improvement of public service facilities, and national security strategy. Moreover, cultural construction has mainly concentrated on the education assistance, technological advancement, talent personnel training, and protection of Tibetan traditional cultural characteristics [93], which further promoted the Tibetan people to be emancipated in their minds and overcome their concept of closure, and induced the formation of a multi-channel, multi-level, and all-round opening pattern in the entire Tibet autonomous region [94]. Thus, only by combining NP with SO can we reduce the Tibetan people's cultural adaptive differences between local traditional culture and modern culture.

The simultaneous impact of "SO associated with IM" can reduce the Tibetans' cultural adaptable differences, because the stability of Tibetan society is a key factor in local development and the Tibetan people's good livelihood [24]. Additionally, Tibetan traditional culture has the characteristics of time, tenacity, nationality, and sociality [95]. The contemporary society's Tibetan culture serves the construction and development of Tibetan social undertakings and reflects the Tibetan people's values, moral standards, ideology, and behavioral norms. Abandoning the traditional cultural component of Tibetan local culture is not conducive to social development and public progress, which can improve the quality of Tibetan local culture as a whole [96]. Therefore, linking SO with IM has a mediating effect on the Tibetans' cultural adaptable differences. The abovementioned two factors' combination may improve the modern cultural adaptation to Tibetan people, and thus reduces the adaptive difference between the modern and traditional parts in the Tibetan local culture.

The intermediary effect of "UI combined with IM" may reduce the Tibetans' cultural adaptive differences. Social cognitive models emphasize the importance of technology, expectations, values, attitudes, and perceptions [57]. Using Internet, television, and other media has a significant correlation to the transformation of Tibetan people's traditional cultural concepts. However, the level of use of the network is less than the interpersonal effect about spreading information to bring about traditional Tibetan cultural transformation [97]. Therefore, combining UI with IM indirectly narrows the Tibetans' cultural adaptive differences through an intermediary effect.

## 6. Conclusions, Implications and Limitations

### 6.1. Conclusions

The game between traditional and modern culture is first reflected in the cultural adaptation of Tibetan people in terms of affection, behavior, and cognition. Research shows that there are seven cultural adaptive strategies: Integration, assimilation, separation, marginalization, tending to modern culture, tending to Tibetan traditional culture, and unclassified cultural adaptive types. To sum up, the Tibetans' cultural adaptive strategies tend toward integration of modern and traditional culture in the affective, behavioral, and cognitive dimensions, whose characteristics are especially represented in the behavioral dimension. Meanwhile, the traditional culture assimilated by modern culture accounts for a small proportion, yet the Tibetan people still have a large distribution of traditional cultural adaptation. The unclassified cultural adaptive types in the affective and cognitive dimensions increase the complexity and dynamics of cultural adaptation strategies. In addition, the Tibetan people's tendency towards modern culture has a certain proportion in the affective, behavioral, and cognitive dimensions, but this adaptation to modern culture is still based on traditional culture.

There is a correlation between the cultural adaptive difference of the affective dimension and the cultural adaptable differences of the behavioral and cognitive dimensions, but there is no significant confidence level. However, there is a significant correlation between cultural adaptation differences in behavioral dimensions and cultural adaptation differences in cognitive dimensions. This is mainly because the cultural adaptation in the affective dimension is more complex than the cultural adaptability of the cognitive and behavioral dimensions, and the cultural adaptation of the cognitive dimension is more complex than the cultural dimension of the behavioral dimension. In sum, the differences between the Tibetan people in the affective and cognitive dimensions of the Tibetan culture and the cultural adaptation of the modern dimension are smaller than the behavioral dimension of the cultural adaptation, but the affective and cognitive cultural adaptable differences are more complex than the behavioral dimension culturally adaptable differences.

The factors affecting the cultural adaptability of Tibetan people have a direct and intermediary effect. All of CT and IM have direct effects on Tibetans' cultural adaptive differences. CT expands the Tibetans' cultural adaptive differences, while IM reduces the Tibetan cultural adaptive distinctions. In addition, six factors of "NP united with SO", "SO incorporated with IM", and "UI allied with IM" have mediating effects on the Tibetans' cultural adaptive differences. The intermediary effect of above two mentioned mixes can reduces the Tibetan people's cultural adaptive differences between the traditional culture and the modern culture in local Tibetan cultures.

### 6.2. Implications

The contemporary Tibetan local culture is divided into two parts: Tibetan traditional culture and Tibetan modern culture, which is a theoretically innovative way to overcome the misunderstanding of modern mainstream cultural superiority. This paper put Tibetan traditional culture and modern culture into an equal perspective to explore the Tibetans' cultural adaptive differences, aiming to pay attention to the "internalization" of culture [98]. Meanwhile, it reflects the deep respect for the Tibetan local culture. Based on Hofstede's definition of cultural distance, the computational model of cultural distance is redefined by combining with Tibetans' cultural adaptive differences in affective, behavioral, and cognitive dimensions. This study also applied qualitative data to the quantitative model, which can effectively explain the subjects. Besides, based on the multiple linear regression analysis and structural equation modeling to study the effects of cultural adaptive differences, the two models can mutually verify the robustness of direct effects, which has methodological significance.

In the face of the current situation in which the economy of Tibet is lagging behind the Chinese mainland, this research investigates whether the cultural adaptive differences of Tibetans helps to grasp the cultural psychology of the Tibetan people from a deep level and helps to guide the ethnic areas to establish good relations with Chinese mainland. Simultaneously, based on the dimensions of

affection, behavior, and cognition, the Tibetan people are treated to adapt to the differences between the traditional and modern parts of the Tibetan local culture. It helps local governments to grasp the Tibetans' true demands from the national psychology [28], actual behavior, and cognitive characteristics, which plays an important role in the harmony, stability, unity, and development of Tibetan society. When the government of the PRC implements major project investment and economic assistance to the Tibetan region, the related serials engineering must combine national policies with social stability and development. Moreover, the stable and open society must be linked with the modern factors as well as scientific and technological levels. In addition, Tibetan culture is an important part of Chinese culture; in the context of contemporary social and economic development, studying the Tibetans' cultural adaptive differences and its influencing factors is conducive to reconstructing the Tibetan local cultural significance. It also promotes Tibetans and non-Tibetans to observe and protect the Tibetan traditional cultural characteristics. Further, it may help Tibetans adapt to the changing economic and cultural environment in the contemporary society.

*6.3. Limitations*

The limitations of this research are mainly reflected in the following four aspects. First, the impact of demographic characteristics associated with age, gender, occupation, the level of education, and the residential time in Shigatse on Tibetans' cultural adaptive differences between traditional culture and modern culture is not discussed. Second, it is not separately discussed how the seven influencing factors (traditional cultural observance, modern cultural influence, using technology, policies, globalization, religious beliefs, as well as stable and open development) affect the Tibetans' cultural adaptive strategies (integration, assimilation, separation, marginalization, tending to Tibetan traditional culture, adapting to Tibetan modern culture, and unclassified cultural adaptive types). In addition, the factors about globalization and religious beliefs do not have direct or intermediary effects to influence the Tibetans' cultural adaptive differences. However, the existing research results have shown that religious beliefs affect things in social contexts, and emotional responses contribute to cultural adaptive differences [53]. Third, based on the ABC model and CD theory, CD is measured. The number of variables is inconsistent in the behavioral and cognitive dimensions, which may, to a certain extent, produce errors in cultural adaptive differences of behavioral and cognitive dimensions. Fourth, in this paper, the cultural adaptive difference CD is processed according to the distance calculation method in Euclidean geometry, so the cultural distance has some similar properties of Euclidean distance: Symmetry, stability, linearity, causality, and discordance, which is based on the assumption that the Tibetans' cultural adaptation is a simple and homogeneous system. But the practical reality is that the cultural adaptive system is a complex and heterogeneous system, and cultural distance changes with space, time, embeddedness, causal effect, or lack of fit [35]. Furthermore, cultural distance has the nature of friction and resistance [7]. It means the surface "roughness" in different cultural environments and the "texture" inherent in culture may affect the attenuation or amplification of cultural distance [7]. As a result, cultural distance has an unexplained part in measuring the Tibetan people's cultural adaptable differences, which requires further innovative research methods to explore complex cultural adaptive systems. These four shortcomings are the future exploration directions in terms of Tibetans' cultural adaptive differences.

## Appendix A

**Table A1.** Variable selection of Tibetans' traditional cultural adaptability.

| Dimensions | Variables' Description | Shorthand | WeightingMethod | | | | |
|---|---|---|---|---|---|---|---|
| Affection | The level of psychological stress caused by foreign culture on the impact of Tibetan traditional culture | FIT | [ 5 | 4 | 3 | 2 | 1 ] |
| Behavior | The level of likeness of Tibetan food and its inheritance | LTF | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of Tibetan dressing degree and its inheritance | TDI | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of resident agglomeration with Tibetans | RAT | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of decoration and inheritance of the Tibetan style of the home | DTH | [ 5 | 4 | 3 | 2 | 1 ] |
| | The frequency or extent of Tibetan language use in daily life | FTL | [ 5 | 4 | 3 | 2 | 1 ] |
| | The frequency or extent of Tibetan language use in social communication | FTS | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of the number, love, and trust Tibetan friends | NTF | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of complying with Tibetan traditional customs | LTC | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of complying with traditional Tibetan marriage etiquette | LTM | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of complying with Tibetan traditional funeral | LTF | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of complying with traditional Tibetan festivals | TTF | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of Tibetan culture's restraint on behavior | TRB | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of dietary taboo | LDT | [ 5 | 4 | 3 | 2 | 1 ] |
| Cognition | The level of religious piety or display | RPD | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of familiarity with the origin and development of Tibetan Buddhism | FTB | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of familiarity with Zongshan and Tashilhunpo Monastery | ZTM | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of familiarity, observance, and recognition of Tibetan traditional culture | RTC | [ 5 | 4 | 3 | 2 | 1 ] |

**Table A2.** Variable selection of Tibetan people's modern cultural adaptability.

| Dimensions | Variables' Description | Shorthand | WeightingMethod | | | | |
|---|---|---|---|---|---|---|---|
| Affection | The level of modern cultural openness | MCO | [ 5 | 4 | 3 | 2 | 1 ] |
| Behavior | The frequency or extent of Chinese language use in work | FCL | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of recognition about living in a same residential area with non-Tibetans | RNT | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of familiarity with modern festivals | FMF | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of familiarity and compliance with national statutory holidays | NSH | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of familiarity with modern culture | FMC | [ 5 | 4 | 3 | 2 | 1 ] |
| Cognition | The level of cognition of deep interaction with non-Tibet | DIN | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of cognition and love for modern culture | CMC | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of recognition of intermarriage with non-Tibet | IMN | [ 5 | 4 | 3 | 2 | 1 ] |

**Table A3.** The selection of factors affecting Tibetans' cultural adaptable differences.

| Dimensions | Variables' Description | Shorthand | WeightingMethod | | | | |
|---|---|---|---|---|---|---|---|
| Traditional cultural observance | The degree of the taboo, etiquette, custom compliance required by Tibetan traditional culture | CT | [ 5 | 4 | 3 | 2 | 1 ] |
| Modern cultural influence | The degree of impact and freshness of modern culture in the dimensions of affection, behavior, and cognition | IM | [ 5 | 4 | 3 | 2 | 1 ] |
| Using technology | The extent of using internet | UI | [ 5 | 4 | 3 | 2 | 1 ] |
| | The level of the improvement about education and facilities | IE | [ 5 | 4 | 3 | 2 | 1 ] |
| Policies | The level of national policies' impact | NP | [ 5 | 4 | 3 | 2 | 1 ] |
| | The degree of influence on counterpart assistance to Tibet | AC | [ 5 | 4 | 3 | 2 | 1 ] |
| | The extent of local government role | LG | [ 5 | 4 | 3 | 2 | 1 ] |
| Globalization | The degree of globalization role | GL | [ 5 | 4 | 3 | 2 | 1 ] |
| Religious beliefs | The extent of influence of Tibetan Buddhism | TB | [ 5 | 4 | 3 | 2 | 1 ] |
| Stable and open development | The level of social stability, openness, and development | SO | [ 5 | 4 | 3 | 2 | 1 ] |

## References

1.  Ronald, I.; Baker, W.E. Modernization, cultural change, and the persistence of traditional values. *Am. Sociol. Rev.* **2000**, *65*, 19–51.
2.  Zhang, J. Discuss the cultural transition. *Acad. Forum.* **2010**, *33*, 158–163.
3.  Averitt, R.T. The cultural contradictions of capitalism. *J. Econ Issues.* **1976**, *19*, 243–244. [CrossRef]
4.  Liao, Y.L.; Wang, F.Z. The resource allocation of the villages in Tibet under modernization transformation from the perspective of organizational communication. *J. Tibet Univ. (Soc. Sci. Ed.)* **2017**, *2*, 157–163.
5.  Zhang, Z.H.; Zhan, P. Study on "locality" mechanism and cultivation countermeasure of local cultural industry. *J. Tech. Econ. Manag.* **2017**, *10*, 120–124.
6.  Wu, Y. *Temporal-Spatial Reconfiguration and Cultural Changes of the Relocation Minority Immigrants in Perspective of Urbanization: A Case Study Yunqiao Community*; Yunnan University: Kunming, China, 2016.
7.  Moufakkir, O. The role of cultural distance in mediating the host gaze. *Tour. Stud.* **2011**, *11*, 73–89. [CrossRef]
8.  Robins, K. *Questions of Cultural Identity*; Hall, S., Gay, P.D., Eds.; SAGE Publications: Thousand Oaks, CA, USA, 1996; pp. 18–53.
9.  Nahavandi, A.; Malekzadeh, A.R. Acculturation in mergers and acquisitions. *Acad. Manag. Rev.* **1988**, *30*, 10–12.
10. Stahl, G.K.; Voigt, A. Do cultural differences matter in mergers and acquisitions? A tentative model and examination. *Organ. Sci.* **2008**, *19*, 160–176. [CrossRef]
11. Sun, M. Cultural transformation of the realization of China's social modernization. *J. Chin. People Police Force Acad.* **2009**, *25*, 48–50.
12. Li, R.J. *A Study on the Modernization of Ethnic Cultures and the National Identity In contemporary Xinjiang*; Minzu University of China: Beijing, China, 2012.
13. Nemtsov, K.M. *Towards a New ABC Model: Understanding Adaptation of International Studies in China Relation to Social Exclusion, Intra-Cultural Friendship, and Perceived Cultural Distance*; Shanghai International Studies University: Shanghai, China, 2018.
14. Buttel, F.H. Ecological modernization as social theory. *Geoforum* **2000**, *31*, 57–65. [CrossRef]
15. Zhao, S.H. The Idea and Way of Integrating Modern Information Technology and Tibet National Culture. *HeiLongjiangShizhi* **2009**, *18*, 26–27.
16. Yang, D. *The Influence About Globalization on the Inheritance and Development of Tibetan Traditional Culture*; Tibet University: L Hasa, Taiwan, 2016.
17. Jiang, M.H. Cultural psychology in the globalizational context: A review of Ma Yuan, Yang Zhen, and Alai's Tibetan novels. *Jiang Huai Tribune.* **2003**, *5*, 128–132.
18. Lang, W.W.; Zhao, S.B. Tibet population characteristics and structure optimizations study. *Tibet. Stud.* **2016**, *6*, 75–81.
19. Yan, Y.L. New planned economy or "new bird cage economy". *Econ. Her.* **2017**, *8*, 65–69.
20. Zeng, Y. On the modernization of Tibet's society and ruling Tibet by law. *J. Tibet Univ.* **2015**, *30*, 34–39.
21. Yang, J.P.; Ding, L.H. Research on the integration of rural tourism, national festivals, and traditional Tibetan sports culture in Tibet. *J. Southwest Univ. Natl. (Hum. Soc. Sci.)* **2016**, *37*, 46–50.
22. Yang, Y. Culture integration between Man and Han nationalities, social harmony and progress. *Cult. Geogr.* **2014**, *20*, 60–61.
23. Kavanagh, M.H.; Ashkanasy, N.M. The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *Br. J. Manag.* **2006**, *17*, S81–S103. [CrossRef]
24. Du, H.J. *The Research About Cultural Acculturation between Han and Tibetan Nationality of Hehuang Area in Qinghai Province*; Qinghai University: Xining, China, 2014.
25. Winkelman, M. Cultural shock and adaptation. *J. Couns. Dev.* **2014**, *73*, 121–126. [CrossRef]
26. Ward, C.; Bochner, S.; Furnham, A. *The Psychology of Culture Shock*; Routledge: New York, NY, USA, 2001.
27. Berry, J.W.; Trimble, J.E.; Olmedo, E.L. Assessment of acculturation. In *Cambridge Handbook of Acculturation Psychology*; Sage Publications, Inc.: London, UK, 1986; pp. 290–349.
28. Berry, J.W.; Kim, U.; Power, S.; Young, M.; Bujaki, M. Acculturation attitudes in plural societies. *Appl. Psychol.* **1989**, *38*, 185–206. [CrossRef]
29. Berry, J.W. Psychology of acculturation. *Cross Cult. Perspect.* **1990**, *37*, 201–234.
30. Berry, J.W. Immigration, acculturation, and adaptation. *Appl. Psychol.* **1997**, *46*, 5–34. [CrossRef]

31. Huynh, Q.L.; Benet-Martínez, V.; Nguyen, A.M.D. Measuring Variations in Bicultural Identity across U.S. Ethnic and Generational Groups: Development and Validation of the Bicultural Identity Integration Scale. *Psychological Assessment* **2018**, *12*, 1581–1596. [CrossRef] [PubMed]

32. Hofstede, G.; Mintu, A.T. Cultures and organizations: Software of the mind. *J. Int. Bus. Stud.* **1992**, *2*, 362–363.

33. Hofstede, G. Cultural constraints in management theories. *Executive* **1993**, *7*, 81–94. [CrossRef]

34. Drogendijk, R.; Slangen, A. Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises. *Int. Bus. Rev.* **2006**, *15*, 361–380. [CrossRef]

35. Shenkar, O. Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *J. Int. Bus. Stud.* **2001**, *32*, 519–535. [CrossRef]

36. Kim, Y.Y. Ideology, identity, and intercultural communication: An analysis of differing academic conceptions of cultural identity. *J. Int. Commun. Res.* **2007**, *36*, 237–253. [CrossRef]

37. Robinson, L. Cultural identity and acculturation preferences among South Asian adolescents in Britain: An exploratory study. *Child. Soc.* **2009**, *23*, 442–454. [CrossRef]

38. Wedeen, L. Conceptualizing culture: Possibilities for political science. *Am. Polit. Sci. Rev.* **2002**, *96*, 713–728. [CrossRef]

39. Black, J.S.; Stephens, G.K. The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *J. Manag.* **1989**, *15*, 529–544. [CrossRef]

40. Miville, M.L.; Koonce, D.; Darlington, P.; Whitlock, B. Exploring the relationships between racial/cultural identity and ego identity among African Americans and Mexican Americans. *J. Multicult. Couns. Dev.* **2000**, *28*, 208–224. [CrossRef]

41. Usborne, E.; Taylor, D.M. The role of cultural identity clarity for self-concept clarity, self-esteem, and subjective well-being. *Pers. Soc. Psychol. Bull.* **2010**, *36*, 883–897. [CrossRef]

42. Larsson, R.; Lubatkin, M. Achieving acculturation in mergers and acquisitions: An international case survey. *Hum. Relat.* **2001**, *54*, 1573–1607. [CrossRef]

43. Bhugra, D. Migration, distress and cultural identity. *Br. Med. Bull.* **2004**, *69*, 129–141. [CrossRef] [PubMed]

44. Tajfel, H. Social psychology of intergroup relations. *Annu. Rev. Psychol.* **1982**, *33*, 1–39. [CrossRef]

45. Hogg, M.A.; Terry, D.J. Social identity and self-categorization processes in organizational contexts. *Acad. Manag. Rev.* **2000**, *25*, 121–140. [CrossRef]

46. Sun, K.; Yin, H.; Zhu, Y.S. A empirical study on cross-cultural adaptation of Southeast Asia students in Yunnan: A survey on international students at Yunnan Agricultural University. *J. Yunnan Agric. Univ. (Soc. Sci.)* **2018**, *12*, 119–126.

47. Vianen, A.E.M.V.; Pater, I.E.D.; Kristof-Brown, A.L.; Johnson, E.C. Fitting in: Surface- and deep-level cultural differences and expatriates' adjustment. *Acad. Manag. J.* **2004**, *47*, 697–709. [CrossRef]

48. Yan, C.J. Attach importance to "cross-cultural communication". *Qunzhong.* **2004**, *3*, 58–59.

49. Björkman, I.; Stahl, G.K.; Vaara, E. Cultural differences and capability transfer in cross-border acquisitions: The mediating roles of capability complementarity, absorptive capacity, and social integration. *J. Int. Bus. Stud.* **2007**, *38*, 658–672. [CrossRef]

50. Håkanson, L.; Ambos, B. The antecedents of psychic distance. *J. Int. Manag.* **2010**, *16*, 195–210. [CrossRef]

51. Dikova, D.; Sahib, P.R. Is cultural distance a bane or a boon for cross-border acquisition performance? *J. World Bus.* **2013**, *48*, 77–86. [CrossRef]

52. Xu, H.W. "Fei Xiaotong's difficult problem": Realistic tension and theoretical response to the modernization and cultural transition of ethnic minorities. *J. Hubei Univ. Natl. (Philos. Soc. Sci.)* **2018**, *36*, 116–121.

53. Krieg, A.; Xu, Y. From self-construal to threat appraisal: Understanding cultural differences in social anxiety between Asian Americans and European Americans. *Cult. Divers. Ethn. Minor. Psychol.* **2018**, *24*, 477. [CrossRef] [PubMed]

54. Harvey, D. Between Space and Time: Reflections on the Geographical Imagination. *Ann. Assoc. Am. Geogr.* **1990**, *80*, 418–434. [CrossRef]

55. Liang, Z.X.; Bao, J.G. The impacts of cultural transformation on place becoming: A case study of Shenzhen overseas Chinese town. *Sci. Geogr. Sin.* **2015**, *35*, 544–550.

56. Li, X.Y.; Yang, Y.; Liu, Y.; Liu, H. Impacts and effects of government regulation of farmers' responses to drought: A case study of North China plain. *J. Geogr. Sci.* **2017**, *27*, 1481–1498. [CrossRef]

57. Searle, W.; Ward, C. The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *Int. J. Int. Relat.* **1990**, *14*, 449–464. [CrossRef]

58. Cox, J.B. The role of communication, technology, and cultural identity in repatriation adjustment. *Int. J. Int. Relat.* **2004**, *28*, 201–219. [CrossRef]

59. Rudmin, F.W. Critical history of the acculturation psychology of assimilation, separation, integration, and marginalization. *Rev. Gen. Psychol.* **2003**, *7*, 3–37. [CrossRef]

60. Zhou, J.L.; Zhang, S.J. Analysis of cultural conflict and cultural integration in urban ethnic scattered areas: A case study of Chengdu. *J. Southwest Univ. Natl. (Hum. Soc. Sci.)* **2015**, *36*, 49–54.

61. Dear, M.; Burridge, A. Cultural integration and hybridization at the United States-Mexico borderlands. *Cahiers De Géographie De Québec.* **2005**, *138*, 301–318. [CrossRef]

62. Bresman, H.; Birkinshaw, J.; Nobel, R. Knowledge transfer in international acquisitions. *J. Int. Bus. Stud.* **2010**, *41*, 5–20. [CrossRef]

63. Tucker, M.F.; Bonial, R.; Lahti, K. The definition, measurement and prediction of intercultural adjustment and job performance among corporate expatriates. *Int. J. Int. Relat.* **2004**, *28*, 28,221–251. [CrossRef]

64. Saad, C.S.; Damian, R.I.; Benet-martínez, V.; Moons, W.G.; Robins, R.W. Multiculturalism and creativity: Effects of cultural context, bicultural identity, and ideational fluency. *Soc. Psychol. Pers. Sci.* **2013**, *4*, 369–375. [CrossRef]

65. Bhui, K.; Khatib, Y.; Viner, R.; Klineberg, E.; Clark, C.; Head, J.; Stansfeld, S. Cultural identity, clothing and common mental disorder: A prospective school-based study of white British and Bangladeshi adolescents. *J. Epidemiol. Commun. Health.* **2008**, *62*, 435–441. [CrossRef] [PubMed]

66. Giulietti, C. *Cultural Integration of Immigrants in Europe*; Algan, Y., Bisin, A., Manning, A., Verdier, T., Eds.; Oxford University Press: Oxford, UK, 2012; p. 368.

67. Yildiz, H.E. Not all differences are the same: Dual roles of status and cultural distance in sociocultural integration in cross-border M&As. *J. Int. Manag.* **2014**, *20*, 25–37.

68. Sousa, C.M.P.; Bradley, F. Cultural Distance and Psychic Distance: Two Peas in a Pod? *J. Int. Mark.* **2006**, *14*, 49–70. [CrossRef]

69. Morosini, P.; Shane, S.; Singh, H. National cultural distance and cross-border acquisition performance. *J. Int. Bus. Stud.* **1998**, *29*, 137–158. [CrossRef]

70. Redmond, M.V. Cultural distance as a mediating factor between stress and intercultural communication competence. *Int. J. Int. Relat.* **2000**, *24*, 151–159. [CrossRef]

71. Yamin, M.; Golesorkhi, S. Cultural distance and the pattern of equity ownership structure in international joint ventures. *Int. Bus. Rev.* **2010**, *19*, 457–467. [CrossRef]

72. Zhang, Y.J.; Ma, H.L. A research on the Tibetan undergraduates' acculturation attitude model. *Youth Stud.* **2012**, *6*, 43–52.

73. Ting-toomey, S.; Yeejung, K.K.; Shapiro, R.B.; Garcia, W.; Wright, T.J.; Oetzel, J.G. Ethnic/cultural identity salience and conflict styles in four US ethnic groups. *Int. J. Int. Relat.* **2000**, *24*, 47–81. [CrossRef]

74. Jørn, B.; Lars, A. Religion and cultural integration: Vietnamese Catholics and Buddhists in Denmark. *Nord. J. Migr. Res.* **2011**, *1*, 176–184.

75. Zhang, J.M.; Zhu, Q.B.; Wang, Y.P. Social capital on consumer knowledges-sharing in virtual brand communities: The mediating effect of pan-family consciousness. *Sustainability.* **2019**, *11*, 339. [CrossRef]

76. Yang, Y.C. The development and environment problems of valley-city in the western China. *J. Mt. Sci.* **2004**, *22*, 40–47.

77. Sang, C.R. Survey and consideration on three rivers source eco-immigrant culture adaptability issue. *New Heights (Bimonthly)* **2011**, *30*, 15–20.

78. Shigatse Bureau of Statistics. *Shigatse Statistical yearbook*; Shigatse Statistical Bureau Press in Tibet: Shigatse, China, 2016; pp. 10–200.

79. Zhou, L.H.; Wang, Y.; Yang, G.J. Study on the timely adjustment of the grazing prohibition policy: Ban or lift? Empirical research from local government managers. *Sustainability* **2018**, *10*, 4852. [CrossRef]

80. Yuan, T. *Eco-City Construction: An Analysis of the Development and Transformation of Zhangye*; Lanzhou University: Lanzhou, China, 2018.

81. Wang, M.M.; Yang, Y.C.; Jin, S.T.; Gu, L.; Zhang, H. Social and cultural factors that influence residential location choice of urban senior citizens in China: The case of Chengdu city. *Habit. Int.* **2016**, *53*, 55–65. [CrossRef]

82. Wu, M.L. *Structural Equation Model: Advancement of Amos Practice*; Chongqing University Press: Chongqing, China, 2013.

83. Wanner, C. Public religions after socialism: Redefining norms of difference. *Relig. State Soc.* **2018**, *46*, 88–95. [CrossRef]

84. Cao, W.D.; Li, Y.Y.; Cheng, J.Q.; Millington, S. Locational patterns of urban industry in Shanghai and implications for sustainability. *J. Geogr. Sci.* **2017**, *27*, 857–878. [CrossRef]

85. Ehrkamp, P. Place: A Short Introductionby Tim Cresswell. *Professional Geographer.* **2010**, *4*, 492–493. [CrossRef]

86. Tubadji, A.; Nijkamp, P. *Cultural Corridors: An Analysis of Persistence in Impacts on Local Development—A Neo-Weberian Perspective on South-East Europe*; Taylor & Francis: New York, NY, USA, 2018.

87. DiMaggio, P.; Sotoudeh, R.; Goldberg, A.; Shepherd, H. Culture out of attitudes: Relationality, population heterogeneity and attitudes toward science and religion in the U.S. *Poetics* **2018**, *68*, 31–51. [CrossRef]

88. Tihanyi, L.; Griffith, D.A.; Russell, C.J. The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *J. Int. Bus. Stud.* **2005**, *36*, 270–283. [CrossRef]

89. Sun, S.W.; He, X.J.; Wang, C. Cultural distance and corporate value created via overseas M&A. *Financ. Trade Econ.* **2018**, *39*, 130–146.

90. Ishii, K.; Eisen, C. Cultural similarities and differences in social discounting: The mediating role of harmony-seeking. *Front. Psychol.* **2018**, *9*, 1–9. [CrossRef]

91. Ward, A.; Mandrusiak, A.; Levett-Jones, T. Cultural empathy in physiotherapy students: A pre-test post-test study utilising virtual simulation. *Physiotherapy* **2018**, *104*, 453–461. [CrossRef]

92. Soto, C.; Deemer, E.D. Communal goals, campus racial climate perceptions, and cultural differences in perceived academic satisfaction. *Career Dev. Q.* **2018**, *66*, 35–48. [CrossRef]

93. Qu, X.L.; Liu, H.H. The life changes of the Tibetan people in the four decades of reform and opening. *J. HIT (Soc. Sci. Ed.)* **2018**, *20*, 55–60.

94. Wei, S.H. On the evolution of CPC's policies of developing Tibet since the reform and opening-up: Based on the six Tibetan work conference held by the central authorities. *Guizhou Ethn. Stud.* **2018**, *39*, 1–6.

95. Dong, H.E.D. On Tibetan traditional culture from the perspective of modernization. *J. South-Cent. Univ. Natl. (Hum. Soc. Sci.)* **2003**, *2*, 67–70.

96. Xing, Q.C. Discuss the modernization of Tibetan culture. *Tibet. Arts Stud.* **1992**, *1*, 7–11.

97. Qian, L. *A Study on the Relevance between Mass Media and the Modern Concepts of the Audience in Tibet*; Xizang Minzu University: Xianyang, China, 2013.

98. Guan, K. Modernization and cultural transformation of ethnic minorities. *J. South-Cent. Univ. Natl. (Hum. Soc. Sci.)* **2002**, *6*, 45–48.

*Article*

# The Benefit of Failure: On the Development of Ostrava's Culture

**Jan Suchacek**

Department of Regional and Environmental Economics, Faculty of Economics, VSB-Technical University of Ostrava, 17. listopadu 15/2172, 708 33 Ostrava, Czech Republic; jan.suchacek@vsb.cz; Tel.: +42-059-732-2229

**Abstract:** Peculiar cultures are symptomatic for areas of traditional industry. The purpose of this paper is to analyze and evaluate cultural and creative industries in Ostrava, the third largest town of the country that at the same time constitutes a typical representative of old industrial urban fabrics in the Czech Republic. Special attention will be devoted to the emerging cultural clusters that appear to be indispensable in terms of sustainable cultural management. Unique qualities of Ostrava's culture culminated in 2009, when the town decided to stand for the prestigious title of the European Capital of Culture. Finally, Ostrava did not succeed, nonetheless the contest vivified the discourse on Ostrava's culture and a distinctive potential for the creation of cultural clusters was revealed. Semi-structured interviews accomplished with relevant actors of the town's culture facilitated contextual interpretation of the role of cultural and creative industries as well as mapping the potential cultural clusters in the town. The research question posed in this article is as follows: do development effects formed by the concentration of creative and cultural industries in Ostrava exist? It turned out that the paths towards cultural management sustainability can differ substantially from recipes, which are well-proven in leading developed territories. The results of our analysis confirmed some developmental effects evoked by the concentration of cultural industries and cultural clusters in Ostrava can be identified, but genuine qualitative transformation towards a more cultural and sustainable milieu in Ostrava undoubtedly requires more time.

**Keywords:** management of culture; sustainability; old industrial areas; post-transformation areas; Ostrava

## 1. Introduction

Creative and cultural industries have become buzzwords in the realm of territorial economies. This concerns both theoretical and practical spheres as both above types of industries—or more precisely economic branches—are deemed to be the new opportunities to facilitate development in territories of various scales and ranks [1–3].

New strategies related to territorial competitiveness are typically not devoid of cultural and creative industries. This applies mainly to leading countries, regions and cities. In the contemporary turbulent context, economies have been exposed to innumerable risks that can endanger the path and pattern of their economic sustainability, as well as social and environmental sustainability. Naturally, apart from traditional industries, their cultural and creative peers are jeopardized as well.

In this context, a special position is occupied by cultural clusters. Similarly to traditional clusters, cultural clusters enjoy numerous agglomeration advantages just for the sake of sharing specialized infrastructure, a common labor market, transfer of knowledge, luring the same target groups or common marketing. Cultural clusters have become one useful instruments for the regeneration of diverse urban areas [4].

Arguably, it is not necessary to provide a reminder that specific and peculiar cultures are typical for old industrial territories. This is doubly valid in contemporary post-transformation economies, in which their pre-transformation legacies and institutions are still deeply embedded [5,6].

The purpose of this article is to analyze and examine cultural and creative industries in Ostrava, the third largest town in the Czech Republic that at the same time embodies a typical representative of old industrial urban fabrics in the country. Special attention will be devoted to the emerging cultural clusters that constitute a useful tool for the revitalization of various urban areas. Cultural clusters appear to be indispensable in terms of sustainable cultural management.

From a methodical point of view, semi-structured interviews accomplished with relevant actors of a town's culture facilitated contextual interpretation of the role of cultural and creative industries as well as mapping and monitoring the potential cultural clusters in the town. The research question formulated for the purposes of our paper is as follows: do development effects shaped by the concentration of creative and cultural industries in Ostrava exist?

The added value of the article consists in mapping and monitoring the concentration of cultural and creative industries and subsequent interpretation of related effects in large post-industrial town in post-transformation country and uncovering the paths towards sustainability. In this case, external stimuli, i.e., loss in the contest for the title of the European capital of Culture enhanced positive internal endeavors aimed at the development of urban culture. Such a kind of vivification is typically not concomitant to traditional economic branches, however creative and cultural industries seem to be more elastic and resilient in this respect.

The debates on these currently vogue concepts in advanced and more affluent western economies often lead to their glorification and even labeling as cure-all-maladies. Yet, the situations in post-transformation economies differ substantially and uncritical adoption of these concepts without appropriate contextualization in the frame of post-transformation economic-societal settings could lead into the void. Thus, the need for such kind of studies is indisputable.

The structure of the manuscript is as follows: after the introduction, the literature review section follows. The paper then proceeds to its background as well as the materials and methods. Results are discussed widely from both quantitative and qualitative standpoints. Finally, the whole article culminates in the chapters focusing on the discussion and conclusions.

## 2. Literature Review

There are only minor doubts that the last few decades have witnessed the processes of economization and commodification of culture. However, the relation between the economy and culture is slightly more tricky to determine. For culture and cultural processes, non-standardized, spontaneous and often tacit characteristics are typical. In contrast, standardization is inherent to the economy as it expresses the economy's pragmatic and profit-oriented drive.

The cultural sector is not constrained by rational rules, which is its strength. Culture may positively influence an economy in the sense of finding new solutions and new approaches to currently pressing and difficult to solve socioeconomic issues. At the same time, the widely perceived culture represents a softening social and value fabric above the rationalized economy. That's why it is desirable that culture and economy influence themselves mutually. Hitherto, the economy puts the screws on the culture. In other words, culturalization of the economy that has been severely underrated should complement contemporary relations between the economic and cultural sectors [7,8].

Creative industries and cultural industries form an inner fulfilment of the culture. Even more importantly, these industries can be intercepted from both quantitative and qualitative perspectives. It is generally accepted that their role within economies of various territorial ranks has an increasing tendency. While creative industries became a buzzword and to some extent a hazy notion, their subset, which is represented by cultural industries, enables a more intense focus that is useful from both theoretical and practical perspectives. Nonetheless, it has to be stated that there is nothing like a

generally accepted definition of the cultural sector and cultural industries so far. Indeed, a certain elasticity is inherent to the culture.

Definitions of The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the General Agreement on Tariffs and Trade (GATT) can be comprehended as a certain point of departure for the purposes of our article and according to them, cultural industries combine the creation, production, and distribution of goods and services that are cultural in nature and usually protected by intellectual property rights. The notion of cultural industries generally includes textual, music, television, and film production and publishing, as well as crafts and design. These are knowledge-based industries that create employment and a better institutional-social milieu, as well as other benefits.

In order to structure, differentiate and better grasp cultural industries, it is pertinent to use one of the following approaches [9]:

- Sectoral approach,
- Labor market and organization of production,
- Creative index.

A large number of issues concerning the cultural sector and cultural industries are related to the fact that cultural industries and cultural sector usually concern large metropolitan areas. What remains to be answered is the role of culture and cultural industries in other types of territories. Since this article focuses upon Ostrava, the third largest town in the Czech Republic in terms of population size, we also have to take into consideration rather specific attributes of traditional industrial areas, of which Ostrava is a typical representative.

The cultural sector and cultural industries underline the relevance of tacit knowledge and skills, creativity and talent of individual entities as well as their networks. The markets, in which these entities function, are of a highly competitive and volatile nature. Labor markets in cultural industries are strongly competitive too and a substantial part of employees is working part-time, which is in discordance with sustainability principles. Temporary projects are the most typical way of working in cultural industries. As for the size structure of firms involved in these projects, the vast majority of them are of a micro/small character and there are only a few large global players. The above characteristics in a way undermine the economic importance of culture. On the other hand, the flexibility of the culture complies with contemporary trends in the economy [10–12].

As already indicated, the cultural sector and cultural industries tend to develop in large metropolitan territories. It is generally accepted that the importance of hard location factors is stable or even declining as they became nearly ubiquitous in advanced leading economies. In contrast with that, soft location factors are getting increasingly relevant. Indeed, the atmosphere or image has become an essential element for the presence of the cultural sector in various localities, regions or whole states.

Large agglomeration economies, proximity to suppliers as well as to customers, specialized labor forces and/or access to information, which are typical signs of large metropolitan territories, act as a stimulus of a spatial concentration of creative and cultural industries [13,14]. These areas usually offer conditions that draw on the ideal state of a 'creative milieu'. Such a milieu is a physical setting where a critical amount of entrepreneurs, intellectuals, artists or administrators operate in an open-minded, cosmopolitan context and where face to face interactions shape new ideas, products, services and/or institutions [1–3].

In case that a critical mass of people in the given territory thinks and acts in a positive and territorially-conscious way, they form the spaces of harmony existing at the intersection of natural territorial characteristics and preferences of the population inhabiting the territory in question. A critical mass of people always has 'a contagious effect' on the rest of the community in the given territory and pulls previously undecided individuals in their direction. In our case this involves positive and cultural thinking and acting consciously in relation to the inhabited territory.

From a wider perspective, we are entitled to talk about the mutual exchange of positive energy between the people and their environment. This synergy stems from the fact that a territorially bound population behaves consciously and positively towards the surrounding environment while taking into account its genius loci. In that way, truly cultural and creative spaces can be formed [7].

At the same time, one should consider that previously depicted positive characteristics can be found only in a very limited number of territories so far. Typically, their affluence from an economic perspective is eloquent. As for traditional industrial towns in post-transformation countries, this harmonic state is barely imaginable as people strive primarily for the satisfaction of economic needs and there is also low level of trust in the society [7].

One cannot ignore the fact that conceptions concerning the cultural sector and industries were born in advanced and wealthier economies in the West. It is thus only hardly surprising that their applications reckon with standard Western economic-institutional environments. Nonetheless, history matters and economic-institutional environments in Central and Eastern Europe are rather distant from their Western peers as they still bear heavy economic-institutional burdens of the past. Moreover, experience shows that return to the natural developmental track without a deformed economic-institutional milieu usually takes two or three generations [5,6]. This naturally raises many queries about the applicability of a cultural sector and cultural industries in post-transformation countries and territories. Naturally, one size hardly fits all.

The research gap is twofold in our case and our paper attempts to contribute to filling in these gaps. First, from methodical and methodological perspectives—as already suggested—creative and cultural industries play different roles in mature Western and post-transformation economies. This holds true with even higher intensity for traditional industrial areas that have their own peculiar cultures. In case of post-transformation countries, spontaneous rather than programmatic development takes place and endogenously developing creative and cultural industries based on inner potential of territorially-bound population seem to be more untamed and resilient. Nonetheless, their contemporary role and weight in Central East Europe cannot be overestimated.

Second, in the Czech Republic as well as other Central East European countries, the data on creative and cultural industries are far from perfect. They suffer from a high degree of fragmentation, incompleteness as well as inadequate time series (if there are any at all). That is why, the analysis of their composition and development, which is in our case also enriched by qualitative research, contributes to the partial filling of the large empirical gaps.

A substantial role in drawing on the sustainability of cultural management in our context is played by clusters. There are plenty of different definitions of the term cluster, which is a seminal notion with regards to this article. According to reference [15], there is no clear definition of a cluster since clusters differ in individual regions or sectors and it is therefore more appropriate to consider the definition only as a cover concept rather than as a precisely defined term.

In the research, the term cluster is frequently confused with the term cluster initiative. Cluster initiatives are organized endeavors aimed at augmenting the growth and competitiveness of clusters in the region with the participation of the cluster companies, the governments and/or the research communities [16].

A rather frequented delimitation of the cluster was introduced by reference [17], which defines it as follows: 'a geographically close group of interconnected companies and affiliated institutions in a particular area whose common feature is complementarity in certain areas.' Clusters are 'dominating the landscape of every advanced economy, as its emergence is an essential part of economic development and offer a new way of thinking about the economy and economic development' [18]. An important attribute of well-functioning clusters is their sustainability.

For the purposes of our article, we concentrate on cultural clusters. Similarly to the above mentioned traditional clusters, cultural clusters benefit from ample agglomeration advantages just due to the sharing the specialized infrastructure, common labor market, transfer of knowledge, luring the

similar or same target groups or common marketing activities. Cultural clusters became one useful instruments for the vivification of various types of mainly urban areas.

Cultural clusters can be narrowly delimitated—a typical form is a museum or theater cluster; nonetheless cultural clusters can be multifunctional as well and can offer a diverse group of artistic activities, such as music, design or the others. Cultural clusters often underline various forms of social leisure or entertainment, such as cafés, bars, sport and social infrastructure. In that way, synergic effects are being augmented. Cultural clusters are useful tools for cultural managements.

As reference [4] points out, there are a great variety of spatial forms of cultural clusters. Projects may restrict themselves to standalone buildings or they may include entire quarters or building complexes. Mostly, the projects are housed in former industrial complexes, but rather frequently they also entail the building of new sites.

## 3. Background

Old industrial towns and cities are territories that experienced their strongest growth in the period of industrialization. Hence these territories came to be known as centers of heavy industry, i.e., metallurgy or mining. In some cases, their industrial monoculture was based on the textile industry. Chaotic and spontaneous settlement and population growth is a typical sign of these areas. From the geographical point of view, these spatial entities typically form large urban agglomerations or conurbations.

The rise of traditional industries drove the growth of these urban areas. However, it ultimately became the bane of their development, since it distorted the orientation of their economies. Currently, a lot of these urban entities are forced to cope with a distinct shrinkage from both population and economic perspectives.

These spaces are also quite peculiar from the institutional perspective. Both their formal and informal institutional characteristics distinguish them substantially from other types of territories. The dominance of large enterprises forms a culture of dependency and weakens entrepreneurial activity. This is connected with the lack of an innovative milieu and a certain inertia of deeply embedded habits, particularly among industrial workers. On the other hand, positive features include a higher level of solidarity, responsibility, and technical and organizational discipline derived from hard work. Basically, peculiar culture is typical for this kind of areas and subsequently, cultural management bears a lot of specific features [19,20].

For a long time, traditional industrial urban areas benefited from economic growth. However, the 1960s and 1970s proved to be turning-points in their history. Technological advances and the subsequent process of globalization revealed the vulnerability of their economies. Increased competition in the world markets connected with the move from a Fordist 'industrial economy' towards a post-Fordist 'information economy' imposed profound transformation in these territories [7,20].

There is little doubt that the decay of old industrial areas in Central and Eastern Europe differs substantially from that of their Western counterparts in terms of both the origin and the nature of their troubles. The specific legacy of socialism, which can be expressed as a complex and interconnected social, economic and environmental deformations, is hampering the transformation of these urban areas severely [7].

Ostrava, which is the focus of the article, represents a multicultural urban entity with a complex and inconsistent development. Moreover, Ostrava's peculiarity is further enriched by the town's traditional industrial character. Ostrava's characteristics are strongly linked with the town's location in Central Europe. Numerous issues connected with this intriguing Central European region go beyond the extent of this article; however, it should be stated that, as defined by Milan Kundera, this area was 'geographically in the Center, culturally in the West, and politically in the East'. Ostrava´s growth trajectory was thus shaped by an enormously complicated context that was very often aggravated by unfavorable political-administrative settings.

The discovery of coal deposits in 1763 and the foundation of an ironworks in the neighboring small village of Vítkovice in 1828 embodied the beginning of Ostrava's massive development. This was further strengthened by the utilization of Ostrava's favorable geographical location: the town was located just in the middle of the Vienna-Krakow railway line that was built in 1847. Industrialization transformed a town of artisans and agrarians into an industrial metropolis. This substantially affected the mode of settlement, the construction of facilities as well as the composition of the population. Ostrava's architecture nowadays reflects the heritage of the past: valuable Art Nouveau or functionalistic complexes persist alongside industrial architecture.

The development of industry in connection with the accumulation of the capital stimulated the construction of public facilities and brought numerous remarkable edifices. From the cultural point of view, the town was transformed into a multicultural center, as its wide offer of jobs in all categories acted as magnet for people from all corners of the Austro-Hungarian Empire. This marked the foundations of Ostrava's peculiar culture, which is dissimilar to other towns in the Czech Republic.

In spite of its significance, Ostrava has never been a favorite town of Czechoslovak/Czech governments. The town was compelled to deserve its existence and to fight for it. Hence, Ostrava's administrative and political importance was practically always qualitatively one step behind its importance in terms of industry and population. Ostrava's industrial vigor before World War II was largely constrained by its inadequate political-administrative context [20,21].

Ostrava, formerly called the 'Steel Heart of Czechoslovakia' is the typical example of the victim of communistic industrial megalomania. Rough industrial growth resulted in the low-level image of the town that was known as an environmentally and socially unpleasant place inhabited by rude people. From a spatial standpoint, low permeability of the borders and a subsequent lack of both material and intangible communications caused the general retardation of practically all Socialist countries. Not surprisingly, Ostrava as a frontier town was hit rather severely by this semi-autarky as former Czechoslovakia was one of the most diligent pupils of the Soviet system. In 1989, Ostrava's agglomeration provided some 86% of Czechoslovak coal mining, 82% of coke production and 70% of steel production. Approximately 52% of inhabitants worked in the secondary economic sector, 7% in the primary sector and a mere 41% in the tertiary sector [20,21].

After the Velvet Revolution in 1989, the country underwent the double transformation consisting of the move from a totalitarian to a pluralistic democratic political system and from a centrally planned economy to a market economy. These processes were further enriched by general modernization tendencies briefly expressible as a shift from Fordism towards post-Fordism. These frame conditions substantially delimitated Ostrava's course of transformation. The situation was complicated by Ostrava's inadequate socioeconomic structure stemming from its industrial past that turned out to be vulnerable under new socioeconomic circumstances.

Thus, it is far from surprising that the position of the town on mental maps remains an unsatisfactory one. In spite of a gradual transformation of all principal urban socioeconomic structures and a rising quality of life, Ostrava and its surroundings are still perceived as a territory of heavy industry, socio-pathological phenomena and other negatives. This bad image is often compounded by the media coverage at the national level.

As a consequence of that, Ostrava is currently a rather inconspicuous place from the tourism point of view. But this is in sharp discordance with the fact that the town previously acted as a business, economic and cultural center. The architecture and the memory of the town represent valuable witnesses of this history. So, contemporary Ostrava lies in the middle of Central Europe but at the same time is at its periphery. Conflicts can be perceived as inseparable parts of the town's development that symbolically resembles the sine curve [20,21].

Nowadays, as a consequence of the long-term influence of the communistic regime, Ostrava is still returning to the natural developmental track and is looking for its new mission and identity. A bad position on mental maps combined with little maneuvering space for self-government meant that there is only a little room for the town's genuine endogenous development. Yet, it should be

noted that contemporary Ostrava's population size is almost 300,000 inhabitants and the town forms a natural socioeconomic center of agglomeration with nearly 1 million inhabitants. This naturally creates sufficient space for markets of all kinds, including a cultural one.

In 2009 Ostrava´s management decided to compete for the prestigious title of European Capital of Culture and to take part in contest with another Czech town: Pilsen. The competing town of Pilsen enjoys a good geographical location in between the Czech capital city of Prague and Germany. The town was less beset by industrialization in the past and enjoys larger economic diversity. However, with a smaller population of some 170,000 inhabitants, the cultural infrastructure of the town is not extraordinary.

The most distinguishing feature of Ostrava ´s project aiming at the title of European Capital of Culture 2015 was unprecedented integration of the traditional Ostrava image into the project and its communication. The entire project activated many actors of Ostrava's culture and helped to create an atmosphere of collaboration boosted by positive expectations related to Ostrava's supposed victory in that contest.

Even former president Václav Havel supported Ostrava in its candidacy. The project website [22] quoting his speech from the Ostrava candidacy clip provides his words: ´Ostrava, always too far from the capital, has created its unique genius loci, which is basically relying just on itself. As almost a synonymous to Ostrava are still heavy industry and coal mining rather than culture or education. Finally the drawbacks from the past deliver new hopes to revitalize the places, which resisted attempts of social engineering, collectivization or globalization pressures. Thus I am happy and endorse the candidacy of the City of Ostrava for the title of European culture capital 2015 as a commitment to recognize, appreciate and expand the beauty of Czech landscape and cities which is not to be recognized at a first sight. However I am sure, that more Czech cities would like to stand for the title of European culture capital and maybe they would deserve it, I appreciate Ostrava at most to be the choice.´

In 2010, Pilsen was announced as the European Capital of Culture 2015. Naturally, this brought large disenchantment to Ostrava. At the same time, since the town´s DNA is permeated by the consciousness of self-reliance, it seems that the failure in the competition for the European Capital of Culture indeed brought several benefits. These benefits can be seen by monitoring the cultural and creative industries in the town, via deepening public consciousness on Ostrava´s culture towards identification of potential cultural clusters in the town. Important actors of Ostrava's culture agreed that in spite of the loss, Ostrava remains a cultural town. Empirical evidence shows that despite the financial loss as a consequence of the failure in the competition for the European Capital of Culture, we are witnessing the development of Ostrava's culture.

## 4. Materials and Methods

Spatially-orientated research usually tackles both quantitative and qualitative perspectives. A fine blend of both of these perspectives enables us to identify the most relevant aspects of examined elements and phenomena. In our case, we also utilized both quantitative and qualitative methods, but preference was given to the latter because of the lack of quantitative data on the one hand and possibility of contextual interpretation of information found out during the interviews on the other [23].

It has to be noted that cultural industries represent a rather new concept in the Czech Republic. Shortcomings or more precisely misunderstandings that abound in the theoretical sphere are moreover accompanied by a low quality of collected data as well as insufficient statistical resources. Thus, there appeared numerous limitations and constraints related to the quantitative components of the article. We are still unable to create any longer time series and consequently, spatial developmental tendencies related to cultural industries can be only barely evaluated.

Not surprisingly, the quantitative dimension of the paper will be much more modest than its qualitative counterpart. Yet, limited quantitative data are available based on secondary information from the Czech Register of Economic Entities and Czech Statistical Office. This allows us to intercept at least roughly the geographical distribution of cultural and creative industries in the country.

For the purposes of our study, we applied pragmatic sector delimitation of creative and cultural industries [24,25].

In order to gather relevant qualitative information, we utilized semi-structured interviews. In contrast to structured interviews, this meant we could collect more interesting and contextually chosen information. Moreover, we were still able to compare the answers in a satisfactory manner. Non-structured interviews can be barely compared and that is why a semi-structured version turned out to be useful for our purposes and enabled not only comparison of the information gathered but also their basic classification.

Subjective evaluations of interviewees are typical for the answers we gained. But since creative and cultural industries are relatively new and in a way are not-yet-established conceptions, the high degree of creativity and spontaneity in answers could be detected. Altogether 10 interviews were completed. Interviewees included various groups, such as artists, public administration employees, marketing experts, teachers and others.

What these interviewees had in common was working in Ostrava, dealing with cultural issues in Ostrava and basic knowledge of art and urban developments issues. Taking into account a pretty constrained time framework of the vast majority of interviewees, at the beginning, they were contacted by e-mail and in case of no response they were then contacted via telephone. After the clarification of the purpose of the research they were visited. The interviews comprised just 9 open questions.

The contents of semi-structured interviews covered various aspects of Ostrava´s cultural life. Individual questions revolved around important topics starting from the character of cultural and creative industries via their impact on local employment towards the emerging cultural clusters in the town´s landscape. Sufficient attention was also devoted to strengths and weaknesses of Ostrava´s candidacy for a title of European Capital of Culture in 2015 in relation to Pilsen, the competitor that finally won the contest and got that prestigious title.

Although the qualitative part of the research was not flawless (e.g., in terms of the subjectivity of the answers), it still represents an appropriate and valuable complement to the quantitative part of our research.

## 5. Results

Culture is an inseparable part of current Ostrava´s life. Its foundations are even stronger than in evolutionary developing towns as Ostrava´s culture was always rather peculiar. As already mentioned in chapter 3, the town was compelled to fight for its existence, which was far from easy. Ostrava was always forced to deserve its position just due to its industrial character that was not accompanied by a corresponding position within the urban political-administrative hierarchy.

Contemporary Ostrava attracts visitors because of its cultural institutions and cultural events. The extra-regional reach of these institutions and events is confirmed by the fact that 35 % of visitors do not come directly from Ostrava [25]. The town hosts ten theaters, eleven museums, tens of galleries, tens of libraries, ten cinemas, two multiplexes as well as regional TV and radio studios [26].

Over the year, Ostrava hosts plenty of musical events of various genres. These events include Janacek´s May and St. Wenceslas Music Festival, as well as annual international festivals devoted primarily to classical music. Ostrava days represent a bi-annual festival concentrating upon contemporary classical music. In the summer, there are several well-known festivals, such as multi-genre festival Colors of Ostrava or Beats for Love, an electronic music festival. Janacek Philharmonic Orchestra is one of the most pronounced symphonic ensembles in the whole country.

In order to capture Ostrava´s culture in a more appropriate and structured way, it is useful to distinguish quantitative and qualitative perspectives.

### 5.1. Quantitative Perspective

As for the quantitative-geographical view on Ostrava´s creative and cultural industries, the position of the town should correspond to its place within the urban hierarchy of the Czech Republic. Yet, one

cannot get rid of the town´s industrial past so easily. This is palpable mainly in view of the fact that Ostrava´s sector structure is rather distant to that of Prague (the capital city) and Brno (the second largest town in the country).

In concrete terms, Prague (population 1.2 million) itself accounts for nearly 40 % of the country's jobs in the cultural and creative industries. The position of Brno (population 370 000) is rather favorable too, as town´s creative and cultural industries provided 9 % of all working opportunities in the country. Ostrava, the third largest town in the country and with a population size that is close to Brno, provided just 3 % of jobs in these industries in the country [27]. So, from the national perspective, Ostrava´s position is by no means spectacular.

From regional perspective, the position of the town looks much brighter. Ostrava can be perceived as an indubitable center of the whole Moravian-Silesian region not only from a wider administrative and socio-economic perspective, but also from the point of view of creative and cultural industries. Ostrava´s population reaches one fourth of the total population in the Moravian-Silesian region. Nonetheless, Ostrava comprises 52 % of companies specializing in cultural and creative industries. The share of all other towns in the region is under 10 % [25].

There are two important areas in Ostrava itself, where we can find a strong concentration of creative and cultural industries: the town center and the Mariánské Hory quarter. Spatial concentration of cultural industries in these two parts of Ostrava is in discordance with a rather negligible share of creative and cultural industries in other parts of the town as well as the rest of the Moravian-Silesian region. While in case of Ostrava center this can be attributed to the natural attractiveness of the area, in case of Mariánské Hory, the concentration of creative and cultural industries can be accounted for by a large concentration of entrepreneurs as well as the active approach of the local town hall managing the ward.

There are altogether 599 enterprises focusing on creative and cultural industries in the town center. Thus, the town center includes 43% of these industries in Ostrava and accounts for nearly 22% of these industries in the whole Moravian-Silesian region. Subsequently, we can contemplate a strong spatial concentration of creative and cultural industries in the Ostrava town center. Since a lot of these enterprises are mainly audience oriented, good accessibility plays therefore a significant role, which is also the case for the Ostrava town center [26].

From synthetic point of view, there is still room for the improvement of Ostrava´s weight at the national level. Naturally, it is impossible to unload the burden of an industrial past in the short run. However, in terms of the culture—as well as from socioeconomic and administrative-political point of view—Ostrava is a clear Moravian-Silesian regional leader.

*5.2. Qualitative Perspective*

This part of the article contains the results of accomplished interviews that are shown mostly in a synthetic manner. Spatial concentration of companies in cultural industries shows that companies in these sectors tend to concentrate into the Ostrava town center. However, the concentration of cultural industries does not tell us anything about the quality of institutional milieu and co-operation among individual entities involved in the cultural industry. From the qualitative-geographical point of view, on the basis of gathered interviews, numerous interesting facts were disclosed.

The majority of interviewees agreed that we can speak of several cultural clusters in Ostrava. These clusters were identified as follows:

- Stodolní street—'Stodolní phenomenon' is what local residents and visitors have called one of the most interesting streets in Ostrava. The street has previously honorable town houses that decayed between the 1970s and 1980s. The dilapidated and dowdy street attracted the young and artists as local rents were some of the lowest in the whole Ostrava agglomeration in the 1990s, after the fall of the Iron Curtain. Today, there are over 100 clubs, restaurants and discotheques in and around Stodolní street. Whether clubbing, dining, listening to concerts or lectures, or meeting with artists

at various exhibitions, there is always something to do on the 'Street that never sleeps'. The most intense nights out take place on Fridays and at weekends [28].

- A specific micro-cluster composed of Fiducia gallery with its program as well as two joint galleries.
- A network of cultural houses throughout the town located in different quarters that concentrate on educational, entertaining and cultural activities.
- Lower Vítkovice—since 2002 the site is a National cultural heritage site. The site represents a uniquely preserved flow of materials from coal mining to coke-plant and iron production. In 1998 its operations ended, but the site has survived. The Lower Vítkovice Iron Mills with the Hlubina Mine, Landek Mining Museum and the Vrbice Shaft are on the waiting list for registration as a UNESCO cultural heritage site. In August 2007 the Lower Vítkovice was opened to the public.

As stated by reference [26]: ´The importance of Lower Vítkovice, a national cultural monument, far exceeds the city, region and the Czech Republic. By reconstructing the original gas holder, the "Gong", a multinational congress center with a capacity of 1 509 seats and its own gallery space, was created. The reconstruction of the original historical energy distribution station (U6) gave rise to the Small World of Technology, an interactive museum with educative elements. In September 2014, the Big World of Technology was opened in a completely new building. On an area of 14,000 square meters, visitors can discover four worlds—the Children´s World, the World of Science and Discovery, the World of Civilization and the World of Nature. Since May 2015, Lower Vítkovice has a new landmark—the Bolt Tower (named after famous athlete). Standing almost seventy-eight meters high, the glazed superstructure of the Blast Furnace No. 1 serves as a lookout tower with multifunctional areas and a café.´ The congress center as well as both the Small and Big World of Technology nowadays also form the most important concentration of cultural industry in the whole Moravian-Silesian region.

It is also worth mentioning the Black Meadow cultural cluster, which represents a unique opportunity for the whole region. Developing this cluster is possible only because of the specific historical settlement development in Ostrava. The relatively sparse urban structure of the town nowadays offers the chance to build up and improve the spatial qualities of Ostrava. There are not many other European towns offering the possibility to create an extensive urban-architectural project in such an exceptional location. The Black Meadow site is situated in a handy location just a few meters from Ostrava's main square.

Since the University of Ostrava managed to obtain over 1 billion of CZK from European funds, the project of educational area with two faculties can be launched. While one of them will host sport and new technologies, the other one will concentrate on art and design. The whole project that is arguably able to entice further positive culture-related activities into the whole area is supported by the Ostrava urban authorities.

Generally speaking, developmental potential of creative and cultural industries in Ostrava exists but is not yet utilized in an optimal way. Moreover, creative and cultural industries can be perceived as one of pivotal themes for the redefinition of urban functions of Ostrava in the future. Persons that were interviewed generally saw a great potential for the future of creative and cultural industries in Ostrava. Only two interviewed people were critical in that respect.

Cultural and creative industries can surely improve not only the image of Ostrava, which is far from optimal so far, but can also stimulate local human resources and provide them with new opportunities. Taking into account the truly high amount of talented people with large capabilities and tacit knowledge that live in the area, 'brain drain' tendencies can be mitigated by means of the promotion of cultural and creative industries and cultural and creative clusters in Ostrava.

Eighty percent of interviewed individuals were also convinced that creative and cultural industries and clusters have a positive influence on the labor market in the agglomeration and can contribute to the local employment. In contrast, the remaining twenty percent stressed the problem of temporary projects representing a typical form of employment in creative and cultural industries as well as the fact that genuine culture is basically of an elite nature and that is why it has only a negligible impact on local employment.

According to the optimists, creativity, culture and mainly creative cultural clusters contribute not only to the formation of new working opportunities but also stimulate the production with high added value. Certainly, innovations constitute the corner-stone of creativity, culture and creative and cultural industries.

The biggest effect of the concentration as well as certain interactivity of creative and cultural industries in Ostrava can be seen in the formation of the so-called 'Growth Triangle'. This triangle consists of the already depicted Stodolní street, Lower Vítkovice and prepared Black Meadow cultural cluster. This territory is located basically in the town center. Moreover, distances are small enough for pedestrians, which facilitates shaping the room for a creative milieu.

In the gravity center of this 'Growth Triangle' we can find New Karolina site, which contains mixed functions, however, it includes also creative and cultural industries. New Karolina in Ostrava is one of the largest urban development and revitalization projects in the Czech Republic. Its entire area should cover 32 ha. The first of 4 planned phases comprises 57,000 sqm of shopping and leisure centers, an office building covering 23,000 sqm, a residential building with approximately 200 apartments as well as two historic buildings reconstructed to fulfill contemporary functions. With a total investment of over €200 million, the first stage has been already completed.

As stated by reference [29] ´The Nová Karolina development is planned to grow in consequent phases on the total site of 32 ha/79 acres, extending the historic city center towards the south and aiming at linking with Lower Vítkovice industrial heritage site and Black Meadow to the East. The estimated total 240,000 sqm of mixed-function development will provide retail (86,000 sqm), residential areas (1200 flats), offices (60,000 sqm), as well as spaces for leisure, entertainment and sport (12,000 sqm), all supported by ample parking areas, large green areas and complementary functions split proportionally in each phase.´

Naturally, the 'Growth Triangle' in Ostrava has both pros and cons. According to the accomplished interviews, strengths and opportunities are as follows:

- Multifunctional utilization of public spaces.
- Unique territory in the middle of large agglomeration.
- Interconnection of urban industrial history, entertainment at Stodolní street and a new cultural cluster can act as a bait for tourists.
- Accumulation of cultural activities where people involved in culture can generate new ideas and products.
- Concentration of entities with high added value.
- Creation of new working opportunities and new amenities for leisure and entertainment.
- Possible improvement of the image of the whole Ostrava agglomeration.
- In contrast, there are the following weaknesses and threats related to the formation of the 'Growth Triangle':
- Augmentation of uniform shopping areas.
- Possible liquidation of the urban historical core for the sake of new shopping opportunities in New Karolina.
- A possible lack of cultural events at Stodolní street, such as discussions, concerts, etc.
- The specific character of Stodolní street can hamper the natural integration of these places.

Put succinctly, some developmental effects evoked by the concentration of creative and cultural industries and creative and cultural clusters in Ostrava agglomeration can be identified, nonetheless, genuine qualitative transformation towards a more creative and cultural milieu in Ostrava and surrounding region is undoubtedly the question of longer time.

## 6. Discussion

The role of culture in advanced and post-transformation countries differs. While Western towns and cities are generally aware of both pros and cons of the culture and this category is firmly

incorporated in their developmental strategies, their Central and Eastern European counterparts are often forced to undergo a rather painful trial-and-error approach. Moreover, Western towns and cities entered the next stage of a regeneration-through-culture agenda when we see a shift from a policy aimed at organizing occasions for spectacular consumption, to a more fine-tuned policy. This is directed to creating spaces, quarters and milieus for cultural production and creativity [4].

Before the detailed discussion, one should be aware of limitations of our research from both quantitative and qualitative standpoints. These limitations and constraints are thoroughly depicted in the subchapter named ´Materials and Methods´ and concern mostly the low quality of collected data as well as a certain infancy of statistical resources from a quantitative point of view and subjective and possibly biased stances of interviewees from the qualitative perspective.

Cultural development in various parts of Ostrava has taken a different form in different places. Emergence of the phenomenon of Stodolní street in the 1990s can be contemplated as almost haphazard play of market forces when neither territorial nor functional regulations of the area were effective. However, after a certain time, we witnessed a distinct move from artist-led regeneration via property-led regeneration towards consumption-led regeneration. This development is in accordance with existing conceptions in this realm [30,31].

The case of Black Meadow is a different one. A planned cultural cluster can be seen as one of benefits of the unsuccessful competition to be the European capital of culture. The town always played an active role as Black Meadow was treated as an area of opportunity. Recently, the town transferred the whole site to the University of Ostrava in the form of a gift. The university tackled the Black Meadow cultural cluster project rather vigorously. Materialization of the whole project should commence in the middle of 2019. The synergy with the region is embodied also by the regional architects involved in the whole project.

The next corner of the ´Growth Triangle´ is represented by Lower Vítkovice area. Its truly successful development can be attributed to the strong leadership in connection with patriotism of the owner [21]. Lower Vítkovice nowadays is the third most visited tourist attraction in the whole Czech Republic.

Last, but not least, in the gravity center of the above depicted ´Growth Triangle´, we can find a New Karolína. This can be treated as quite successful project led by the external interests of developers residing out of Ostrava. Architectural qualities of the complex in combination with an excessive commercial function have been criticized many times, nonetheless culture-orientated components of the area are unquestionable. They are embodied by finely renovated historical objects where various concerts as well as other cultural events take place regularly.

On the basis of the analysis performed in the frame of this text, the answer to the research question formulated at the beginning of the paper is as follows: yes, development effects invoked by the existence of creative and cultural industries in Ostrava exist and help not only the diversification of the economy but overall regeneration of urban life as well. At the same time, it should be reminded that the development of these industries is slower than in other towns not beset by an industrial past. The great advantage Ostrava has is that it acts as the metropolis of the whole Moravian-Silesian self-governing region.

As to the managerial implications for practical policies, it should be reminded that genuine development in urban spaces can be reached primarily via the stimulation of inner endogenous potential of these urban entities [32]. Exogenous interventions cannot be entirely eliminated but they should act just as a complement to the endogenous activities of towns and cities. Development that is established on inner and truly endogenous regional potential is both effective and efficient because in contrast to exogenous strategy, it changes the quality of social and economic structures of individual territories.

At the same time, endogenous development (or combination of exogenous and endogenous development) can be successfully carried out only in the framework of adequately organized system

macrostructures. Spatial distribution of these macrostructures should enable at least roughly just and homogeneous conditions for the development of individual territories [7].

As for the benefit for decision and policy makers, the study identifies the developments in the field of cultural and creative industries, which have been generally underestimated in old industrial areas. This is an even trickier issue in case of old industrial towns in post-transformation economies, where Ostrava belongs. A quantitative view is furthermore enriched by qualitative data that enhance formulations of particular recommendations.

Culture is an important component of life, but it cannot work properly if a place or an area in question finds themselves in a bad position on mental maps. That is why there should be sufficient space for marketing activities of urban areas emphasizing mainly positive elements and phenomena of their lives. This would help to lure more tourists, investors, students as well as other interesting target groups that would promote local cultural industries. This has even higher relevance for traditional industrial areas, among which Ostrava can be included.

One has to take into consideration the importance of public spaces that are indispensable for the formation of genuine culture. If we create and manage public spaces of any urban area, the collaboration of many experts from different fields is necessary. Only in that way we can reach the adequate emotional and functional synergy in the formation of public spaces. Urban settings should be planned by architects, economists, sociologists, psychologists, geographers and culturologists. Subsequently, we can draw on the improvement of outer aesthetics of urban spaces and people will be willing and glad to spend longer time at public spaces. This forms a positive milieu for further advancement of culture and cultural industries. This is the next important recommendation.

Local authorities should be also aware of the fact that more actors (including international ones) in the cultural industry means more co-operation as well as competition, along with the subsequent introduction of new ideas and products. That is why both domestic and international individuals and entities that are involved in cultural industries should be attracted to Ostrava. The town should reckon with the openness principle as a premise of success not only in the sphere of cultural industries and cultural clusters.

The above recommendations can help to the transformation of inner characteristics of the locals and desirable result of the whole process would culminate not only in the support of cultural industry and cultural clusters but also in everyday cultural behavior and cultural perceptions of life in general. Since informal institutions are usually changing in the long run, the tangible positive results cannot be obtained immediately.

## 7. Conclusions

Ostrava represents a traditional industrial town, which however finds itself in a post-transformation stage of its development. The role of the culture in the town is markedly different than that in advanced towns. In contrast to its Western counterparts, culture is not yet established as an integral component of Ostrava´s development agenda and strategy.

There exists a distinct concentration of creative and culture industries in the territory occupied by Ostrava. Nonetheless, their importance is dependent upon the geographical context in which we assess them. While from the national perspective the position of Ostrava is in terms of cultural and creative industries quite a modest one, the town is undoubtedly a leader in the Moravian-Silesian self-governing region. This mirrors the fact that creative and cultural industries from Ostrava did not commence from scratch. At the same time, it should be remembered that the concentration of cultural and creative industries tells us nothing about the quality of these industries and the surrounding milieu as such. That is why in the frame of this article, a qualitative research has found ample utilization.

As it turned out, we can discuss the growth of a so-called ´Growth Triangle´ consisting of Stodolní street, Lower Vítkovice, Black Meadow and Nová Karolina occupying the gravity center of this triangle.

The developments of each of these areas constitute specific stories. Stodolní street, which initially evolved into a cultural ward, sui generis, is moving towards being an entertainment zone nowadays.

This street, where neither territorial nor functional regulations shaped the development in the 1990s, was created on the basis of free market forces. Nowadays, its prevailing commercial character is symptomatic for the whole area.

In contrast, the Black Meadow cultural cluster represents an intended endeavor of the urban authorities. The last developments show promising ground for the completion of a cultural cluster there. In contrast to Stodolní street, regulations virtually embrace the planned cultural cluster and two pivotal actors—urban management and the University of Ostrava—are currently participating in this project.

The case of Lower Vítkovice is perhaps the most connected with the failure of the candidacy to the European Capital of Culture. This failure only strengthened the strong endogenous basis of the whole project. The endogenous bias of the project was based on strong leadership in connection with sound patriotism.

Finally, New Karolína project, which finds itself just in the gravity center of ´the Growth Triangle´, represents a fine blend of commercial and cultural functions. Culture surely contributes to Ostrava´s overall regeneration, yet the question of the formation of cultural behavior in the town and cultural perception of life remains part of the long-distance goal.

In sum, development effects formed by the concentration of cultural and creative industries in Ostrava are distinctive. The failure in the competition for the European Capital of Culture fortified the endogenous character of the development of Ostrava´s culture. This endogenous development without relying upon external resources is almost an inbuilt mechanism stemming from the town´s complicated history.

As to the future possible tendencies in the research related to this topic, one should mention more intense co-ordination of individual endogenous activities that forms one of biggest challenges for Ostrava´s future sustainable cultural management. The next issue concerns the question whether Ostrava´s culture will be still capable of developing in an endogenous way, or whether some new patterns of development could emerge. Last but not least, transformation in the composition of Ostrava´s cultural and creative industries towards a higher degree of progressivism could occur, which should be also subjected to further investigations.

**Conflicts of Interest:** The author declares no conflict of interest. The founding sponsors had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, and in the decision to publish the results.

## References

1. Landry, C. *The Creative City: A Toolkit for Urban Innovators*; Earthscan Publication: London, UK, 2000.
2. Florida, R. *The Rise of the Creative Class and How It Is Transforming Work, Leisure, Communication and Everyday Life*; Basis Books: New York, NY, USA, 2002.
3. Florida, R. *Cities and the Creative Class*; Routledge: New York, NY, USA, 2005.
4. Mommaas, H. Cultural clusters and the post-industrial city: Towards the remapping of urban cultural policy. *Urban Stud.* **2004**, *41*, 507–532. [CrossRef]
5. Suchacek, J. Regional Development in Central and Eastern Europe: A New Approach. *Actual Probl. Econ.* **2014**, *154*, 106–115.
6. Suchacek, J. Large Enterprise Branches: The Case of the Czech Republic. *Econ. Sociol.* **2015**, *8*, 82–93. [CrossRef] [PubMed]
7. Suchacek, J. *Territorial Development Reconsidered*; VŠB-TU: Ostrava, Czech Republic, 2008.
8. Wróblewski, L.; Kurowska-Pysz, J.; Dacko-Pikiewicz, Z. Polish-Czech microprojects as a tool for shaping consumer behavior on the cross-border market for cultural services. In *Innovation Management and Education Excellencce through Vision 2020*; International Business Information Management Association: Milan, Italy, 2018.

9.    Gibson, C.; Kong, L. Cultural Economy: A critical review. *Prog. Hum. Geogr.* **2005**, *29*, 541–561. [CrossRef]

10.   Scott, A.J. Creative cities: Conceptual issues and policy questions. *J. Urban Aff.* **2006**, *28*, 1–17. [CrossRef]

11.   Pratt, A.C.; Jeffcut, P. Managing Creativity in the Cultural Industries. *Creat. Innov. Manag.* **2002**, *11*, 225–233.

12.   Grodach, C.; Seman, M. The cultural economy in recession: Examining the US experience. *Cities* **2013**, *33*, 15–28. [CrossRef]

13.   Scott, A.J. *The Cultural Economy of Cities. Essays on the Geography of Image-Producing Industries*; Sage: London, UK, 2000.

14.   Hutton, T.A. Spatiality, built form, and creative industry development in the inner city. *Environ. Plan. A* **2006**, *38*, 181–184. [CrossRef]

15.   Pavelková, D. *Klastry a Jejich Vliv na Výkonnost Firem*; Grada: Prague, Czech Republic, 2009.

16.   Sölvel, O.; Lindquist, G.; Ketels, C. *The Cluster Initiative Greenbook*; Ivory Tower: Stockholm, Sweden, 2003.

17.   Porter, M.E. *The Competitive Advantage of Nations*; The Free Press: New York, NY, USA, 1990.

18.   Porter, M.E. *On Competition*; Harvard Business School Press: New York, NY, USA, 1998.

19.   Suchacek, J. Ostrava in the Context of Geopolitical Transformations: The Embodiment of Inconsistent Urban Development. *Int. Cult. Cent. Yrly.* **2007**, *15*, 53–58.

20.   Suchacek, J. *Na Cestě k Nové Identitě. Ostrava, Katovice a Košice Po Roce 1989*; VŠB-TU: Ostrava, Czech Republic, 2010.

21.   Suchacek, J.; Herot, P. The City of Ostrava—From Industrial Image to Industrial Image 2.0. In *Harnessing Place Branding Through Cultural Entrepreneurship*; Go, F., Lemmetyinen, A., Hakala, U., Eds.; Palgrave Macmillan: Basingstoke, UK, 2015; pp. 191–210.

22.   Ostrava 2015 Candidacy for European Capital of Culture. 2015. Available online: http://www.ostrava2015. cz/web/structure/project-ostrava-2015-150.html?lang=en (accessed on 25 October 2018).

23.   Caves, R. *Creative Industries: Contracts between Art and Commerce*; Harvard University Press: Cambridge, MA, USA, 2000.

24.   The European Cluster Observatory Priority Sector Report: Creative and Cultural Industries. 2011. Available online: http://www.clusterobservatory.eu/common/galleries/downloads/CreativeAndCulturalIndustries.pdf (accessed on 5 October 2018).

25.   *Koncepce Rozvoje Kultury Statutárního Města Ostravy Včetně Aktualizace Akčního Plánu*; Mimeo: Ostrava, Czech Republic, 2014.

26.   Fact Sheets Ostrava 2017. City of Ostrava—Facts and Figures. 2018. Available online: https://www.ostrava. cz/en/podnikatel-investor/city-profile/ke-stazeni/ke-stazeni-en/copy_of_FL_2017_EN.pdf (accessed on 25 October 2018).

27.   Slach, O.; Koutský, J.; Novotný, J.; Ženka, J. Creative Industries in The Czech Republic: A Spatial Perspective. *E M Econ. Manag.* **2013**, *16*, 14–29.

28.   Stodolní Ulice. Available online: http://www.ostravainfo.cz/en/visit/the-best-of-ostrava (accessed on 25 October 2018).

29.   Nová Karolina. Available online: http://www.nova-karolina.cz/clanky/nove-karolina-project (accessed on 25 October 2018).

30.   Cameron, S.; Coaffee, J. Art, gentrification and regeneration: From artist as pioneer to public arts. *Eur. J. Hous. Policy* **2005**, *5*, 39–58. [CrossRef]

31.   Slach, O.; Boruta, T. What can cultural and creative industries do for urban development: Three stories from the post-socialist industrial city of Ostrava. *Quaest. Geogr.* **2012**, *31*, 99–112. [CrossRef]

32.   Castanho, R.A.; Naranjo Gómez, J.M.; Kurowska-Pysz, J. How to Reach the Eurocities? A Retrospective Review of the Evolution Dynamics of Urban Planning and Management on the Iberian Peninsula Territories. *Sustainability* **2019**, *11*, 602. [CrossRef]

# The Role of Marketing in Cultural Institutions in the Context of Assumptions of Sustainable Development Concept—A Polish Case Study

**Magdalena Sobocińska**

Wrocław University of Economics, ul. Komandorska 118/120, 53-345 Wrocław, Poland;
magdalena.sobocinska@ue.wroc.pl

**Abstract:** Development of both the marketing and cultural sectors have multi-directional natures, showing relationships with sustainable development that should be considered at various levels of cultural sector management in cultural institutions, at the level of the cultural policy of the state or region, and on the micro-scale. Not only do the natural environment, economy, and technology constitute areas of sustainable development, but also society and culture. The assumptions about sustainable development by cultural institutions are related to implementing marketing concepts in this sphere, in that they are the expression of market orientation (on consumer of culture). The goal of this study was to show that marketing by cultural institutions, as a reflection of their market orientation, translates into these institutions' implementation of the assumptions of sustainable development. This paper is based on literature studies and the results of empirical and quantitative research that was conducted on a sample of 451 people managing cultural institutions in Poland. The research included general managers, managers, artistic directors, managers of marketing, promotion and sales departments, as well as owners of cultural institutions. Analysis of research results shows that consumers of culture are ranked first as recipients of targeted actions conducted by cultural institutions. An increase in the diversity of cultural offers, including the concept of sustainable development, emerged as a factor stimulating the development of the culture market, being closely related to growth of the quality of cultural offer.

**Keywords:** marketing concept; cultural institutions; sustainable development; cultural offer diversity; culture consumer

## 1. Introduction

In the discourse about the functioning of the culture sector, there are various views about the role of the state in culture, the scope of culture protection, forms of its financing, importance of the market system in culture, the institutional shape of the culture sector, the status of artists and their masterpieces, and the approach to the consumer. Approaching culture, the related mechanisms, and the principles of its functioning in the categories of autotelic value or instrumental value, state or market, cost or investment, art or product, or culture recipient or consumer without considering intermediate states is an over-simplification because perceiving culture as sacred does not mean the lack of a need to implement in this sphere the marketing concepts that are an expression of the market orientation of cultural institutions.

When analyzing how the concept of market orientation is defined, the factors determining the success of a market entity should be considered. These factors can be both external and internal, and thus concern the environment or resources and processes occurring inside the market entity. This means that people managing various types of market entities can adopt an exogenous perspective or an endogenous perspective [1]. Market orientation is located within external orientations.

Many features and related explanatory variables prove the complex nature of the concept of market orientation. Contrary to production, product, or sales orientation, market orientation involves thinking about the way in which a market entity functions. Understanding consumers and satisfying their needs better than the competitors is the essence of market orientation. Market orientation is also characterized by obtaining and using market information by management, which enables considering current and future needs of consumers in the offer they create. When defining market orientation Kohli and Jaworski emphasized that all organizational divisions and units, and not only marketing services, should be involved in the process of goal achievement. The scope of the implementation of the principles of marketing concepts, and compliance of an organization's management with the assumptions of the marketing approach proves the level of market orientation of a market entity [2]. Day emphasized that market-oriented entities are characterized by openness and participatory organizational culture in which meeting consumers' needs are the priority. The employees of market externally-oriented entities take risks and have knowledge about actions conducted by competitors [3].
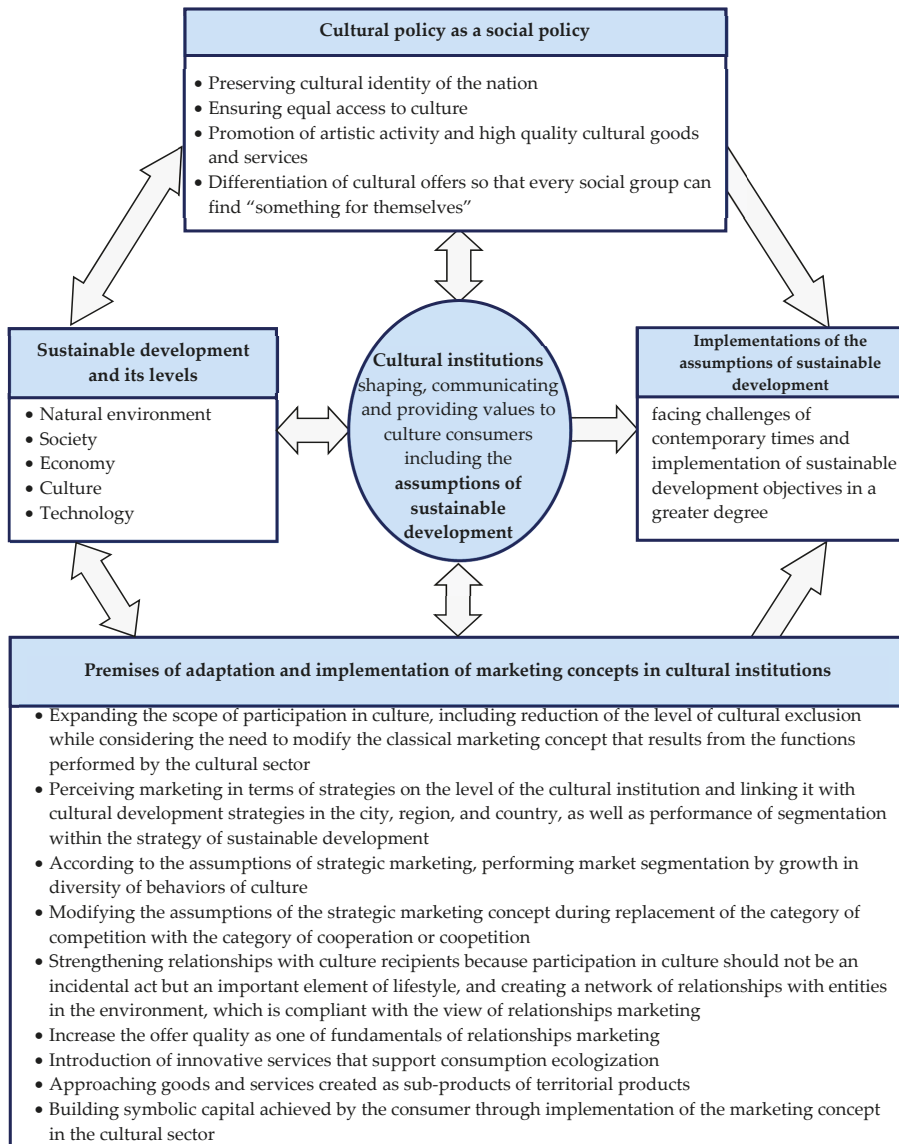
Therefore, market orientation is a condition that is necessary for the emergence of marketing as a specific way of thinking and acting in the market. The role of marketing that is associated with culture functions in this sphere is frequently expressed in finding the appropriate audience for artworks [4]. When describing the significance of marketing in the cultural sector, Colbert similarly noticed that, in the case of cultural institutions, applying marketing principals does not mean that the artist has to create the artwork adjusting to the recipients' needs and tastes. Marketing in culture is defined in the context of reaching the market segments that may be interested in the artwork. The forms of artwork promotion, methods of its distribution, and pricing policy should be adjusted to recipients' needs. Therefore, enabling consumers to contact the artwork and consequently achieve goals related to the mission of cultural institutions are the premises for the application of marketing. The role of marketing is perceived through the prism of the symbolic dimension of cultural experience, brand of cultural institution, and artwork, shaping the tastes of culture recipients, establishing relationships with them, and developing culture sensitivity that does not only include satisfaction of currently experienced needs [5–10]. Consumers, artists, as well as their works are the center of interest of marketing. In this context, providing contact between artists, their works, and culture consumers is essential [11].

The satisfaction of culture participants' needs by the creator does not exclude the creators' and artistic circles' needs in the processes of creation. Recipients toward whom the creator orients their creativity do not need to have different tastes or perceptions of art.

Simultaneously, development of both marketing and culture has a multidirectional and multi-paradigmatic nature, and has relationships with the concept of sustainable development (Figure 1). Sustainable development oriented toward economic growth and equal distribution of profits, protection of natural resources and the environment, and reduction of the scale of social exclusion, has a series of implications for the cultural policy of the state or region, or management of cultural institutions. Sustainable development includes such spheres as economy, society, environment, and culture [12], and is a process aimed at the satisfaction of current aspirations without compromising the ability of future generations to achieve the same aspirations [13]. Reduction of poverty and social exclusion, and maintenance of cultural diversity are the essence of sustainable development [14]. This consequently causes sustainable development to be a type of social-economic development implemented by people for people and integrating all human activity in social, economic, environmental, technological, and cultural dimensions. It also represents the desired living environment and a responsible society that implements concepts of intra- and inter-generational order [15].

Relationships between sustainable development and culture are expressed by the development of the cultural policy, in which culture is perceived as a factor accelerating development, and by the introduction and promotion of the cultural dimension in other public policies [16]. References to the concept of sustainable development can be found in the goals of cultural policies of many countries [17]. Implementation of the assumptions of the concept of sustainable development is not possible without shaping the attitudes and behaviors supporting this development in society [18]. Culture institutions

that, through their mission and actions, impact society in the implementation of the assumptions of sustainable development should be active in this process. Therefore, the role of culture in sustainable development should not be ignored because it is a determinant of such development and enables sustaining the functioning of societies [19,20].

**Cultural policy as a social policy**

- Preserving cultural identity of the nation
- Ensuring equal access to culture
- Promotion of artistic activity and high quality cultural goods and services
- Differentiation of cultural offers so that every social group can find "something for themselves"

**Cultural institutions** shaping, communicating and providing values to culture consumers including the **assumptions of sustainable development**

**Sustainable development and its levels**

- Natural environment
- Society
- Economy
- Culture
- Technology

**Implementations of the assumptions of sustainable development**

facing challenges of contemporary times and implementation of sustainable development objectives in a greater degree

**Premises of adaptation and implementation of marketing concepts in cultural institutions**

- Expanding the scope of participation in culture, including reduction of the level of cultural exclusion while considering the need to modify the classical marketing concept that results from the functions performed by the cultural sector
- Perceiving marketing in terms of strategies on the level of the cultural institution and linking it with cultural development strategies in the city, region, and country, as well as performance of segmentation within the strategy of sustainable development
- According to the assumptions of strategic marketing, performing market segmentation by growth in diversity of behaviors of culture
- Modifying the assumptions of the strategic marketing concept during replacement of the category of competition with the category of cooperation or coopetition
- Strengthening relationships with culture recipients because participation in culture should not be an incidental act but an important element of lifestyle, and creating a network of relationships with entities in the environment, which is compliant with the view of relationships marketing
- Increase the offer quality as one of fundamentals of relationships marketing
- Introduction of innovative services that support consumption ecologization
- Approaching goods and services created as sub-products of territorial products
- Building symbolic capital achieved by the consumer through implementation of the marketing concept in the cultural sector

**Figure 1.** Relationships between actions of cultural institutions, sustainable development, marketing, and cultural policy.

Considering the abovementioned relationships between culture and sustainable development, these categories are also closely related to marketing, and can be both a part of the issue as well as a

part of its solution [21]. Applying marketing that considers contemporary challenges should enable changing consumer societies into societies respecting the principles of sustainable development. This is reflected in the concept of sustainable marketing, which is described as the process of creation, communication, and provision of values to consumers in a way that protects and strengthens natural and human capital [22]. This also includes cultural institutions that apply the classical marketing concept and the relationship marketing concept. Implementation of the assumptions of the classical concept of marketing should translate into the expansion of the scope of cultural participation through raising awareness and stimulating motivation for participation in culture among people who have not used cultural offer before. It is associated with the concept of sustainable development. Strengthening relationships with culture recipients and other market entities, increasing their loyalty, and building valuable relationships with entities in the environment are the result of implementing the major assumptions of the concept of relationship marketing. High quality offers are also the essence of relationship marketing [23,24]. Cultural institutions also apply the concept of strategic marketing, which includes the idea of market segmentation and diversification of marketing activities. Such an approach enables combining the strategy implemented at the level of the cultural institution with development strategies, including sustainable development, of the cultural sector at the city, region, and country levels.

It is important that the application of marketing expressed in market orientation, innovations (including those based on new media), and the high value of the offer of cultural institutions have positive impacts on culture sustainability [25].

The performed survey of the literature concerning market orientation, marketing in culture, and sustainable development showed that a research gap exists that is related to how managers of cultural entities in Poland perceive the market orientation of cultural institutions and the place of culture consumers among groups of recipients of actions conducted by these institutions, and also whether development of offer diversity included in the concept of sustainable development is perceived in terms of raising quality of cultural offer. The hypotheses presented below are addressed to filling this identified research gap.

## 2. Materials and Methods

To fill the identified research gap, it was necessary to design and perform empirical research. Before the start of design and then during the implementation and interpretation of results, literature reviews were conducted in the sphere of research methods and techniques [26–29] to develop a research procedure that was appropriate from the point of view of both the analyzed subject area, marketing, and the specific characteristics of the culture sector.

The conducted empirical study included a set of objectives aimed at the recognition of how the concept of market orientation is understood by people managing cultural institutions in Poland, description of the place that participants in culture occupy among groups of consumers receiving marketing actions performed by cultural institutions, and checking for a correlation between expansion of the offer diversity as a determinant stimulating development of the culture market and improvement of the quality of the offer created by cultural institutions. Empirical research was implemented within the research project entitled "Determinants and perspectives of development of market orientation in the culture sector", funded by the National Science Centre.

In the research procedure, the following hypotheses were formulated:

**Hypothesis 1 (H1).** *The ways in which market oriented cultural institutions are perceived more often reveal the focus on culture consumers rather than the financial aspect of activity conducted by the entities creating cultural offers.*

**Hypothesis 2 (H2).** *Culture participants are the most important group of recipients of actions conducted by cultural institutions.*

**Hypothesis 3 (H3).** *Increase in offer diversity as the factor stimulating development of cultural market, which is included in the concept of sustainable development, is strictly related to improvement of the quality of cultural institutions' offers.*

Quantitative research was conducted on a Poland-wide sample of cultural institutions selected using a probability sampling method. The respondents included general managers, managers and artistic directors, heads of marketing, promotion and sales departments, and owners of cultural institutions.

Identification of the general population required considering a complete list of cultural institutions, which included all entities operating in the culture sphere, including organizational and ownership criteria, complying with the demand for timeliness and consistency with the type of activity in the sphere of culture declared at the time of registration with actually conducted activity. On the basis of analyses of available data and publications on the subject of culture market, even the National Business Registry Number (REGON) register had some deficiencies because the registering entities frequently declare a broader scope of activities according to the Polish Classification of Businesses Code (PKD) than they actually conduct. However, the register is not always updated. As such, actions were aimed at increasing the opportunity to reach the entities providing cultural offers in Poland and forming possibly the best representative research sample. The list of entities was created on the basis of integration of the Bisnode company database used by ARC Rynek i Opinia (ARC Market and Opinion) research institute, and lists made available by the Ministry of Culture and National Heritage, Adam Mickiewicz Institute, and the Polish Film Institute, among others. All cultural entities occurring in the integrated database were checked to determine whether they were still functioning or still active in the sphere of culture. For this purpose, webpages and their timelines were checked, and if up-to-date content was absent, phone calls were made to confirm that a given entity conducts activity in the sphere of culture. The database created for the purpose of the study constituted the most up-to-date and representative collection of culture entities that were consistent with the research assumptions.

The research was designed to be non-exhaustive. Stratified random sample selection was applied as the main method of entities selection. In the process of sample selection, the studied population was divided into six separate strata out of which the entities for research were randomized in the next stage. Strata were distinguished with respect to the type of conducted activity, The research included 451 cultural institutions, including: museums, art galleries and exhibition rooms, theatres and musical institutions, cinemas, cultural centers (excluding sitting rooms, clubs, and circles), and publishers (excluding publishers of educational, academic, scientific, professional books and other specialist publications and incidental publishing entities).

The structure of the research sample by type of cultural entity is presented in Table 1.

**Table 1.** Structure of research sample by the type of cultural market entity.

| Specification | Museums | Art Galleries and Exhibition Rooms | Cinemas | Theatres and Musical Institutions | Publishers | Cultural Centers | Total |
|---|---|---|---|---|---|---|---|
| Number of studied cultural entities | 129 | 66 | 82 | 96 | 18 | 60 | 451 |
| Share of cultural entities in the study population | 28.6% | 14.6% | 18.2% | 21.3% | 4.0% | 13.3% | 100% |

The number of entities studied within specific groups was proportional to the number of institutions functioning in particular areas found in the integrated database of cultural entities.

The studied market entities represented all voivodeships in Poland. Over 68% of studied entities belonged to self-governed cultural institutions, 7.5% were state-owned cultural institutions, and the other 23.9% were private institutions. With respect to the number of workers employed on the basis of employment contract, among the studied institutions, there were both micro-entities as well as large entities employing over 100 people, which constituted 8% of the studied population. The studied

cultural markets entities were also diversified in terms of the period of functioning. The short-term entities functioning on the market (no longer than five years) constituted 8.2% of the research sample and the oldest, functioning more than 100 years, represented 4.2%. Considering the size of the city where the cultural institutions were located, the largest group were located in cities of over 200,000 residents. Their share in the studied population was 46.4%. The sample structure including its most important characteristics is shown in Table 2.

**Table 2.** Description of research sample

| Characteristic | Distribution of Answer |
|---|---|
| Type of ownership of cultural market entity | State-owned: 7.5%, self-government-owned: 68.6%, private: 23.9% |
| Voivodeship | Lower Silesian: 8.6%, Kuyavian-Pomeranian: 3.5%, Lublin: 3.3%, Lubusz: 1.8%, Łódź: 7.1%, Lesser Poland: 14.0%, Masovian: 15.7%, Opole: 1.6%, Subcarpathian: 3.8%, Podlaskie: 3.5%, Pomeranian: 6.9%, Silesian: 10.6%, Holy Cross: 2.7%, Warmian-Masurian: 3.1%, Greater Poland: 8.9%, West Pomeranian: 4.9% |
| Size of the locality | Village: 2.2%, city up to 50,000 inhabitants: 28.8%, city of 50,000–200,000 inhabitants: 22.6%, city over 200,000 inhabitants: 46.4% |
| Number of workers employed on the basis of employment contract | 1 person: 8.6%, 2–10 people: 30.2%, 11–20 people: 16.6%, 21–50 people: 21.1%, 51–100 people: 15,.5%, over 100 people: 8.0% |
| Years of institution functioning | Up to 5 years: 8.2%, 5 to 10 years: 6.7%, >10 to 20 years: 16.9%, >20 to 50 years: 35.8%, >50 to 100 years: 28.2%, >100 years: 4.2% |

Considering the scope of this quantitative research, the type of respondents, and the nature of their work, the computer-assisted telephone interview technique (CATI) was selected. The choice of the technique was dictated by the need for standardization of the interview process and minimization of the interviewer effect [30]. This technique allowed for flexible adjustment of the date of interview to accommodate respondent's preferences.

When establishing the content, type, number, and order of questions, the principles that are applied in marketing research were considered. To determine the duration of the interview, recognition of respondents' reactions to individual questions, and to check whether the questions were unambiguous, unclear, or did not cause difficulties for respondents, a pilot experiment was conducted. The questionnaire was also tested via telephone.

Technical execution of the computer-assisted telephone interviews with the use of a standardized questionnaire occurred in the CATI studio of the ARC Rynek i Opinia (ARC Market and Opinion) research institute in Warsaw, Poland that is equipped with professional devices and software that ensures appropriate research process. The application of the CATI technique reduced the possibility of errors because the program controls the logical correctness of the introduced answers. IBM SPSS Statistics 24 (IBM Corp., 2016, Armonk, NY, USA) was used to statistically analyze the collected data. The operations on the data set that involved sorting and aggregation were performed through computer processing of data. Subsets of data for the analysis were separated. Quantitative analysis was applied with the use of descriptive statistics to recognize how market orientation and marketing in the studied cultural institutions is understood and approached. Correlations between the variables were determined.

## 3. Results

Aiming at recognizing how the notion of market orientation in the cultural sector is understood by decision-makers in cultural institutions, a semantic network was created. Semantic networks, which consist of bundles and links, allowed the identification of mental representations and processes [31]

in terms of how decision-makers in cultural institutions perceive the category of market orientation. Analyzing the managing staff's answers to the open-ended questions asked in the quantitative study concerning distinguishing features of market-oriented cultural institutions, the individual answers in relation to the mechanisms of the formation of meanings that are reflections of cognitive processes and methods of conceptualization of notions were analyzed. The question was: "Please finish the following sentence: A market-oriented cultural institution is one that . . . ". Analyzing the semantic area, the keywords were identified and then were categorized according to the functions they performed in respondents' statements, when simultaneously considering the notions characterizing the studied issue, associations, and equivalents that could replace the keywords. The process aimed at an accurate reproduction of the respondents' intentions. The analysis of the semantic area that emerged from the phrases allowed the identification of the thoughts about market-oriented cultural institution. The analyzed semantic field depicts the image of a market-oriented cultural institution as viewed in the minds of decision-makers' in cultural institutions as one focused on culture recipients, the financial aspect of their activity, the instrumental and action-related sphere of marketing, statutory activity, and increase in competitiveness. The ways in which decision-makers in cultural institutions in Poland understand the notion of market-oriented cultural institution are presented in Figure 2 and the whole semantic network is shown in Figure 3.



**Figure 2.** The ways in which decision-makers in cultural institutions understand the category of "market oriented cultural institutions".
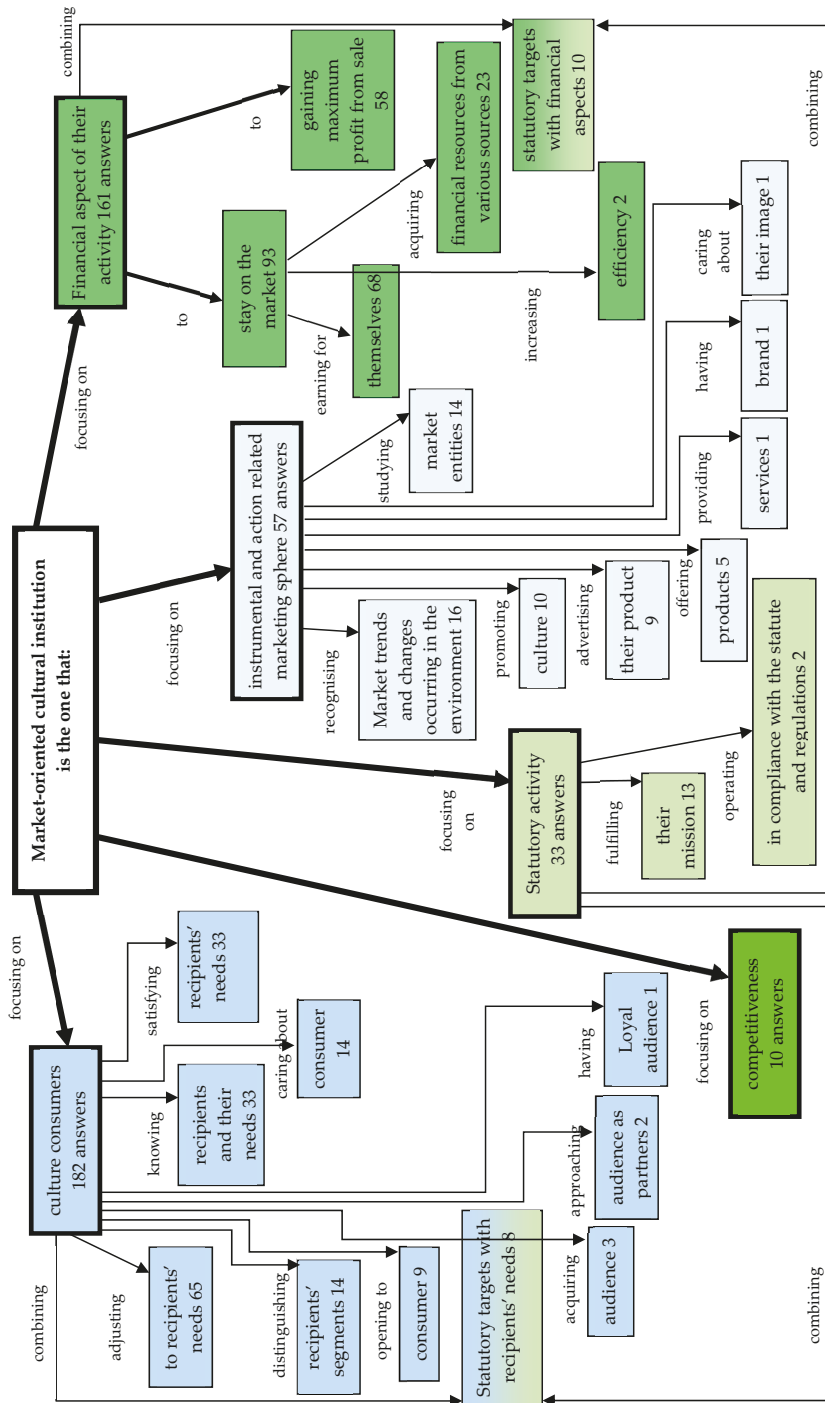
**Figure 3.** Semantic network of the notion of a market oriented cultural institution [32].

The semantic network of the notion of market-oriented cultural institution shown in Figure 3 has a hierarchical nature. It was constructed on the notion that respondents' opinions aptly describe the essence of market orientation and the bundles and links present relationships occurring between major bundles and bundles that specify the main bundles. The notions that occur in the semantic area are found in the figure with greater frequency closer to the studied category, which is the market-oriented cultural institution.

The key conceptual relationships occurring between the analyzed category of market-oriented cultural institution and major links (culture consumers, financial aspect of cultural institution activity, instrumental and action-related marketing sphere, statutory activity, and competitiveness) are shown in the Figure 3 in bold. Other categories specify how the notions included in major links are perceived and consequently indicate the context of the respondents' definition of market-oriented cultural institutions.

Considering the research objectives, apart from identifying the method for market orientation by people managing cultural institutions in Poland, the groups of consumers to which entities are shaping and aiming their cultural offer are important. This results from both the development of marketing thought and the significance of the concept of relationship marketing, for which it is characteristic to approach the recipients of marketing activities from the context of relationship networks created, with many internal and external partners, as well as from the context of the many entities whose needs are satisfied by cultural institutions. The results from the cultural institutions in Poland show that they attach importance to the satisfaction of recipients' needs. Almost 98% of respondents (Table 3) classified culture participants into one of four groups of entities on whose satisfaction of needs and expectations the cultural institutions are oriented on.

**Table 3.** Hierarchy of importance of groups of recipients of actions implemented by cultural institutions. Respondents were choosing four groups of entities and ranked them in order from the most to the least important.

| Groups of Entities | Rate of Cultural Institutions Ranking the Entity First (%) | Rate of Cultural Institutions Ranking the Entity Second (%) | Rate of Cultural Institutions Ranking the Entity Third (%) | Rate of Cultural Institutions Ranking the Entity Fourth (%) | Total Rate of Cultural Institutions Ranking a Given Group of Recipients (%) |
|---|---|---|---|---|---|
| Culture participants | 88.5 | 7.1 | 1.6 | 0.4 | 97.6 |
| Workers of this institution, including creators, artists | 7.1 | 36.1 | 15.1 | 15.5 | 73.8 |
| Media | 0.7 | 19.5 | 23.6 | 20.7 | 64.5 |
| Representatives of city, region and central authorities | 1.8 | 12.2 | 17.3 | 18.0 | 49.3 |
| Sponsors | 0.4 | 7.3 | 15.7 | 14.4 | 37.8 |
| Reviewers, critics | 0.2 | 6.7 | 13.1 | 15.5 | 35.5 |
| Owners of cultural institutions | 0.4 | 5.3 | 6.9 | 10.2 | 22.8 |
| Volunteers | 0.9 | 5.8 | 6.7 | 5.3 | 18.7 |

The high ranking of culture participants in the groups of recipients of cultural institutions is proven by the analysis of the correlations between the type and location of an entity in the hierarchy of importance of addressees of actions undertaken by cultural institutions. People managing cultural institutions that indicated culture recipients as one of four priority groups of stakeholders almost always placed them in the first position in the ranking (V-Cramer coefficient = 0.537; Table 4). Of respondents, 88.5% placed culture consumers at the top of the hierarchy of importance of groups of recipients. The workers, including creators and artists, were ranked as the most important groups whose satisfaction of needs and preferences a cultural institution was the focus, as indicated by slightly over 7% of respondents. Analysis of the V-Cramer coefficient value showed a correlation between including creators, artists, and other workers to one of four entities most important for cultural institutions and ranking them second in the hierarchy (V-Cramer coefficient = 0.527). Of the

respondents, 36.1% ranked the group of creators, artists, and other workers in second place the groups of entities whose needs and preferences are satisfied by cultural institutions.

**Table 4.** V-Cramer coefficient for hierarchy of significance of groups of recipients of actions implemented by cultural institutions.

| Groups of Entities | Measure of Dependence | Ranked First | Ranked Second | Ranked Third | Ranked Fourth |
|---|---|---|---|---|---|
| Culture participants | V-Cramer coefficient | 0.537 | 0.169 | 0.092 | 0.151 |
| | *p*-value | 0.000 | 0.076 | 0.804 | 0.176 |
| Workers of this institutions, including creators, artists | V-Cramer coefficient | 0.182 | 0.527 | 0.299 | 0.280 |
| | *p*-value | 0.036 | 0.000 | 0.000 | 0.000 |
| Media | V-Cramer coefficient | 0.147 | 0.390 | 0.431 | 0.399 |
| | *p*-value | 0.207 | 0.000 | 0.000 | 0.000 |
| Representatives of city, region and central authorities | V-Cramer coefficient | 0.209 | 0.403 | 0.494 | 0.507 |
| | *p*-value | 0.006 | 0.000 | 0.000 | 0.000 |

As culture participants ranked first among the groups of recipients of actions undertaken by cultural institutions in Poland, the answer to the question about how decision-makers in cultural institutions offer diversity within the concept of sustainable development seems important.

The conducted questionnaire survey shows that people managing cultural institutions in Poland perceive an increase in offer diversity as a stimulant of the development of the culture market. This is proven by this factor reaching a mean value of 6.04 on the seven-degree scale, where one represented unimportant stimulant and seven represented a very important stimulant of culture market development in Poland. According to the respondents, improving the quality of the offer created by cultural institutions was an almost equally important factor determining the development of the culture market in Poland (average score 6.02). Therefore, the results of the research show that decision-makers in cultural institutions have an active attitude toward the market and want to shape its development through increasing the attractiveness of the cultural offer. The analysis of results was completed with observed correlations between perceiving the increase in the diversity of the cultural institution offers as a stimulant of cultural market development and experiencing the need to expand the scope of the conducted marketing actions (Kruskal–Wallis test: $\chi^2 = 14.146$, degrees of freedom (df) = 2, *p*-value = 0.000). Decision-makers in cultural institutions in Poland stated that, in the market entities they represented, the scope of marketing operations should definitely be expanded and greater importance should be attributed to increasing the diversity of the cultural offer as a factor determining development of culture market.

Analysis of correlations between scores provided by decision-makers in cultural entities to the individual factors that are stimulants of the culture market in Poland revealed correlations between high scores attributed to certain factors (development of the offer diversity) and an increase in the quality of the created cultural offer (Spearman rank correlation coefficient = 0.710). Therefore, these respondents typically perceive market development in the context of factors that are directly influenced by people managing cultural institutions. This should be considered an expression of the market orientation of these cultural institutions.

## 4. Discussion and Conclusions

Theoretical constructs of market orientation and related explanatory variables, including those oriented on buyer, oriented on competitors, coordination of functions of market entities, long-term horizon, acquisition and use of information, as well as efficiency are important references for empirical

data constituting the basis for the creation of semantic networks for evaluating the notion of "market oriented cultural institution" [33].

The frequency of occurrence of individual contexts revealing the way in which respondents perceive the concept of market orientation of a market institution is diverse. Decision-makers in cultural institutions most often defined a market-oriented institution as one that focuses on recipients, including satisfying and adjusting to their needs and separation of segments, among others. This is consistent with the assumption of the marketing concept that satisfaction of consumer needs and expectations is the basis for achievement of the targets of a market entity. The share of this trend of responses in the semantic network was 41.1%.

Categories, such as loyalty and partnership, rarely occurred in respondents' statements. Therefore, spontaneous respondents' statements did not reflect thinking about market orientation in the context of the assumptions of relationship marketing or partnership marketing on a large scale.

Referring to a cultural institution's financial aspect of functioning was the next most frequent way of defining market-oriented cultural institution in the respondents' statements. The categories related to the financial functioning of a market entity were found in 161 statements. The statements of decision-makers in cultural institutions who perceived market orientation through the prism of financial variables can be divided into two groups. The first includes the statements of decision-makers who identified market orientation with a continuing presence in the market as well as seeking and acquiring financial resources for conducting cultural activity from various sources. The second group includes statements about perceiving market orientation as acting in a targeted profit-making way. This latter approach to market orientation does not reflect its essence and may pose a risk of economic targets becoming more important than the statutory and artistic goals of a cultural institution. Considering the specific characteristics and roles of cultural institution, a desirable situation is when the achievement of economic goals enables achievement of artistic targets. Subordination of creative processes to achievement of only economic goals is typical of the sales-oriented approach and is not compliant with the assumptions of the marketing concept, where satisfaction of consumers' needs is the key to achievement of goals, including financial goals [34].

Categories associated with the instrumental and operational spheres of marketing formed the third group of statements that was used by a significantly smaller group of respondents defining market orientation. In this case, the method through which a cultural institution approaches market-orientation is one that recognizes market trends and studies entities emerging in the market environment. This way of describing the institutions is consistent with one of the key principles of marketing concepts, i.e., market research, where the essence of market orientation is acquiring information about the market, including information about current and future consumer needs [2]. The majority of the other descriptions of market orientation in this group referred to marketing instruments and associated operations. Among the ways in which market orientation was defined by respondents, there were no direct references to marketing strategies or the process of marketing management.

Defining market orientation through the prism of fulfilment of a mission and operating in accordance with the statute was barely present in respondents' minds.

Improvement of competitiveness in the market was the last identified category that, in the respondents' view, is a distinctive feature of the market orientation of a cultural institution. This type of explanation of the studied category occurred in 10 statements.

A small group of respondents linked the issues associated with statutory activity with satisfying recipients' needs or financial aspects, while explaining what market-oriented cultural institution means to them.

The conducted analysis of the quantitative research results with the use of the semantic network provided the basis for the positive verification of H1, the category of focusing on culture recipients rather than the financial aspects of activity conducted by entities creating a cultural offer is revealed in the ways of perceiving of market-oriented cultural institutions. The presented semantic network was completed with the results that showed that even though not all respondents indicated cognition, satisfaction

of recipients' needs while answering the open-ended question concerning distinctive features of market-oriented cultural institutions, 97.8% of studied respondents agreed with the statement that striving to meet the needs of culture consumers is important to management. Only 10 of the 451 studied representatives of cultural institutions (2.2%) thought it was not significant.

Among the premises for starting actions aimed at the satisfaction of consumers' needs, the conviction was prevailing that if a cultural institution has consumers, artistic actions gain sense and significance (88.7% of studied cultural institutions are aimed at satisfying consumers' needs). Only 11.3% of cultural institutions taking consumer needs into consideration do so because of the wish to increase income. This proves that decision-makers in the studied cultural institutions perceive the consumers as a recipient who gives meaning to creative work rather than as a source of income.

The analysis of the V-Cramer coefficient for hierarchy of importance of groups of recipients of actions conducted by cultural institutions showed that H2 (a culture participant has a high (or even the highest) ranking among the recipients of actions by cultural institutions in Poland) is true. This constitutes one of the expressions of market orientation applied by cultural institutions.

While discussing the results this research and results of analyses in the literature, attributing a high significance to the satisfaction of recipients' needs by cultural institutions can result from the goal of cultural institutions, which is the creation and popularization of art, building cultural experiences, and conducting dialogue with the recipients [35]. Participation in culture, in terms of combining perception, expression, and transformation, is an expression of the internal activity of a human being and the expression of their internal life. This is related to the many processes of the sensory reception of the artwork, its interpretation, the mechanisms of providing messages, and transforming symbolic messages and their valuation. Understanding the behaviors of culture participants requires conducting public surveys. The qualitative method described as theatre talks allow for exploring theatrical experiences and increasing knowledge resources applied in audience development, which is based on community, connections, collaborations, and caring [36,37]. This method should be applied here. This method can also be implemented in other cultural fields.

The people managing cultural institutions in Poland, indicating the needs of the recipients to which they cater as being of crucial importance, consider the lack of cultural education in Poland to be a significant barrier to the development of the cultural market. There is a need to expand the cultural and aesthetic competences of the recipients that are perceived in the predisposition of individuals to participate in culture and to understand the codes and interpretations of artworks. This is especially vital in a culturally diversified world [38].

Consequently, the results of this conducted empirical research mean that openness of cultural institutions to satisfaction of recipients' needs is not accompanied by the willingness to create an offer that is easy to consume, and the development of the culture market is seen in shaping knowledge and skills associated with reading codes included in culture and creation of positive attitudes toward participation in culture. The results of the conducted empirical research also show that people managing cultural institutions in Poland perceive the development of offer diversity as a stimulant of the development of the culture market. This factor is correlated with increasing the quality of the cultural offer. This constitutes the basis for the verification of H3, which stated that an increase in offer diversity, included in the concept of sustainable development and as a factor stimulating development of the culture market, is closely related to increasing the quality of the offer of a cultural institution.

Given the analysis of the results, many recommendations for the implementation of marketing concepts in the culture sector are possible. The attainments in the area of classical marketing concepts, relationship marketing, strategic marketing, marketing of services, territorial marketing, as well as sensation and experience marketing can be applied in the management of the cultural sector. Regardless of which marketing concept, both at the theoretical level and in management practice, is implemented in culture sector, there is a need to adapt some assumptions associated with the philosophy of marketing to the specific characteristics of the cultural sector. Market orientation and implementation of marketing principles in the sphere of culture involves finding the appropriate audience for artworks that are the

result of the creative process, and thus reaching market segments that are interested in the artwork. Applying marketing that is an expression of market orientation should facilitate the implementation of the assumptions of sustainable development. In this case, marketing emerges as one of the ways to solve current problems and challenges as well as building a society that respects the principles of sustainable development. This requires cultural institutions to consider the idea of sustainable development while shaping, communicating, and supplying value to culture recipients.

The development of market orientation in the culture sector is not possible without cultural education aimed at shaping the cultural competences of recipients—artistic education— as well as managerial education, allowing for development of creative capital of artistic circles. This education should translate into management efficiency and shaping the set of values offered to culture participants while considering the assumptions of sustainable development.

In terms of application, the literature and the results here show that the use of innovative marketing solutions by cultural institutions should translate into stimulating people who previously have not used cultural institution offers to participate in culture. Consequently, this will reduce the distance observed between active culture consumers and people who have not previously used the offer of a cultural institution. This is the expression of responsible management in the culture sector because development of an individual cannot occur without participation in culture. There is a need to enhance the relationships of cultural institutions with existing offer consumers. This requires ensuring the quality of the offer and diversification of marketing actions as well as development of knowledge about the behaviors of culture recipients.

Each study has its limitations. The scope of future studies on the role of the marketing of cultural institutions in the context of sustainable development should be expanded to include cultural institutions from countries in various stages of socio-economic development. The countries with various models of cultural state policy and different attitudes of the state toward the scope and forms of financing the culture sector should be investigated. In cognitive terms, determining the differences in the role attributed to marketing in processes of creation of value for culture participants in the American market and in selected European and Asian markets could provide valuable insights. In further studies, applying other methods of statistical analysis to improve the scope of the interpretation of the results would be useful. Re-measurement on a similar sample of cultural institutions to recognize changes in the application of marketing in the culture market in Poland and how this translates into reducing inequalities in the access to culture is another trend for future research. Another avenue for future quantitative marketing research is implementation among culture, especially because the development of the culture market depends on aptitude for dialogue with the audience. This trend in further research on market orientation would help determine how culture participants perceive their role in the process of value creation and the role of the cultural institution in the implementation of the assumptions of sustainable development.

**Conflicts of Interest:** The author declares no conflict of interest.

## References

1. De Wit, B.; Meyer, R. *Synthesis. Resolving Strategy Paradoxes to Create Competitive Advantage*; Thomson Learning: London, UK, 2007.
2. Kohli, A.K.; Jaworski, B.J. Market Orientation: The Construct, Research Propositions, and Managerial Implications. *J. Mark.* **1990**, *54*, 1–18. [CrossRef]
3. Day, G. The Capabilities of Market-Driven Organizations. *J. Mark.* **1994**, *58*, 37–52. [CrossRef]
4. Mokwa, M.P.; Dawson, W.M.; Prieve, E.A. (Eds.) *Marketing the Arts*; Praeger Publishers: New York, NY, USA, 1980.
5. Baumgarth, C. Brand Orientation of Museums: Model and Empirical Results. *Int. J. Arts Manag.* **2009**, *11*, 30–45.

6.  Colbert, F. *Marketing Culture and the Arts*; HEC: Montreal, QC, Canada, 2012.
7.  Colbert, F.; St-James, Y. Research in Arts Marketing: Evolution and Future Directions. *Psychol. Mark.* **2014**, *31*, 566–575. [CrossRef]
8.  Diggles, K. *Guide to Arts Marketing: The Principles and Practice of Marketing as They Apply to the Arts*; Rhinegold Publishing: London, UK, 1986.
9.  Plaza, B.; Haarich, S.N.; Waldron, C.M. Picasso's Guernica: The strength of an art brand in destination e-branding. *Int. J. Arts Manag.* **2013**, *15*, 53–64.
10. Varbanova, L. *Strategic Management in the Arts*; Routledge: New York, NY, USA, 2013.
11. Wróblewski, Ł. *Culture Management. Strategy and Marketing Aspects*; Logos Verlag Berlin: Berlin, Germany, 2017.
12. Swanson, K.K.; DeVereaux, C. A theoretical framework for sustaining culture: Culturally sustainable entrepreneurship. *Ann. Tour. Res.* **2017**, *62*, 78–88. [CrossRef]
13. Elliott, J.A. *An Introduction to Sustainable Development*; Routledge: London, UK; New York, NY, USA, 2012; pp. 8–50.
14. Borys, T. (Ed.) *Wskaźniki Zrównoważonego Rozwoju*; Wydawnictwo Ekonomia i Środowisko: Warszawa-Białystok, 2005; p. 30.
15. Pezzey, J.C.V.; Toman, M.A. Progress and problems in the economics of sustainability. In *International Yearbook of Environmental and Resource Economics 2002/2003*; Tietenberg, T., Folmer, H., Eds.; Edward Elgar: Cheltenham, UK, 2002.
16. Culture: Fourth Pillar of Sustainable Development. UCLG, 2010. Available online: http://www.agenda21culture.net/documents/culture-the-fourth-pillar-of-sustainability (accessed on 2 April 2019).
17. Wróblewski, L.; Dziadzia, B.; Dacko-Pikiewicz, Z. Sustainable Management of the Offer of Cultural Institutions in the Cross-Border Market for Cultural Services—Barriers and Conditions. *Sustainability* **2018**, *10*, 3253. [CrossRef]
18. Janhonen-Abruquah, H.; Topp, J.; Posti-Ahokas, H. Educating Professionals for Sustainable Futures. *Sustainability* **2018**, *10*, 592. [CrossRef]
19. Loach, K.; Rowley, J.; Griffiths, J. Cultural sustainability as a strategy for the survival of museums and libraries. *Int. J. Cult. Policy* **2017**, *23*, 186–198. [CrossRef]
20. Pop, I.L.; Borza, A.; Buiga, A.; Ighian, D.; Toader, R. Achieving Cultural Sustainability in Museums: A Step Toward Sustainable Development. *Sustainability* **2019**, *11*, 970. [CrossRef]
21. Van Dam, Y.K.; Apeldoorn, P.A.C. Sustainable Marketing. *J. Macromark.* **1996**, *16*, 45–56. [CrossRef]
22. Martin, D.M.; Schouten, J.W. *Sustainable Marketing*; Pearson Prentice Hall: New Jersey, NJ, USA; Upper Saddle River: New Jersey, NJ, USA, 2014.
23. Gummesson, E. *Total Relationship Marketing*; Butterworth-Heinemann: Woburn, MA, USA, 2008.
24. Christopher, M.; Payne, A.; Ballantyne, D. *Relationship Marketing: Creating Stakeholder Value*; Routledge: London, UK, 2015.
25. Recuero, V.N.; Blasco López, M.F.; San-Martín, S. How can European museums reach sustainability? *Tour. Rev.* **2017**, *72*, 303–318. [CrossRef]
26. Aaker, D.A.; Kumar, V.; Leone, R.P.; Day, G.S. *Marketing Research*; Wiley: Hoboken, NJ, USA, 2015.
27. Iacobucci, D.; Churchill, G.A. *Marketing Research: Methodological Foundations*; Createspace Independent Publishing Platform: Charleston, SC, USA, 2015.
28. McDaniel, C.; Gates, R. *Marketing Research*; John Wiley & Sons, Inc.: New York, NY, USA, 2002.
29. Tashakkori, A.; Teddlie, C. (Eds.) *SAGE Handbook of Mixed Methods in Social & Behavioral Research*; SAGE: Thousand Oaks, CA, USA, 2010.
30. Gwartney, P.A. *The Telephone Interviewer's Handbook: How to Conduct Standardized Conversations*; John Wiley & Sons: New York, NY, USA, 2007.
31. Cruse, A. *Meaning in Language: An Introduction to Semantics and Pragmatics*; Oxford University Press: Oxford, UK, 2011; p. 219.
32. Sobocińska, M. *Uwarunkowania I Perspektywy Rozwoju Orientacji Rynkowej W Podmiotach Sfery Kultury*; Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu: Wrocław, Poland, 2015.
33. Narver, J.C.; Slater, S.F. The Effect of a Market Orientation on Business Profitability. *J. Mark.* **1990**, *54*, 20–35. [CrossRef]
34. Kotler, P.; Keller, K.L. *Marketing Management*; Pearson International Edition: London, UK, 2016; p. 27.

35. Smith, J.K. *The Museum Effect: How Museums, Libraries, and Cultural Institutions Educate and Civilize Society*; Rowman & Littlefield: Lanham, MD, USA, 2014.

36. Lindelof, A.M.; Hansen, L.E. Talking about theatre: Audience development through dialogue. *Particip. J. Audience Recept. Stud.* **2015**, *12*, 234–253.

37. Fanizza, S.D. *The How of Audience Development for the Arts: Learn the Basics, Create Your Plan*; Lulu Press: Raleigh, NC, USA, 2015; pp. 5–7.

38. Ferro, L.; Wagner, E.; Veloso, L.; IJdens, T.; Teixeira Lopes, J. (Eds.) *Arts and Cultural Education in a World of Diversity*; Springer: Basel, Switzerland, 2019.

# The Sustainable Development of Social Media Contents: An Analysis of Concrete and Abstract Information on Cultural and Creative Institutions with "Artist" and "Ordinary People" Positioning

**Yulin Chen**

Department of Mass Communication, Tamkang University, New Taipei City 25137, Taiwan; 143530@mail.tku.edu.tw; Tel.: +886-2-2621-5656

**Abstract:** The sustainability of social media is a common subject of study. With the emergence of cultural and creative industries, many studies have begun to explore the advantages and disadvantages of the integration of social media with cultural and creative industries. However, there remains a lack of research on the sustainability of cultural and creative social media. Therefore, the present study uses the example of a non-profit cultural and creative organization as its case. The use of social media content discovery technology explains the sustainable use of cultural and creative social media and how participation and interaction with cultural and creative brands are promoted from the perspective of artists or ordinary people. In addition, the analysis of concrete and abstract information explores how content orientation and brand perception impact emotions and behavior. We use social media content discovery technology to analyze 9529 image posts. The results show that for abstract themes, for example, art or design, people can be more easily guided by information with the help of images, which stimulate positive emotions, resulting in more actual engagement behavior, including posting and sharing. With respect to emotional responses, images with smiles are found to have a significant effect in guiding positive emotions, which are expressed through actions, such as active participation and feedback. By examining the meaning of the information in the images, we find that images with abstract themes have a good connection with the brand image. Although the information is less easily shown, it can guide significant outcomes that are positively correlated with the information. Therefore, strengthening brand image and content themes can effectively consolidate trust in brand content and the sustainable development of cultural and creative social media.

**Keywords:** cultural and creative industries; social media content exploration; abstract and concrete information; behavioral and emotional participation

---

## 1. Introduction

Social media content exploration is an analytical science that combines computer science, data mining, big data, machine learning, and social network analysis. It uses data and content to carry out various discussions. It is not only applicable to various brands of social content management but also has very important auxiliary effects for social content planning and decision making [1]. Since the participation of people is closely related to the social content, content exploration in social media has become one of the common research methods. For example, Kalampokis et al. (2013) used social media data to predict disease, stock market volatility [2], and election outcomes in different regions. Abrahams et al. (2013) used text exploration technology to examine the complaints about car brands on social platforms [3]. He et al. (2013) used text exploration to analyze the Facebook and Twitter content of three American pizza franchisers and understand public praise and Internet trends [4]. Currently,

social media content exploration applications not only provide patterns to identify specific related topic information but can also be used to conduct qualitative and quantitative analyses to predict events with unstructured content.

Combining the instantaneity of social media with the rapid collection of content exploration has become the best approach to grasp the characteristics of people [5]. Social media content exploration mainly focuses on information collection for various websites and social platforms [6]. Therefore, exploration technology and tools are used to collect, share, explore, and visualize information [7]. So far, the commonly used exploration technologies include computer-based technology, such as retrieval and automatic or semi-automatic model construction [8]. Social media content can be explored by using text data and text exploration models to determine specific patterns and relationships of content. Different types of content, such as image, video, multimedia, audio, and other information and data, can be used for mining and testing the data content of these unstructured texts [9].

In recent years, research into social media content has been growing rapidly. Whether it is semantic analysis based on the textual content of Twitter or Pinterest, or image, textual, and video analyses of Facebook or Instagram, the relationships between the contents of different communities and user needs are being explored. For example, users who actively use Facebook and Twitter tend to be the ones in the community who execute the most likes or follows [10]. An investigation of users in a community has found via association that their motivations for use are often interactively influencing the demand for posts. For example, an investigation of image posts has shown that users display two different kinds of feelings: sentimental images and cognitive images. Sentimental images are images that easily stimulate sentiments or emotions in users [11]. Cognitive images often use non-textual descriptions such as portraits or images to reduce users' barriers to posts, which has become a common method for communities to expand into different populations [12]

Based on many previous studies and findings, online images and content are the best way to create image. Either the text or the image is constantly creating and transferring information [13]. Therefore, social media has an irreplaceable value for image promotion, and often plays a key role in image sustainable development. Image information is helpful for not only forming the image but also understanding the perception and ideas of people, thereby facilitating the expression of appropriate images and themes from the perspective of people [14]. The positioning of content image is indeed beneficial for brand image formation and can reduce excessive complexity or contradiction when communicating with people [15]; it can even use positive elements to convey exclusive brand characteristics and attributes [16]. Therefore, considering the industry's high reliance on social media platforms and the trend toward social media content discovery technology, the present study focuses on cultural and creative industries and explores the future sustainable development of cultural and creative social media.

In contrast to the simple business perspective of enterprises, the cultural industry is characterized by complexity and contradictions. Holden (2006) asserted that, to be representative of culture and art, any legitimate cultural entity must not only be creative but also have a symbolic meaning representing certain symbols or images [17]. The meaning of the term "culture" can be reflected in social experience, art exhibitions, or everyday practice [18]. Many cultural and creative industries are established in a similar way: the development of brands creates a shared or homogeneous cultural experience among a group of people [19], producing similar beliefs, traditions, values [20], and so on. Of these, cultural and creative products can take the form of symbols or text [21]. Therefore, cultural and creative industries are seen as a product of experience and art. People can not only appreciate cultural creativity but also create culturally unique spiritual symbols together with the brand. Using appropriate content to communicate with groups of people can be referred to as cultural and creative marketing [22]. It can achieve the ultimate objective of establishing communication between art and groups of people. In this way, the sustainable development of cultural and creative industries can provide more diverse cultural values [23].

With the global emergence of creative industries [24], the creative industries in Asian countries, including Taiwan, largely emerged from the blueprint of a British Labour Party report in 1998 on cultural and creative industries. This blueprint was quickly passed from the United Kingdom to Taiwan; in 2008, the Taiwan government proposed the "Challenge 2008 National Development Plan." Cultural and creative industries involve the Ministry of Economic Affairs, Council for Cultural Affairs, Ministry of Education, and Council for Economic Planning and Development. The Ministry of Economic Affairs set up a working group to integrate these responsibilities, and the government has systematically developed cultural and creative industries from the top down. Of these, two cultural and creative parks have the largest scale and most unique characteristics. Located in Taipei, the Huashan 1914 Creative Park is a historical and cultural property. Since 1999, it has become a venue for cultural events, such as art exhibitions and music performances, and has the unique characteristics of an "artists' cultural and creative organization". The Pier-2 Art Center is an art center located in Kaohsiung, creating an international art platform through the application of avant-garde, experimental, and innovative concepts. The Pier-2 Art Center is operated by the Bureau of Cultural Affairs of the Kaohsiung City Government. It is owned by the Kaohsiung City Bureau of Cultural Affairs and the Kaohsiung City Cultural and Administrative Corporation. It provides a multi-faceted cultural and creative exhibition and is characterized as an "ordinary people's cultural and creative organization".

In this study, we look at the social media platforms of these two representative cultural and creative organizations. First, how can cultural and creative social media expand the sustainability of its content? Second, based on different content or exhibition needs, for example, the different characteristics of cultural and creative industries for artists and ordinary people, how can the sustainability of the content be used to increase the emotional and behavioral engagement of social media users? Finally, is it possible to integrate existing social media content exploration technology to provide recommendations pertaining to the management and development of sustainable cultural and creative social media?

In addition, the present study understands that online images and content are the best way to generate the creative image of brand culture [25]. We divide the model proposed by Aaker et al. into functional images and symbolic images according to the features and positioning obtained during image exploration. Symbolic images are mainly abstract and thematic images [26], while functional images mainly represent specific objects [27]. This allows us to explore whether concrete factors and abstract factors in image posts have a positive influence on emotions and behaviors.

However, most studies on social media management strategies have purely focused on the analysis of commercial brands, whereas very few have discussed brands of a noncommercial nature. Therefore, this study attempts to focus on a different type of brand positioning and take nonprofit cultural and creative brands as examples. This study discusses how the images of cultural and creative brands influence the relationship between information factors and emotional factors. In the strategies applied to social content development, information can be emphasized with images, and some topics can be analyzed, such as the kind of negative emotional and behavioral influence that can be exerted when the positioning of the content is different from people's cognition of the brand. To verify the findings of the analyses in this study, the content sustainable development of social media of cultural and creative industries is first considered by taking the Huashan 1914 Creative Park in Taiwan and the Pier-2 Art Center as examples to demonstrate the difference in cultural and creative brands between "artist" positioning and "ordinary people" positioning. Subsequently, the study explains how content image benefits content sustainable development differently and influences people's cognition and emotions. In addition, this study focuses on social content in the form of images and discusses whether the images can lead to people's cognition of brands; these forms can be applied by future cultural and creative industries and relevant institutes in their social media marketing and brand positioning. The purpose of this study is to explore the conclusions according to the real examples and master the methods and concepts of information management for different cultural and creative industries.

The study is organized as follows: Section 2 briefly summarizes the relevant literatures and theories of content images and the quality of information at the current stage; Section 3 proposes the

relevant hypotheses on how images and text related to cultural and creative brands with different display purposes influence people's participation in the homepages as followers, and then analyzes how different factors influence people's emotions and behaviors; Section 4 focuses on the operating methods in the study; Section 5 analyzes the data; Section 6 discusses the conclusions and explains how to use this model to conduct social content management and content sustainable development planning.

## 2. Theoretical Background

Research on social media posts has grown rapidly in recent years in terms of the text content analysis based on semantics, including research on the characteristics of images, text, or video and analyses of the impact of social media text, images, or video on the responses of people [28]. In addition, some studies have further discussed various types of posts and media elements, such as the elements in images or videos that have a positive impact on people. All of these empirical studies have validated that information can shape the experience environment and enable interaction between different social media and people [29]. Since information can be used to induce people and help them create associations, the interaction between people's emotional state and information content must be interrelated and predictable beforehand. For example, Zhang (2014) believed that information triggers emotional responses and drives people to generate cognition, emotion, and evaluation [30]. In terms of social content, it is often found to use information packaging to arouse emotional support from people, so as to strengthen brand power and provide different emotional guidance, such as experience, care, understanding, and sympathy [31].

The content image refers to the image of a specific content or object [32], which includes various elements, such as the cognition, perception, and emotion of the content, especially the overall image presented in brand perception and emotion. It is often formed by various sources of information, such as online pictures of the content. According to different media types, the online content can be divided into online text, online image, online video, and other media types. Almost all brands can use social media to launch a commercial social media strategy and build a model to measure the social characteristics of people [33]. Stieglitz et al. (2014) suggested using people analysis to support the formation of deep relationship marketing [34]. This can be interpreted as using clear content positioning to attract more people with the same attributes [35]. In fact, the participation of the brand is closely related to the positioning of the content image, which mainly depends on many internal and external factors [36]. The content image depends on people's intention, while the intention depends on preferences, which are in turn affected by emotions; for example, positive and negative images can result in differences in participation intentions and attitudes.

Woodside and Lysonski (1989) further interpreted the relationship between the content image and intention [37]. They proposed three inspection criteria for a content image, namely, the general attribute, psychological function, and relevance level. General attributes refer to the general images of the content and the cognition of individual attributes. Psychological functions are the psychological characteristics of the content image. The relevance level refers to all general images and related images, showing the relationship between the content image and behavior intention.

Among them, abstract images are represented by general attributes and psychological functions, whereas concrete images are represented by the symbols of relevant images.

Both concrete and abstract images in the content image can affect people's cognition, emotion, and intention toward a brand. Cognition includes knowledge and belief; emotion generally refers to aspects such as emotions, feelings, and attachment. Therefore, in addition to cognitive and emotional assessments, the assessment of behavioral intentions is also necessary [38]. Among the related studies, Gartner (1994) paid special attention to the formation process of the image and discussed the influence of different types of information on people's cognition and emotion [39]. It was found that, irrespective of the different images, the implementation of positive information can produce more positive image promotion and participation willingness. Images are mostly affected by individual psychological attitudes, representing personal knowledge, beliefs, feelings, and feedback for the content. Although

Gartner (1994) argued that the content image depends on the causal relationship between cognition and emotion, he emphasized the possibility that personal feelings have an impact on the content image. Gallarza et al. (2002) pointed out that since the elements of content image are very complex, either due to time or space [40], they are constantly changing by subjective factors or produce more meanings through social interactions [41].

Many studies in the past have evaluated information quality and information services. Huang et al. (2010) asserted that information quality can be used as a criterion for judging its suitability for people [42]. Kahn et al. (2002) believed that information quality must possess the characteristics required to meet the expectations of people [43]. In addition, there are some reviews of information quality from people's perspective, such as the framework of information quality proposed by Wang (1996), according to which information quality should be divided from people's perspective [44], instead of the conventional systematic perspective, into four analytical dimensions: internal level, context level, representative level, and accessibility level. Agarwal and Karahanna (2000) extended the details of each dimension of information quality [45]. In addition, Kahn et al. (2002) divided information quality into two dimensions: concrete and abstract. They examined different aspects of products, services, and performance, and ultimately obtained four representative evaluation criteria: robustness, usefulness, reliability, and availability (Table 1).

**Table 1.** Related researches of information quality.

| Information Related Researches | Research Topics | Researcher(s) |
|---|---|---|
| Information quality and information services | Information quality criterion | Huang, Basu, and Hsu, 2010 |
| | Information quality characteristics | Kahn, Strong, and Wang, 2002 |
| | Information quality dimensions: internal level, context level, representative level, and accessibility level | Wang, 1996 |
| | Information quality details | Agarwal and Karahanna, 2000 |
| | Information quality dimensions: robustness, usefulness, reliability, and availability | Kahn, Strong, 2002 |
| Information quality indicators | Context quality indicators | Klein, 2002 |
| | Information retrieval indicators | Knight and Burn, 2005 |
| | Social media information quality indicators | Agarwal and Karahanna, 2000 |
| | Social media information quality classification indicators Satisfaction is related to information | Emamjome, Rabaa'i, Gable, and Bandara, 2013 Prayag, 2009 |

In addition, similar concrete criterion indicators include the context quality indicators of Internet information [46], information retrieval indicators [47], social media information quality indicators [45], and social media information quality classification indicators [48]. In addition, the interaction between perceived quality and people in the abstract dimension is also inspected [49]. Lee et al. (2015) found that the abstract image and perceived quality are mutually related [50]. Satisfaction is related to information [51], and intention is related to information. According to the relationship between information quality and intention, Tseng et al. (2015) divided information quality into three stages [52]. The first stage begins with Gunn's guidance stage, which mainly includes the content image of induction and the adjustment to the induction [53]. This stage is mainly represented by concrete symbols. In the second stage, the concept of people perception is introduced [54], which includes cognition, emotion, and intention. It is guided by multi-level thematic images and has subsequently become the most common theoretical framework for content images. The third stage links the content image and brand positioning to provide a holistic consideration and integrated evaluation. This study integrates

Wang's information quality framework [44], referring to different evaluation criteria, such as Internet information [46], e-commerce information [43], and social media information characteristics [48], and re-establishes the framework with special attention to the relevant factors in social content. Paying special attention to the characteristics of image information in community content (both concrete and abstract), analysis and evaluation are conducted for the cognitions, sentiments, and behaviors that may be triggered by these characteristics.

## 3. Research Model and Hypothesis

### 3.1. Abstract Factors with An Impact on Emotional and Behavioral Participation

Brands can also establish distinct social positioning, such as by the classification of rational and emotional images, which not only helps to increase loyalty among people but also is very useful in tackling competitors. Certainly, good content sustainable development cannot automatically work for the brands simply by creating social media. To benefit from social media, brands must enhance both their own public image and people's trust [55]. They believed that it is important for a brand to send information that matches its own positioning to build a social image, which can effectively establish a consistent position or relationship and simultaneously strengthen brand awareness [56].

Content image is regarded as the process of people's recognition of the content. It constantly uses the unique value of the content to connect people's brand impressions and generate content beliefs and associations; it even uses perceptions to build a good feeling toward the content. According to its characteristics and positioning, the content can be divided into a functional image, an experiential image, and a symbolic image. A symbolic image is abstract and thematic, while a functional image is mainly based on concrete icons [27]. For example, they evaluated a content image on the basis of four factors: perceived quality, perceived value, uniqueness, and content intention. They found that perceived quality represents a concrete image and perception, whereas perceived value represents the perception in abstract consciousness. Therefore, different incentives directly or indirectly affect people's attitudes toward social media, reasons for using social media, different experiences, and different attitudes toward social participation [57].

The purpose of this study is to understand the information packaging and positioning of the culture-creativity image in order to make the image attractive to people. Furthermore, cultural and creative brands are often concerned with the setting by the setting of the content image. Therefore, this study uses two cultural and creative brands with "artist" positioning and "ordinary people" positioning to analyze how the content images are related to the user emotional and behavioral response. Symbolic images tend to be abstract and make use of themes or sentiments and others to convey message content, such as design, art, and branding. Functional images mainly use specific messages and make statements with clear signs or objects, such as products, illustrations, and buildings [26,27]. This study emphasizes the quality of image information to discuss the abstract factors further (for example, design, art, and brand, etc.). The basic hypotheses are as follows (Figure 1):

**Hypothesis 1 (H1).** The abstract factor images of the "artist" field brands have a significant difference with the user behavioral and emotional response.

**Hypothesis 1a (H1a).** The abstract factor images of the "artist" field brands have a significant difference with the user emotional response.

**Hypothesis 1b (H1b).** The abstract factor images of the "artist" field brands have a significant difference with the user behavioral response.

**Hypothesis H2 (H2).** The abstract factor images of the "ordinary people" field brands have a significant difference with the user behavioral and emotional response.

**Hypothesis H2a (H2a).** The abstract factor images of the "ordinary people" field brands have a significant difference with the user emotional response.

**Hypothesis H2b (H2b).** The abstract factor images of the "ordinary people" field brands have a significant difference with the user behavioral response.
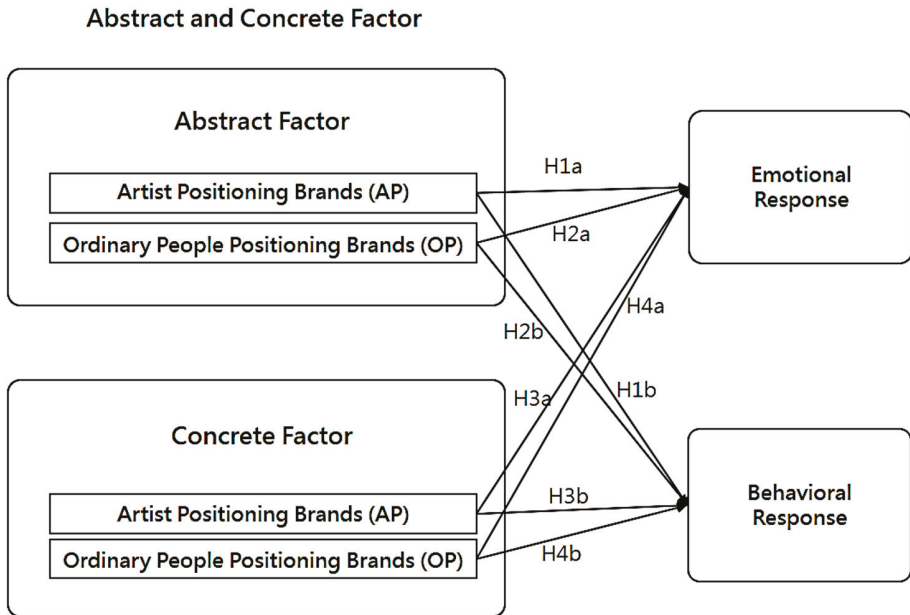


*Artist Positioning Brands (H1a, H1b, H3a, H3b)；Ordinary People Positioning Brands (H2a, H2b, H4a, H4b).*

**Figure 1.** Extended research model.

*3.2. Concrete Factors with An Impact on Emotional and Behavioral Participation*

Psychological studies have generally claimed that emotions can affect the degree of people's identity when people are reading information [58]; the most common occurrence is the guidance of positive and negative emotions [59]. Human emotions are evoked through specific stimuli [60] because emotions have different evaluations from the information. Schwarz and Clore (2003) found that emotions can enhance different levels of information memory [61], judgment, and evaluation; indeed, positive emotions can enhance positive attitudes and persuasion toward the brand. When people are in a happy mood, the evaluation of information will be more positive [62]. Although most of the literature has focused on exploring positive factors, some studies have found that negative emotions are similarly correlated. It has been further demonstrated that the emotional state may be due to a temporary personality produced by a particular environment, which has a behavioral or cognitive impact on a particular object [63]. The content image refers to people's image of a product or service [64]. Therefore, the content image mainly comes from people's self-discovery or self-construction, which then extends to the concrete (icon) image [26]. By setting specific information (text or image) characteristics, a linked theme or a symbolic feature can be generated. Therefore, this study emphasizes the quality of image information to discuss the concrete image further (for example, products, illustrations, and exhibitions) and presents the following hypotheses related to the reaction of people's emotions and intentions:

**Hypothesis 3 (H3).** The concrete factor images of the "artist" field brands have a significant difference with the user behavioral and emotional response.

**Hypothesis 3a (H3a).** The concrete factor images of the "artist" field brands have a significant difference with the user emotional response.

**Hypothesis 3b (H3b).** The concrete factor images of the "artist" field brands have a significant difference with the user behavioral response.

**Hypothesis 4 (H4).** The concrete factor images of the "ordinary people" field brands have a significant difference with the user behavioral and emotional response.

**Hypothesis 4a (H4a).** The concrete factor images of the "ordinary people" field brands have a significant difference with the user emotional response.

**Hypothesis 4b (H4b).** The concrete factor images of the "ordinary people" field brands have a significant difference with the user behavioral response.

## 4. Research Methodology

### 4.1. Theoretical Foundation

This study verifies the emotional and behavioral data of social media users by means of the concrete and abstract factors in content image, with reference to abstract and concrete information theory, cognitive, emotional and behavioral theory, and online participation theory.

A symbolic image is abstract and thematic, while a functional image is mainly based on concrete icons [26]. Both concrete and abstract images in the content image can affect people's cognition, emotion, and intention toward a brand. Cognition includes knowledge and belief; emotion generally refers to aspects such as emotions, feelings, and attachment [39]. The concept of people perception [54] includes cognition, emotion, and intention. It is guided by multi-level thematic images and has subsequently become the most common theoretical framework for content images. Most of the information on Facebook pages is presented in the form of text, photos, videos, and links. Measures of online participation behavior include Likes, Comments, and Shares. Emotions include Love, Haha, Wow, Sorry, and Anger [65]. User responses have always been considered as a valid reference for social media operations and related user behaviors [31,66,67]. For example, clickthrough rates are often seen as a type of active user engagement, and data such as interaction rates and views are also commonly used [68]. This study is based on conditions in Facebook's terms of service, allowing application designers to observe interactions and obtain post data and content for research purposes [69–71]. In addition, to ensure the accuracy of the data, we use the Facebook graphics application program to collect daily posts [72], including the content of each post, the type of post, the posting time, the number of Likes, the number of Shares, and the number of Comments for each article, and extract the information for classification.

*4.2. Image Analysis Method*

This study focused on image content by using techniques for exploring and filtering social media content. First, the API of the community software was used to extract relevant content and data for Facebook and next all the collected data were subjected to screening and collation. Through image analysis techniques provided by Google Cloud sVision, the images were subjected to face detection, brand tag detection, network content detection, textual recognition detection, etc. Automatic determination technology with machine learning was used to detect figurative and abstract elements in the images, such as faces, words, items, and brand logos. Through machine learning, classification was conducted automatically. The aim was to use artificial intelligence to integrate image analysis with machine learning and perform quantitative analysis on community image elements.

*4.3. Sample Introduction*

In the display of cultural and creative contents, for images possessing very different themes, not only possessing the brand imagery of "artists" and "ordinary people", but also the performance of community content, it is necessary to actively conduct packaging and adjustment according to user characteristics. Therefore, as a reference for cultural and creative community contents, this study is significant. The Huashan 1914 Creative Park and the Pier-2 Art Center are selected to represent the two cultural and creative brands with "artist" positioning and "ordinary people" positioning.

The pre-test phase covered the year of 2018. As the number of posts was less than 1000, the results for both emotions and behaviors were not significant. Therefore, the data was re-filtered for a posting frequency of five times in a single week. Finally, all the posts from January 1st, 2011, to December 31st, 2018, were collected, for a total of 11,176 posts. Of the posts, 9529 have photo content. Of the interactions, there are 2,539,514 Likes, 35,251 Comments, and 91,219 Shares. Of the emotional responses, there are 9,017 for Love, 5,449 for Haha, 4,356 for Wow, 715 for Sorry, and 218 for Anger (Table 2). Of the abstract factor, there are 2,355 for Design, 1,682 for Art, 1,344 for Brands, and of the concrete factor, 1,584 for Product, 816 for Graphic, and 1,166 for House (Table 3).

**Table 2.** Total posts.

| Posts | Likes | Comments | Shares | Behavioral Participation | Love | Haha | Wow | Sorry | Anger | Emotional Participation |
|---|---|---|---|---|---|---|---|---|---|---|
| Artist positioning brands (n = 4053) | 343,965 | 7802 | 22,632 | 374,399 | 3161 | 1312 | 1323 | 95 | 25 | 5916 |
| Ordinary people positioning brands (n = 5476) | 2,195,549 | 27,449 | 68,587 | 2,291,585 | 5856 | 4137 | 3033 | 620 | 193 | 13,839 |
| Sum (n = 9529) | 2,539,514 | 35,251 | 91,219 | 2,665,984 | 9017 | 5449 | 4356 | 715 | 218 | 19,755 |

**Table 3.** Total number of factors.

| Posts | Design | Art | Brands | Abstract Factor (AF) | Product | Graphic | House | Concrete Factor (CF) |
|---|---|---|---|---|---|---|---|---|
| Artist positioning brands (n = 4053) | 961 | 538 | 585 | 2084 | 673 | 321 | 381 | 1375 |
| Ordinary people positioning brands (n = 5476) | 1394 | 1144 | 759 | 3297 | 911 | 495 | 785 | 2191 |
| Sum (n = 9529) | 2355 | 1682 | 1344 | 5381 | 1584 | 816 | 1166 | 3566 |

## 5. Data Analyses and Results

### 5.1. Reliability and Validity

Using SPSS software, we analyze the Cronbach αcoefficient to verify the reliability and internal consistency of each scale in the sample. The results of the reliability analysis show that the Cronbach α for the abstract factor component and concrete factor component is 0.710 and 0.706, respectively. The included items are also correlated. This indicates that it can be used to measure the sustainability of social media cultural and creative content and that all of the items are closely correlated with the total.

In this study, the Cronbach's α is 0.701 and the Kaiser–Meyer–Olkin (KMO) value is 0.696. The factor load actually meets the basic criteria of being equal to or higher than 0.6 and has convergent and discriminant validity. The data were subjected to statistical analysis to determine the correlations of each independent variable, via linear regression analysis and correlation analysis, in order to confirm the research structure and hypothesis.

### 5.2. Hypothesis Testing

First, we test Hypothesis 1 to determine whether the abstract factor images of the "artist" field brands have an impact on the user behavioral and emotional response. Of these, H1a, the abstract factor images of the "artist" field brands have a significant difference with the user emotional response, is not supported. However, H1b has impacts on the emotional response of social media users, is supported.

Second, we test Hypothesis 2 to determine whether the abstract factor images of the "ordinary people" field brands have a significant difference with the user behavioral and emotional response. H2a and H2b, are found to be not supported; that is, the abstract factor images of the "ordinary people" field brands have a significant difference with the user emotional response.

Next, we test Hypothesis 3 to determine whether the concrete factor images of the "artist" field brands have a significant difference with the user behavioral and emotional response. The results show that H3a and H3b are supported; that is, that the concrete factor images of the "artist" field brands have a significant difference with the user emotional response.

Finally, we test Hypothesis 4 to determine whether the concrete factor images of the "ordinary people" field brands have a significant difference with the user behavioral and emotional response. H4a and H4b are supported; that is, that the concrete factor images of the "ordinary people" field brands have a significant difference with the user emotional response (Table 4).

**Table 4.** Findings.

| ID | Hypothesis | Verdict |
|---|---|---|
| H1 | The abstract factor images of the "artist" field brands have an impact on the user behavioral and emotional response. | Partial supported |
| H1a | The abstract factor images of the "artist" field brands have a significant difference with the user emotional response. | Not supported |
| H1b | The abstract factor images of the "artist" field brands have a significant difference with the user behavioral response. | Supported |
| H2 | The abstract factor images of the "ordinary people" field brands have a significant difference with the user behavioral and emotional response. | Not supported |
| H2a | The abstract factor images of the "ordinary people" field brands have a significant difference with the user emotional response. | Not supported |
| H2b | The abstract factor images of the "ordinary people" field brands have a significant difference with the user behavioral response. | Not supported |
| H3 | The concrete factor images of the "artist" field brands have a significant difference with the user behavioral and emotional response. | Supported |

| ID | Hypothesis | Verdict |
|---|---|---|
| H3a | The concrete factor images of the "artist" field brands have a significant difference with the user emotional response. | Supported |
| H3b | The concrete factor images of the "artist" field brands have a significant difference with the user behavioral response. | Supported |
| H4 | The concrete factor images of the "ordinary people" field brands have a significant difference with the user behavioral and emotional response. | Supported |
| H4c | The concrete factor images of the "ordinary people" field brands have a significant difference with the user emotional response. | Supported |
| H4d | The concrete factor images of the "ordinary people" field brands have a significant difference with the user behavioral response. | Supported |

## 6. Discussion and Factors

### 6.1. Discussion of Results

The verification results are explained below (Figure 2). First, we discuss the results of testing Hypothesis 1. The abstract factor images of the "artist" field brands have an impact on the people behavioral and emotional response. For the people emotional response, the "artist" field brands have values of $\beta = -0.012$, $t = -0.822$, and the people behavioral response has values of $\beta = -0.078$, $t = -5.003$, and $p < 0.001$.
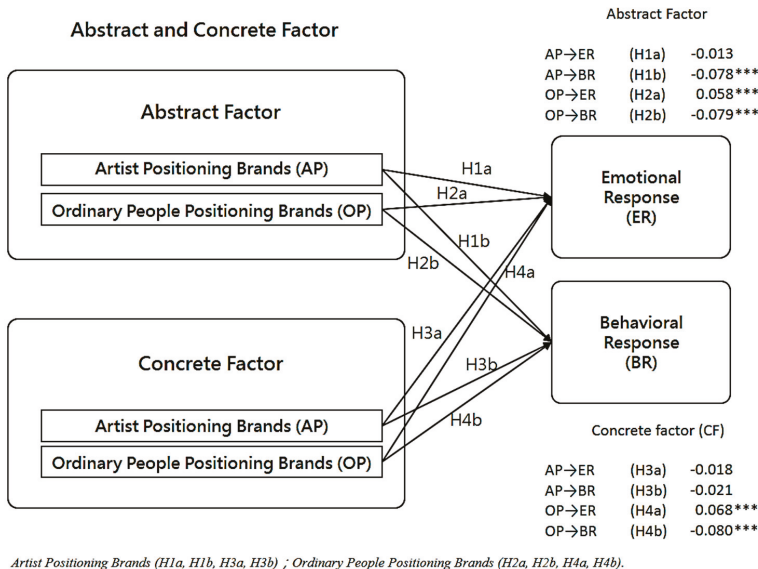


Artist Positioning Brands (H1a, H1b, H3a, H3b) ; Ordinary People Positioning Brands (H2a, H2b, H4a, H4b).

**Figure 2.** Model results.

Second, we discuss the results of testing Hypothesis 2. The abstract factor images of the "ordinary people" field brands have a significant difference with the people behavioral and emotional response. For the people emotional response, the "ordinary people" field brands have values of $\beta = 0.057$, $t = 4.292$, and $p < 0.001$, and the people behavioral response has values of $\beta = -0.079$, $t = -5.895$, and $p < 0.001$.

Next, we discuss the results of testing Hypothesis 3. The concrete factor images of the "artist" field brands have a significant difference with the people behavioral and emotional response. For the people emotional response, the "artist" field brands have values of $\beta = -0.018$, $t = -1.164$, and the people behavioral response has values of $\beta = -0.020$, $t = -1.321$.

Finally, we discuss the results of testing Hypothesis 4. The concrete factor images of the "ordinary people" field brands have a significant difference with the people behavioral and emotional response. In terms of the people emotional response, the concrete factor images of the "ordinary people" field brands have values of $\beta = 0.068$, $t = 5.057$, and $p < 0.001$, and the people behavioral response has values of $\beta = -0.080$, $t = -5.942$, and $p < 0.001$.

*6.2. Theoretical Factors and Limitations and Future Research*

Currently, few studies have focused on nonprofit community brands, and even fewer have examined the effectiveness of the content sustainable development launched by cultural institutions. Therefore, this study specially focuses on the discussion of the value of social content sustainable development for cultural and creative brands as well as the differences in the content and positioning of cultural and creative brands. In addition, using social data, the execution methods of content sustainable development to reach an agreement with people's information perception are also discussed. Moreover, it is important to understand how people participate in social media according to different incentives and how they have different attitudes toward different target images; this is the main focus of this study. The specific results are summarized below (Table A1, Table A2, Table A3).

First, when exploring how cultural and creative social media can expand the sustainability of its content, we found that the content image does have sustainable use characteristics. In addition, we verified that content image can successfully connect the perception of specific images and abstract consciousness.

In terms of the abstract themes, such as arts or designs, with the assistance of pictures, people can more easily feel the guidance of information and stimulation of positive emotions, which generate more practical behavior of participation, including leaving messages and reposting. As for the emotional responses, we found that pictures with smiles achieve significant results in guiding the evocation of positive emotions, which can be effectively embodied by people's behavior, such as positive participation and feedback. The relevant literature on cognitive psychology has also suggested that image-intensive types of information provide more complete information factors for people [73,74]. Therefore, when people read information, the repeated prompting of images is more likely to render the information useful in the minds of people. This is because images are like long-term memories; after the brain processes them, they can be successfully stored in the mind. Moreover, by using advertising words or appropriate texts, they can be more effectively evoked in people's minds. Images are the key to the most common successes in the transfer of the culture-creativity image. Images not only convey unique visual experience but also display the characteristics of the target, which are of great importance and irreplaceable significance. In addition, since images have been widely proven to be valuable in building the culture-creativity image [75], brands should be more proactive in using images or films to enhance the culture-creativity image, which will guide people to produce better evaluations or impressions [13]. It is important to use the specific value of images wisely [76] and be willing to use images to attract potential people as well as to build the brand symbol or image, which can promote a positive visual image [77].

Second, depending on the content or exhibition needs, for example, the different characteristics of cultural and creative industries for artists and ordinary people, the use of imagery or sustainability planning for specific topics can also increase the emotional and behavioral participation of community users. This was also pointed out by Gartner: concrete and abstract images in content images affect people's perceptions, emotions, and intentions about brands. Cognition includes knowledge and beliefs. Emotions are usually consistent with the definitions of feelings and attachments.

After examining the information factors of the images, we found that abstract thematic images, if they are well connected with the brand image, despite being difficult to present, can show remarkable results of message participation compared with pure symbolic images. Therefore, strengthening the construction of themes in building brand image can effectively consolidate people's trust and cognition of the brand content. Hunter (2012), who intended to validate the cultural representations of Okinawa and the Kinmen Islands, conducted a semiotic analysis of network images [78]. Syed-Ahmad et al. (2013) also used images as an index to explain icons and symbols in semiotics and to verify how people define specific culture-creativity images through images [79]. In addition, the discussion of emotional factors indicated that the results of positive "Love" and "Haha" are significant, which demonstrated that interesting content can effectively enhance the characteristics of symbols. Compared with the thematic image, the concrete image can be processed differently in two ways, making its content easier to achieve resonance with people. As mentioned in the literature, images are characterized by the use of rich text to arouse attraction and pleasure in people [80]. People's perception of the content can be triggered not only by cognition and motivation [81] but also through indirect experience. Therefore, the symbols or visual elements in an image can in fact help change people's perception of the brand [82].

Finally, the results of the study clearly showed that the images of high frequency are mainly consistent with the brand name (Huashan or Pier-2), art, design, and other images. This means that whether it is an "ordinary people" positioning or an "artist" positioning, the contents that comply with the corresponding image can easily attract the attention and recognition of people. As for the ambiguous and unclear content, even with exquisite image designs, it is difficult to achieve interactive feedback from most fans, which can also be used as an important reference for the operation of content sustainable development. In general, the purpose of content sustainable development is to establish brand identity and the loyalty of people, which has a positive impact on brand identity. Therefore, according to the framework of social media research [33], this study verified image information in the cultural and creative social platform and explained the interaction between social information and people based on the effectiveness of people's participation. Therefore, this study considered that content sustainable development can be used as a medium to stimulate good communication between people and the brand by displaying creations with either "artist" or "ordinary people" positioning. The key role of the textual posts and the impact of the culture-creativity image should not be underestimated [83,84], especially content participation and people's preferences in relation to the content, which have the most significant impact [85].

This study applied social media content discovery technology to the sustainable development of cultural and creative image management and editing and produced the following recommendations.

First, the key positioning of the brand needs to be clarified; it cannot be ambiguous or uncertain [86]. The use of brand spirit or brand symbols as abstract presentation of thematic categories, supplemented by symbolic brand symbols, can highlight the relevant product or activity characteristics and increase the interest in and variety of the content.

Second, the collocation of pictures and text showed clear and significant results in this study. They affect the positive emotions and behavioral feedback of people. Therefore, in terms of the content sustainable development of brands, if the constant activation of people's relationship or interaction with the content is an aim, the presentation power of the combination of image and text should not be neglected [87].

Third, in regards to concrete symbols in images, such as the smiles of faces, apart from evoking positive emotions, concrete symbols also effectively elicit behavioral participation and encouragement; this effect is more obvious when compared with the effect of objects or images without smiles. The image dialogue for content sustainable development is also one of the special symbols that can be utilized well.

*6.3. Academic and Practical Contributions*

In terms of the academic contribution, first, this study is different from other types of brand research in the literature, as this study focused only on non-profit cultural and creative brands, collecting posted content, people's behavior, and emotional data for analysis. By comparing social media content from the perspective of the "artist" positioning with that from the "ordinary people" positioning, the differences in image in publication are understood. In summary, images combined with text can achieve the recognition and interaction in content sustainable development more successfully.

Second, this study explored the relationships among information, people's emotions, and behaviors within the framework of the simplest and most understandable behavioral model. Although existing studies have enriched our imagination of people's behavior [87,88], with regard to the constant changes in social media, this study further conducted an interactive discussion of social information quality, people's emotion (Love, Haha, Wow, Sorry, Anger), and people's behavior (Likes, Comments, Shares), which explained the relationship of these three factors on fan pages.

Third, the information orientation of images has a direct impact on social content sustainable development. This study discussed how to transform the content and enhance people's awareness and emotions as well as people's participation to achieve a more effective social dialogue. This study also considered that this framework will effectively examine people's participation in the social media of cultural and creative institutes and can serve as a practical reference for social content sustainable development.

In terms of practical contributions, the findings are as follows: first, the format of most information on fan pages is based on the emotional response of "Love" and "Haha", which means that we can use pure and positive emotions to construct the image context of cultural creations and enhance the positive behavior response and brand identity among people. Therefore, to validate the cultural creations discussed in this study, it is suggested to adopt positive emotions to avoid the blurred or ambiguous information interpretation caused by sad or angry emotions. In addition, it is also suggested to use emotional factors in content sustainable development wisely, which can introduce more positive recognition and interaction for the cultural and creative brands.

Second, in addition to understanding the social interaction of cultural creations, the results of this study specifically validated how to reduce information factor barriers and produce better relations with people. People's behavior interacts with the information presented on social media. People perceiving that they are receiving information without obstacles means, that the information is successfully achieving its informative or emotional goals, which will generate positive participation. Planning the information based on how it is positioned for people is important, which can not only avoid the provision of defective information but also reduce ineffective interaction or content sustainable development.

Third, this study also proposed a conceptual framework to explain how public participation differs in relation to different forms of information. Text and images have the same content orientation, but images provide more informative and emotional incentives to guide people, thus implying that the form of information is the key to how people receive information. Thus, cultural and creative institutes should pay more attention to the graphic design of the content in social media.

Fourth, this study found that in terms of content sustainable development, the information on cultural and creative social media affects people and produces positive content sustainable development. Brand identity can stimulate people to share content proactively; the stronger the sense of identity or pleasure one feels in relation to the brand, the easier the interaction will be. In addition to making good use of their own popularity, brand pages should also manage the quality and quantity of the posts with great care. They should carefully select the most appropriate forms of information according to the content characteristics and strive for content professionalism and richness. In addition, they should enable people to obtain useful and feasible information. It is also important to avoid excessive official propaganda, which may create the dilemma of running social networking platforms without the ability to communicate with people via the content. The model of this study provided more complete and

helpful concepts regarding the culture-creativity image through a variety of factors. Through social media content analysis, this study aims to reconsider the previously excluded factors and provide a more complete reference for follow-up studies on the culture-creativity image.

*6.4. Limitations of the Research and Suggestions*

First, the concept of the culture-creativity image is quite complex [89,90]. We cannot simply define it at the level of activity or content, because an incomprehensive definition can easily lead to a lack of social, cultural, and historical thinking and judgment [91]. For example, at the current stage, most of the surveys on the integrity of the culture-creativity image have been conducted from the perspective of traditional tourism [92,93] or the overall performance of the culture-creativity image [40,94]. In recent years, more research has focused on the content theory; thus, there are abundant achievements in text exploration and the processing of social media content [95]. Based on our results, we can continue to expand the different types of social content, attributes, and relationships and wisely include further different contents in the analysis [96]. In the future, adding multiplex technology can also be considered to enhance analysis. Although many users use the same information, post recommendations are made using artificial intelligence technologies like neural networks. Even for the same post, different types of users' needs can still be met according to their post reading habits.

Second, cultural and creative industries have always been considered as the best means for affirming social practice; they also produce the value and structure of the local culture through the provision of content. Grzesiak (2018) asserted that cultural creation is constructed by people's participation, so it will accumulate over time. Therefore, to understand the culture-creativity image, we have to shift from traditional methods to consider more holistic aspects for discussion [97]. Perhaps based on a more comprehensive approach and sociocultural factors, a conceptual framework conforming to the culture-creativity image can be proposed [24,98]. In the future, we may start with different types of cultural institutions with different brand positioning, such as including other types of cultural or creative institutions for analysis. We may further compare the needs of local or global people in relation to information perception, with the purpose of meeting the needs of people in more countries with different cultural backgrounds and effectively enhancing the use value of social content sustainable development.

**Conflicts of Interest:** The author declared no conflicts of interest.

# Appendix A  Measurement and Item

**Table A1.** Pearson correlation analysis.

| Participation Classification | The Artist Positioning Brands | | | | The Ordinary People Positioning Brands | | | |
|---|---|---|---|---|---|---|---|---|
| | Abstract Factor (AF) | | Concrete Factor (CF) | | Abstract Factor (AF) | | Concrete Factor (CF) | |
| | Pearson's r | Sig. | Pearson's r | Sig. | Pearson's r | Sig. | Pearson's r | Sig. |
| Behavioral participation (BP) | −0.078 ** | 0.000 | −0.021 | 0.187 | −0.079 ** | 0.000 | −0.080 ** | 0.000 |
| Likes | −0.093 ** | 0.000 | −0.017 | 0.274 | −0.089 ** | 0.000 | −0.089 ** | 0.000 |
| Comments | 0.031 * | 0.048 | −0.043 ** | 0.007 | 0.004 | 0.752 | 0.008 | 0.571 |
| Shares | −0.012 | 0.433 | −0.014 | 0.367 | 0.039 ** | 0.004 | 0.027 * | 0.043 |
| Emotional participation (EP) | −0.013 | 0.411 | −0.018 | 0.244 | 0.058 ** | 0.000 | 0.068 ** | 0.000 |
| Love | 0.004 | 0.810 | −0.012 | 0.437 | 0.078 ** | 0.000 | 0.095 ** | 0.000 |
| Haha | −0.022 | 0.156 | −0.014 | 0.383 | 0.035 ** | 0.009 | 0.040 ** | 0.003 |
| Wow | −0.013 | 0.395 | −0.019 | 0.226 | 0.026 | 0.059 | 0.033 * | 0.016 |
| Sorry | −0.015 | 0.328 | 0.004 | 0.817 | 0.007 | 0.619 | 0.010 | 0.449 |
| Anger | 0.008 | 0.611 | 0.003 | 0.830 | 0.007 | 0.599 | −0.005 | 0.734 |

**Table A2.** Linear regression coefficient of determination and beta (Abstract factor and Concrete factor1).

| Participation Classification | The Artist Positioning Brands | | | | | | | The Ordinary People Positioning Brands | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B | SD | Beta | T | Sig. | Sig. F Change | Durbin-Watson | B | SD | Beta | T | Sig. | Sig. F Change | Durbin-Watson |
| **Abstract factor (AF)** | | | | | | | | | | | | | | |
| Emotional participation (EP) | −0.203 | 0.247 | −0.013 | −0.822 | 0.411 | 0.411 | 1.955 | 1.057 | 0.246 | 0.058 | 4.293 | 0.000 | 0.000 | 1.830 |
| Behavioral participation (BP) | −25.711 | 5.139 | −0.078 | −5.004 | 0.000 | 0.000 | 1.645 | −108.207 | 18.355 | −0.079 | −5.895 | 0.000 | 0.000 | 1.761 |
| **Concrete factor (CF)** | | | | | | | | | | | | | | |
| Emotional participation (EP) | −0.620 | 0.532 | −0.018 | −1.164 | 0.244 | 0.244 | 1.956 | 1.598 | 0.316 | 0.068 | 5.058 | 0.000 | 0.000 | 1.835 |
| Behavioral participation (BP) | −14.656 | 11.099 | −0.021 | −1.321 | 0.187 | 0.187 | 1.630 | −140.015 | 23.561 | −0.080 | −5.943 | 0.000 | 0.000 | 1.762 |

**Table A3.** Linear regression coefficient of determination and beta (Abstract factor and Concrete factor2).

| Participation Classification | The Artist Positioning Brands | | | | | | | The Ordinary People Positioning Brands | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B | SD | Beta | T | Sig. | Sig. F Change | Durbin-Watson | B | SD | Beta | T | Sig. | Sig. F Change | Durbin-Watson |
| | | | | | | | **Abstract factor (AF)** | | | | | | | |
| Likes | −25.735 | 4.337 | −0.093 | −5.934 | 0.000 | 0.000 | 1.588 | −113.025 | 17.105 | −0.089 | −6.608 | 0.000 | 0.000 | 1.748 |
| Comments | 0.817 | 0.413 | 0.031 | 1.978 | 0.048 | 0.048 | 1.998 | 0.098 | 0.309 | 0.004 | 0.316 | 0.752 | 0.752 | 1.844 |
| Shares | −0.794 | 1.012 | −0.012 | −0.784 | 0.433 | 0.433 | 1.923 | 4.720 | 1.654 | 0.039 | 2.853 | 0.004 | 0.004 | 1.913 |
| Love | 0.024 | 0.098 | −0.004 | 0.241 | 0.810 | 0.810 | 1.897 | 0.480 | 0.082 | 0.078 | 5.819 | 0.000 | 0.000 | 1.701 |
| Haha | −0.124 | 0.087 | −0.022 | −1.418 | 0.156 | 0.156 | 2.001 | 0.420 | 0.161 | 0.035 | 2.604 | 0.009 | 0.009 | 2.000 |
| Wow | −0.097 | 0.114 | −0.013 | −0.851 | 0.395 | 0.395 | 1.982 | 0.127 | 0.067 | 0.026 | 1.889 | 0.059 | 0.059 | 1.871 |
| Sorry | −0.008 | 0.008 | −0.015 | −0.978 | 0.328 | 0.328 | 1.940 | 0.018 | 0.036 | 0.007 | 0.498 | 0.619 | 0.619 | 1.997 |
| Anger | 0.002 | 0.003 | 0.008 | 0.509 | 0.611 | 0.611 | 2.008 | 0.012 | 0.023 | 0.007 | 0.526 | 0.599 | 0.599 | 1.985 |
| | | | | | | | **Concrete factor (CF)** | | | | | | | |
| Likes | −10.271 | 9.380 | −0.017 | −1.095 | 0.274 | 0.274 | 1.568 | −144.537 | 21.957 | −0.089 | −6.583 | 0.000 | 0.000 | 1.748 |
| Comments | −2.418 | 0.890 | −0.043 | −2.718 | 0.007 | 0.007 | 2.001 | 0.225 | 0.397 | 0.008 | 0.566 | 0.571 | 0.571 | 1.843 |
| Shares | −1.968 | 2.180 | −0.014 | −0.903 | 0.367 | 0.367 | 1.923 | 4.297 | 2.124 | 0.027 | 2.023 | 0.043 | 0.043 | 1.915 |
| Love | −0.164 | 0.211 | −0.012 | −0.777 | 0.437 | 0.437 | 1.897 | 0.747 | 0.106 | 0.095 | 7.070 | 0.000 | 0.000 | 1.705 |
| Haha | −0.164 | 0.188 | −0.014 | −0.872 | 0.383 | 0.383 | 2.002 | 0.617 | 0.207 | 0.040 | 2.979 | 0.003 | 0.003 | 2.002 |
| Wow | −0.297 | 0.246 | −0.019 | −1.212 | 0.226 | 0.226 | 1.983 | 0.208 | 0.086 | 0.033 | 2.411 | 0.016 | 0.016 | 1.872 |
| Sorry | 0.004 | 0.017 | 0.004 | 0.231 | 0.817 | 0.817 | 1.942 | 0.035 | 0.047 | 0.010 | 0.757 | 0.449 | 0.449 | 1.997 |
| Anger | 0.001 | 0.007 | 0.003 | 0.215 | 0.830 | 0.830 | 2.008 | −0.010 | 0.029 | −0.005 | −0.340 | 0.734 | 0.734 | 1.985 |

## References

1. Boes, K.; Buhalis, D.; Inversini, A. Conceptualising Smart Tourism Destination Dimensions. In *Information and Communication Technologies in Tourism 2015*; Springer: Berlin, Germany, 2015; pp. 391–403.
2. Kalampokis, E.; Tambouris, E.; Tarabanis, K. Understanding the predictive power of social media. *Int. Res.* **2013**, *23*, 544–559. [CrossRef]
3. Abrahams, A.S.; Jiao, J.; Fan, W.; Wang, G.A.; Zhang, Z. What's buzzing in the blizzard of buzz? Automotive component isolation in social media postings. *Decis. Support Syst.* **2013**, *55*, 871–882.
4. He, W.; Zha, S.; Li, L. Social media competitive analysis and text mining: A case study in the pizza industry. *Int. J. Inf. Manag.* **2013**, *33*, 464–472. [CrossRef]
5. Fayyad, U.; Piatetsky-Shapiro, G.; Smyth, P. From data mining to knowledge discovery in databases. *AI Mag.* **1996**, *17*, 37–53.
6. Filieri, R.; McLeay, F. E-WOM and Accommodation: An Analysis of the Factors That Influence Travelers' Adoption of Information from Online Reviews. *J. Travel Res.* **2014**, *53*, 44–57. [CrossRef]
7. Tang, X.; Yang, C.C. Social network integration and analysis using a generalization and probabilistic approach for privacy preservation. *Secur. Inform.* **2017**, *1*, 1–14. [CrossRef]
8. Chanana, V.; Ginige, A.; Murugesan, S. Improving information retrieval effectiveness by assigning context to documents. In Proceedings of the 2004 International Symposium on Information and Communication Technologies, Trinity College Dublin, Parma, Italy, 10–13 October 2004; pp. 86–91.
9. Kaplan, A.M.; Haenlein, M. Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horiz.* **2010**, *53*, 59–68.
10. Fletcher, A.; Lee, M.J. Current social media uses and evaluations in American museums. *Mus. Manag. Curatorship* **2012**, *27*, 505–521. [CrossRef]
11. Wang, C.Y.; Hsu, M.K. The relationships of destination image, satisfaction, and behavioral intentions: An integrated model. *J. Travel Tour. Mark.* **2010**, *27*, 829–843. [CrossRef]
12. Han, J.; Kamber, M.; Pei, J. *Data Mining: Concepts and Techniques*; Elsevier: Amsterdam, The Netherlands, 2011.
13. Choi, S.; Lehto, X.Y.; Morrison, A.M. Destination image representation on the web: Content analysis of Macau travel related websites. *Tour. Manag.* **2007**, *28*, 118–129. [CrossRef]
14. Lee, T.H. A Structural model to examine how destination image, attitude, and motivation affect the future behavior of tourists. *Leis. Sci.* **2009**, *31*, 215–236. [CrossRef]
15. Huang, W.J.; Chen, C.C.; Lin, Y.H. Cultural proximity and intention to visit: Destination image of Taiwan as perceived by Mainland Chinese visitors. *J. Destin. Mark. Manag.* **2013**, *2*, 176–184. [CrossRef]
16. Govers, R.; Go, F.M.; Kumar, K. Virtual destination image a new measurement approach. *Ann. Tour. Res.* **2007**, *34*, 977–997. [CrossRef]
17. Holden, J. *Cultural Value and the Crisis of Legitimacy*; Demos: London, UK, 2006.
18. Newman, A.; Goulding, A.; Whitehead, C. The consumption of contemporary visual art: Identity formation in late adulthood. *Cult. Trends* **2012**, *21*, 29–45. [CrossRef]
19. Blagoeva-Yarkova, Y. The role of local cultural institutions for local sustainable development. The case-study of Bulgaria. *Trakia J. Sci.* **2012**, *10*, 42–52.
20. Fanea-Ivanovici, M. Culture as a prerequisite for sustainable development. An investigation into the process of cultural content digitisation in Romania. *Sustainability* **2018**, *10*, 1859.
21. Throsby, D. Cultural sustainability. In *A Handbook of Cultural Economics*; Edward Elgar Publishing: Cheltenham, UK, 2011; pp. 183–186.
22. Mpofu, P. The dearth of culture in sustainable development: The impact of NGOs' agenda and conditionalities on cultural sustainability in Zimbabwe. *J. Sustain. Dev. Afr.* **2012**, *14*, 191–205.
23. Gray, J. *Show Sold Separately: Promos, Spoilers, and Other Media Paratexts*; NYU Press: New York, NY, USA, 2010.
24. Wróblewski, Ł.; Bilińska-Reformat, K.; Grzesiak, M. Sustainable activity of cultural service consumers of social media users-Influence on the brand capital of cultural institutions. *Sustainability* **2018**, *10*, 3986. [CrossRef]
25. Buhalis, D.; Foerste, M. SoCoMo marketing for travel and tourism: Empowering co-creation of value. *J. Destin. Mark. Manag.* **2015**, *4*, 151–161. [CrossRef]
26. Aaker, D.A. Measuring brand equity across products and markets. *Calif. Manag. Rev.* **1996**, *38*, 102–120. [CrossRef]

27. Cobb-Walgren, C.J.; Ruble, C.A.; Donthu, N. Brand equity, brand preference, and purchase intent. *J. Advert.* **1995**, *24*, 25–40. [CrossRef]

28. Kim, H.; Stepchenkova, S. Effect of tourist photographs on attitudes towards destination: Manifest and latent content. *Tour. Manag.* **2015**, *49*, 29–41. [CrossRef]

29. Hoffman, D.L.; Novak, T.P. Marketing in hypermedia computer-mediated environments: Conceptual foundations. *J. Mark.* **1996**, *60*, 50–68. [CrossRef]

30. Zhang, K.Z.K.; Zhao, S.J.; Cheung, C.M.K.; Lee, M.K.O. Examining the influence of online reviews on consumers' decision-making: A heuristic-systematic model. *Decis. Support Syst.* **2014**, *67*, 78–89. [CrossRef]

31. Schau, H.J.; Muñiz, A.M., Jr.; Arnould, E.J. How brand community practices create value. *J. Mark.* **2009**, *73*, 30–51. [CrossRef]

32. Hunt, J.D. *Image—A Factor in Tourism*; National Agricultural Library: Beltsville, MD, USA, 1971.

33. Aral, S.; Dellarocas, C.; Godes, D. Social media and business transformation: A Framework for research. *Inf. Syst. Res.* **2013**, *24*, 3–13. [CrossRef]

34. Stieglitz, S.; Dang-Xuan, L.; Bruns, A.; Neuberger, C. Social media analytics. *Bus. Inf. Syst. Eng.* **2014**, *6*, 89–96. [CrossRef]

35. Pentina, I.; Zhang, L.; Basmanova, O. Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter. *Comput. Hum. Behav.* **2013**, *29*, 1546–1555. [CrossRef]

36. Karl, M.; Reintinger, C.; Schmude, J. Reject or select: Mapping destination choice. *Ann. Tour. Res.* **2015**, *54*, 48–64. [CrossRef]

37. Woodside, A.G.; Lysonski, S. A general model of traveler destination choice. *J. Travel Res.* **1989**, *27*, 8–14. [CrossRef]

38. Cian, L. How to measure brand image: A reasoned review. *Mark. Rev.* **2011**, *11*, 165–187. [CrossRef]

39. Gartner, W.C. Image formation process. *J. Travel Tour. Mark.* **1994**, *2*, 191–216. [CrossRef]

40. Gallarza, M.G.; Saura, I.G.; García, H.C. Destination image: Towards a conceptual framework. *Ann. Tour. Res.* **2002**, *29*, 56–78. [CrossRef]

41. Snepenger, D.; Snepenger, M.; Dalbey, M.; Wessol, A. Meanings and consumption characteristics of places at a tourism destination. *J. Travel Res.* **2007**, *45*, 310–321. [CrossRef]

42. Huang, Y.; Basu, C.; Hsu, M.K. Exploring motivations of travel knowledge sharing on social network sites: An empirical investigation of U.S. college students. *J. Hosp. Mark. Manag.* **2010**, *19*, 717–734. [CrossRef]

43. Kahn, B.K.; Strong, D.M.; Wang, R.Y. Information Quality Benchmarks: Product and Service Performance. *Commun. ACM* **2002**, *45*, 184–192. [CrossRef]

44. Wang, R.Y. Beyond accuracy: What data quality means to data consumers. *J. Manag. Inf. Syst.* **1996**, *12*, 5–34. [CrossRef]

45. Agarwal, R.; Karahanna, E. Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Q. Manag. Inf. Syst.* **2000**, *24*, 665–694. [CrossRef]

46. Klein, B.D. When do users detect information quality problems on the World Wide Web. In Proceedings of the 8th Americas Conference on Information Systems, Dallas, TX, USA, 7–9 August 2002; pp. 1101–1103.

47. Knight, S.A.; Burn, J. Developing a framework for assessing information quality on the World Wide Web. *Inf. Sci.* **2005**, *8*, 159–172.

48. Emamjome, F.F.; Rabaa'i, A.A.; Gable, G.G.; Bandara, W. Information quality in social media: A conceptual model. In Proceedings of the Pacific Asia Conference on Information Systems, PACIS 2013, Jeju Island, Korea, 18–22 June 2013.

49. Dellarocas, C. The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Manag. Sci.* **2003**, *49*, 1407–1424. [CrossRef]

50. Lee, K.Y.; Yang, S.B. The role of online product reviews on information adoption of new product development professionals. *Int. Res.* **2015**, *25*, 435–452. [CrossRef]

51. Prayag, G. Tourists' evaluations of destination image, satisfaction, and future behavioral intentions-the case of mauritius. *J. Travel Tour. Mark.* **2009**, *26*, 836–853. [CrossRef]

52. Tseng, C.; Wu, B.; Morrison, A.M.; Zhang, J.; Chen, Y. Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. *Tour. Manag.* **2015**, *46*, 347–358. [CrossRef]

53. Gunn, C.A. *Vacationscape: Designing Tourist Regions*; Van Nostrand Reinhold: New York, NY, USA, 1988.

54. Pike, S. Destination image analysis—A review of 142 papers from 1973 to 2000. *Tour. Manag.* **2002**, *23*, 541–549. [CrossRef]

55. Parent, M.; Plangger, K.; Bal, A. The new WTP: Willingness to participate. *Bus. Horiz.* **2011**, *54*, 219–229. [CrossRef]

56. Katona, Z.; Zubcsek, P.P.; Sarvary, M. Network effects and personal influences: The diffusion of an online social network. *J. Mark. Res.* **2011**, *48*, 425–443. [CrossRef]

57. LaRose, R.; Eastin, M.S. A social cognitive theory of Internet uses and gratifications: Toward a new model of media attendance. *J. Broadcast. Electron. Media* **2004**, *48*, 358–377. [CrossRef]

58. Grubb, E.L.; Grathwohl, H.L. Consumer self-concept, symbolism and market behavior: A theoretical approach. *J. Mark.* **1967**, *31*, 22–27. [CrossRef]

59. Bower, G.H. Mood and memory. *Am. Psychol.* **1981**, *36*, 129. [CrossRef]

60. Clore, G.L.; Gasper, K.; Garvin, E. Affect as information. In *Handbook of Affect and Social Cognition*; Lawrence Erlbaum Associates: Mahwah, NJ, USA, 2001; pp. 121–144.

61. Schwarz, N.; Clore, G.L. Mood as information: 20 years later. *Psychol. Inq.* **2003**, *14*, 296–303.

62. Goldberg, M.E.; Gorn, G.J. Happy and sad TV programs: How they affect reactions to commercials. *J. Consum. Res.* **1987**, *14*, 387–403. [CrossRef]

63. Siemer, M. Mood-congruent cognitions constitute mood experience. *Emotion* **2005**, *5*, 296. [CrossRef]

64. Sirgy, M.J. Self-concept in consumer behavior: A critical review. *J. Consum. Res.* **1982**, *9*, 287–300. [CrossRef]

65. Wallace, E.; Buil, I.; de Chernatony, L.; Hogan, M. Who "likes" you . . . and why? A typology of Facebook fans: From "fan"-atics and self-expressives to utilitarians and authentics. *J. Advert. Res.* **2014**, *54*, 92–109. [CrossRef]

66. Pham, M.T.; Avnet, T. Contingent reliance on the affect heuristic as a function of regulatory focus. *Organ. Behav. Hum. Decis. Process.* **2009**, *108*, 267–278. [CrossRef]

67. Brodie, R.J.; Hollebeek, L.D.; Jurić, B.; Ilić, A. Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *J. Serv. Res.* **2011**, *14*, 252–271. [CrossRef]

68. Tsai, W.-H.S.; Men, L.R. Motivations and antecedents of consumer engagement with brand pages on social networking sites. *J. Interact. Advert.* **2013**, *13*, 76–87. [CrossRef]

69. Cvijikj, I.P.; Michahelles, F. A case study of the effects of moderator posts within a Facebook brand page. In *International Conference on Social Informatics*; Springer: Berlin, Germany, 2011.

70. Goorha, S.; Ungar, L. Discovery of significant emerging trends. In Proceedings of the 16th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Washington, DC, USA, 25–28 July 2010.

71. Lewis, K.; Kaufman, J.; Gonzalez, M.; Wimmer, A.; Christakis, N. Tastes, ties, and time: A new social network dataset using Facebook.com. *Soc. Netw.* **2008**, *30*, 330–342. [CrossRef]

72. Teevan, J.; Ramage, D.; Morris, M.R. # TwitterSearch: A comparison of microblog search and web search. In Proceedings of the Fourth ACM International Conference on Web Search and Data Mining, Hong Kong, China, 9–12 February 2011.

73. LaBarbera, P.A.; Weingard, P.; Yorkston, E.A. Matching the message to the mind: Advertising imagery and consumer processing styles. *J. Advert. Res.* **1998**, *38*, 29–30.

74. Unnava, H.R.; Burnkrant, R.E. An imagery-processing view of the role of pictures in print advertisements. *J. Mark. Res.* **1991**, *28*, 226–231. [CrossRef]

75. MacKay, K.J.; Fesenmaier, D.R. Pictorial element of destination in image formation. *Ann. Tour. Res.* **1997**, *24*, 537–565. [CrossRef]

76. Hunter, W.C. A typology of photographic representations for tourism: Depictions of groomed spaces. *Tour. Manag.* **2008**, *29*, 354–365. [CrossRef]

77. Ye, H.; Tussyadiah, I.P. Destination visual image and expectation of experiences. *J. Travel Tour. Mark.* **2011**, *28*, 129–144. [CrossRef]

78. Hunter, W.C. The good souvenir: Representations of Okinawa and Kinmen Islands in Asia. *J. Sustain. Tour.* **2012**, *20*, 81–99. [CrossRef]

79. Syed-Ahmad, S.F.; Musa, G.; Klobas, J.E.; Murphy, J. Audience Response to Travel Photos and Arab Destination Image. *J. Travel Tour. Mark.* **2013**, *30*, 161–164. [CrossRef]

80. Molina, A.; Esteban, A. Tourism Brochures. Usefulness and Image. *Ann. Tour. Res.* **2006**, *33*, 1036–1056. [CrossRef]

81. Rajaguru, R. Motion Picture-Induced Visual, Vocal and Celebrity Effects on Tourism Motivation: Stimulus Organism Response Model. *Asia Pac. J. Tour. Res.* **2014**, *19*, 375–388. [CrossRef]

82. Stepchenkova, S.; Zhan, F. Visual destination images of Peru: Comparative content analysis of DMO and user-generated photography. *Tour. Manag.* **2013**, *36*, 590–601. [CrossRef]

83. Clark, M.; Melancon, J. The influence of social media investment on relational outcomes: A relationship marketing perspective. *Int. J. Mark. Stud.* **2013**, *5*, 132. [CrossRef]

84. Goh, K.Y.; Heng, C.S.; Lin, Z. Social media brand community and consumer behavior: Quantifying the relative impact of user- and marketer-generated content. *Inf. Syst. Res.* **2013**, *24*, 88–107. [CrossRef]

85. Larson, K.; Watson, R. *The Value of Social Media: Toward Measuring Social Media Strategies*; ICIS 2011 Proceedings: Shanghai, China, 2011.

86. Campbell, D.E.; Wells, J.D.; Valacich, J.S. Breaking the ice in B2C relationships: Understanding pre-adoption e-commerce attraction. *Inf. Syst. Res.* **2013**, *24*, 219–238. [CrossRef]

87. Nambisan, S.; Baron, R.A. Interactions in virtual customer environments: Implications for product support and customer relationship management. *J. Interact. Mark.* **2007**, *21*, 42–62. [CrossRef]

88. Kohler, T.; Fueller, J.; Matzler, K.; Stieger, D. Co-creation in virtual worlds: The design of the user experience. *MIS Q.* **2011**, *35*, 773–788. [CrossRef]

89. Soini, K.; Birkeland, I. Exploring the scientific discourse on cultural sustainability. *Geoforum* **2014**, *51*, 213–223. [CrossRef]

90. Killian, G.; McManus, K. A marketing communications approach for the digital era: Managerial guidelines for social media integration. *Bus. Horiz.* **2015**, *58*, 539–549. [CrossRef]

91. Mazurek-Lopacińska, K.; Sobocińska, M. Marketing communication in the light of challenges brought about by virtualisation and interactivity. *Econ. Bus. Rev.* **2016**, *2*, 65–76. [CrossRef]

92. Cave, J.; Ryan, C.; Panakera, C. Cultural tourism product: Pacific Island migrant perspectives in New Zealand. *J. Travel Res.* **2007**, *45*, 435–443. [CrossRef]

93. Ryan, C.; Cave, J. Structuring destination image: A qualitative approach. *J. Travel Res.* **2005**, *44*, 143–150. [CrossRef]

94. Saraniemi, S.; Kylänen, M. Problematizing the concept of tourism destination: An analysis of different theoretical approaches. *J. Travel Res.* **2011**, *50*, 133–143. [CrossRef]

95. He, J.; Liu, H.; Xiong, H. SocoTraveler: Travel-package recommendations leveraging social influence of different relationship types. *Inf. Manag.* **2016**, *53*, 934–950. [CrossRef]

96. Shao, G. Understanding the appeal of user-generated media: A uses and gratification perspective. *Int. Res.* **2009**, *19*, 7–25. [CrossRef]

97. Grzesiak, M. *Personal Brand Creation in the Digital Age: Theory, Research and Practice*; Springer International Publishing AG: Basel, Switzerland, 2018; pp. 1–185.

98. Smith, P.R.; Zook, Z. *Marketing Communications: Integrating Offline and Online with Social Media*; Kogan Page: London, UK, 2011.

MDPI