Article

Buddhist Transformation in the Digital Age: AI (Artificial Intelligence) and Humanistic Buddhism

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Abstract: Humanistic Buddhism is one of the mainstreams of modern Buddhism, with special emphasis on the humanistic dimension. With the development of artificial intelligence (AI) technology, Humanistic Buddhism is also at an important stage of modernization and transformation, thus facing a continuous negotiation between religious values and technological innovations. This paper first argues that AI is technically beneficial to the propagation of Buddhism by citing several cases in which AI technology has been used in Buddhism. Then, by comparing Master Hsing Yun's Buddhist ethics to "Posthuman" ethics, it points out that the theories of Humanistic Buddhism share similarities with AI and Posthuman ethics. Among them, Master Hsing Yun's theory of "the nature of insentient beings" provides an important theoretical reference for the question of "whether AI can become a Buddha". From the technical and ethical dimensions, it points out that the interaction between Humanistic Buddhism and AI can promote original uses or implementations of AI technology. However, it should also be noted that compared to the cases of "Artificial Narrow Intelligence" discussed in the paper, the "Strong AI" could lead to much more ethical crises. It is also likely to cause the cult of science and technology, and thus subvert the humanistic tradition of Buddhism with a new instrumental rationality. In addition, there are some potential pitfalls that Humanistic Buddhism may encounter when using AI. Hence, while it is necessary to encourage the use of technologies such as AI in contemporary Buddhism, it is also important for Buddhism to keep a critical distance from digital technologies.

Keywords: AI; Humanistic Buddhism; digital religion; posthuman

1. Introduction

The relationship between science and religion has long been a controversial topic. With the development of technology in modern times, artificial intelligence (AI), a cutting-edge technology, also has an important impact on today's religion as well as bringing a new perspective to explore the collisions and fusions between science and religion. Thus, this paper will take Humanistic Buddhism as a special case and focus on the connection between this mainstream of modern Buddhism and AI science.

Both exploring the function of AI in terms of its promotion of the modernization of Buddhism, as well as analyzing the similarities between AI ethics and Humanistic Buddhist ideas, are new ways of exploring the transformation of Buddhism.

Humanistic Buddhism is one of the mainstream schools of modern Buddhism. Its origin and development are closely related to the transformation of modernity. It aims to bring about modernization at both the ideological and institutional levels, to "make Buddhism responsive to the changes in modern society and concepts, as well as to seek the survival and development of Buddhism in a modern way" (Tang 2017, p. 109). "Humanistic Buddhism" as a concept or slogan was introduced at the beginning of the 20th century. At that time, Chinese society was undergoing great changes, the national power was declining, and society was in rapid turmoil. The trend of "democracy" and "science"

was sweeping across the country, and the social movement against religion and superstition began to rise, while the intellectual was skeptical about the necessity of the existence of religion. Chinese Buddhism was already in decline, almost losing its social functions. Many Buddhist intellectuals gradually realized the urgency of revitalizing Buddhism and adapting it to society, seeking to develop it in new situations.

In this context, Master Tai Xu (太虛, 1890–1947) proposed the concept of "Humanistic Buddhism". Taking Chinese Buddhism as its core, it aims to adapt to modern society. Also, it emphasized the focus on one's own practice, turning Buddhism towards humanity. It emphasizes the perfection of personality and monasticism and then promotes the modernization and transformation of Buddhism from multiple levels, such as Buddhist organizations and monastic systems. After that, Master Yin Shun (印順, 1906–2005) developed the concept of "Humanistic Buddhism", and later Zhao Puchu (趙樸初, 1907–2000), Master Hsing Yun (星雲, 1927–2023), Master Jinghui (淨慧, 1933–2013), and Li Yuansong (李元松, 1957–2003); all of them have been promoting the development and propagation of "Humanistic Buddhism" as well as the modernization of Buddhism from different dimensions.

In modern times, the renowned Master Hsing Yun advocated Humanistic Buddhism in Taiwan. Fo Guang Shan (佛光山), originally a barren mountain with five small hills, is located in Kaohsiung, Taiwan. It was founded in 1967 by Master Hsing Yun, a contemporary Buddhist master, leading his followers, and within only a few short decades, it has become the largest Buddhist temple in Taiwan. Fo Guang Shan is inherited from the Rinzai sect and focuses on promoting the doctrine of "Humanistic Buddhism". It has established regional associations across the five continents, with millions of believers around the world. It also advocates the establishment of modern religious communities and the development of international Buddhism. In addition, Fo Guang Shan emphasizes the unity of life and Buddhism, also, it stresses that Buddhism should have a positive effect on society through practical actions. This shows that Humanistic Buddhism, from its foundation to its present development, has always actively adapted to the needs of the times.

Humanistic Buddhism is not a new type of religion but merely seeks to restore the humanistic qualities of Mahayana Buddhism, which are "life-oriented, proving liberation in daily life, and realizing the Pure Land", with the aim of helping believers (especially those at home) to properly deal with the relationship between Dharma and secular principles, so as to enable Buddhism to be more broadly and deeply integrated into the society.

Also, Humanistic Buddhism is the practice of Buddhism to accomplish the transition to modernization in order to meet the needs of society and to promote its own development. It has also laid the foundation for the technologization of Humanistic Buddhism. Choosing to use AI tools at various levels is inseparable from its tendency to be worldly and adapt to contemporary needs. Accordingly, AI has been used to promote Humanistic Buddhism through AI Monk, AI Buddhist scripture translation, and virtual Buddhist communities on the Internet.

As a Buddhist school that is highly concerned with modernization and transformation, Humanistic Buddhism has gradually started to make more use of AI tools in recent years. A few scholars have previously noted the connection between AI and Humanistic Buddhism. Among the studies, Shi Juexi (釋覺西), in "A New Platform for Dharma Propagation: The Internationalization of Humanistic Buddhism from Buddha's Light Satellite Television (佛光衛視) to Beautiful Life Television (人間衛視)" (Shi 2003, p. 333), describes the use of Humanistic Buddhism to propagate Buddhist compassion and wisdom. In "The Realization of the Pure Land of Humanity and the Internationalization of Humanistic Buddhism: The Future of Humanistic Buddhism" (Chen 2019, p. 95), Chen Jianhuang (陳劍煌) mentions the Internet propagation of Humanistic Buddhism, pointing out that "Internet Religion", by using Artificial Intelligence (AI) and Big Data, has both the " worldliness" of the Internet and the "universality" of the religion, as well as the unprecedented ability to cross the boundaries of the world to spread the Buddhist teachings. In the "Seminar on Humanistic Buddhism and Future Society in the Age of Artificial Intelligence", Luo Jin (羅勁) pointed out "The Wisdom of the Buddha from the Perspective of Artificial Intelli-

gence" that there is a similarity between AI and the wisdom of the Buddha, and that big data thinking is a kind of enlightenment cognition.

Based on the articles cited above, there is still a lack of studies on the relationship between Humanistic Buddhism and AI. It is rare to find articles that integrate cases of Humanistic Buddhism's use of AI and contrast AI ethics with Humanistic Buddhism's doctrine. Hence, this paper will explore the interactions between AI technology and Humanistic Buddhism, pointing out that AI technology plays an important role in promoting the propagation of the Dharma of Humanistic Buddhism through various advanced scientific and technological approaches. Meanwhile, this paper will also try to discuss the inner coherence between Master Hsing Yun's concepts of the body, life, and death, and the concepts of "Insentient beings have Buddha Nature" (無情亦有佛性). Based on identifying the intrinsic compatibility between Humanistic Buddhism and AI, it is also pointed out that the polarization of AI theories may lead to the crisis of humanism, which in turn may lead to the divergence of practice from physical and mental unity. Thus, on the one hand, the use of AI in Humanistic Buddhism reflects the modern transformation of Buddhism. But on the other hand, it is also important that the hidden dangers of AI should not be overlooked.

2. Technical Dimension: The Promotion of AI for Humanistic Buddhism

In this section, I will illustrate the positive effects of AI on Humanistic Buddhism at the utilitarian level. That is, with the promotion of AI technology, Humanistic Buddhism has been able to promote Buddhist teachings more conveniently, to enlarge its audience and no longer be restricted by distance and space. At the same time, Buddhist temples are also implementing more convenient and transparent connections through the Internet, and Buddhist scriptures are also being electricized to facilitate long-term storage and widespread propagation (Fo Guang Shan has been progressively electrolizing Buddhist scriptures since 1977), as well as incorporating AI translation software as a tool for translating Buddhist scriptures. All these cases are signs of the expansion of cyberspace, which to a certain extent eases the temporal and spatial constraints on the propagation of the Dharma, thus further promoting the modernization of Humanistic Buddhism and globalization of its propagation.

2.1. New Forms of Buddhist Propagation through AI Monks

When discussing the cases of the integration between AI and Buddhism, the most obvious manifestation of the combination between AI and Buddhism is the creation of robotic monks or AI bodhisattvas. Some scholars have already introduced and academically analyzed the cases and uses of robot Bodhisattvas in Japan. For example, Baffelli E. explains how "Mindar", an important Japanese Buddhist robot, is depicted as an incarnation of Bodhisattva.

Through the observation of Mindar, Baffelli explores the interaction between AI, robotics, and Buddhism in contemporary Japan. It highlights the affective potentialities and possibilities of AI, in particular as they relate to emotional connections between humans and robots, and the implications for Buddhism in contemporary Japan (Baffelli 2021). In this article, Baffelli mentions that a roboticist Mori Masahiro argues that robots have Buddha nature and the potential to attain Buddhahood. In Japan, AI Bodhisattvas like Mindar, which can propagate the Dharma and introduce the Sutra, are even considered to be Bodhisattvas. Also, Baffelli summarizes an interview with Rev. Gōtō: "Gotō's remarks seem to indicate the possibility that Mindar might go beyond fulfilling the role of a bodhisattva as a mediator between buddhas and humans—and thereby potentially replace the role of a priest". This shows that AI Monk can bring a new mode of propagating Buddhist teachings, fulfill the role of a bodhisattva, and guide people to salvation. While appreciating the value that Mindar brings to the digitization of contemporary Buddhism, he also honestly points out that "an android, while able to go beyond human limits, is not (yet) a sentient being able to feel suffering" (Baffelli 2021, p. 259). On the one hand, Gould and Walters (2020) affirm a technological

approach to Buddhist practice in the future, and Buddhism is conceived of as post or transhuman where "technological perfection of practice" replaces human flaws and weaknesses. However, on the other hand, "the sermon delivered by Mindar is inputted by human priests" (Baffelli 2021, p. 261) currently.

This discussion of Mindar, the Japanese AI Bodhisattva, can also provide some insight for us. Compared to Mindar, which appeared in Japan in 2019, Chinese Buddhism seems to have started much earlier in using robot monks to preach the dharma. For Chinese Buddhism, the "Xian Er" (賢二) of Long Quan Temple (龍泉寺) is called the first robot monk, dressed in yellow monk's robes, and can "talk" to believers, not only understand simple operating instructions but also explain some scriptures. Xian Er was created in 2015, through voice recognition, visual recognition, voice control, intelligent sensing, and other technologies, the robot monk can chant sutras, sing Buddhist music, give relief to believers, and even humorously tell jokes.

According to Venerable Xue Cheng, "Xian Er is a deep integration of Buddhism and modern science, manifesting a spirit of Buddhist innovation" and "modern science has its unique advantages in understanding and transforming the physical world, while Buddhism has a comprehensive approach in understanding and transforming the spiritual world, so the two should be combined organically" (Yang 2016). Venerable Xianshu of Longquan Temple also pointed out that the AI monk Xian Er can guide people to goodness. Technology can more easily promote the transmission of Buddhist philosophy and wisdom, while the rising field of AI can also avoid the potential bias of technology by taking Buddhist moral philosophy as the ethical basis.

Venerable Hui Jang, in his lecture "Humanistic Buddhism in the Age of AI" at Fo Guang Shan, mentioned how humanistic Buddhism views the interaction between robots and Buddhism, pointing out that "only by learning more, interacting with robots in the form of symbiosis, transmitting the three good principles, and cultivating the concept of compassion, the robots will give back positive behavior patterns" (Shi 2021). In other words, robotic monks can not only promote the propagation of Buddhism innovatively and attractively with new technology but also inspire the belief in symbiosis and compassion between humans and machines.

Like Mindar's influence in Japanese Buddhism, the AI technology used in Chinese Buddhism offers a new way of thinking about Buddhist practice and can easily do what humans cannot. It is important to note that the use of Xian Er Monk and other Chinese robot monks does not seem to have the symbolic meaning of "Bodhisattva/Monk Incarnation" as Mindar does, but rather has a more popular and entertaining effect. In addition, because the robot monk's sermons are pre-recorded or coded, there is still a lot of potential for further improvement to become a more perfect "supreme teacher". This is also an area where the combination of AI and Buddhist anthropomorphism can still be improved.

2.2. Putting Sutras Online and Using AI to Translate Buddhist Scriptures

With the modernization of technology and AI techniques, Fo Guang Shan is not only committed to the digitalization of Humanistic Buddhist classics[1] but also to the use of AI for the Buddhist classics translation. Through powerful artificial intelligence and deep learning techniques, the accuracy and speed of Buddhist sutras translation has been greatly enhanced.

Fo Guang Shan Institute of Humanistic Buddhism (佛光山人間佛教研究院)[2] is using AI translation software to improve the translation of the "Fo Guang Dictionaries" (佛光大辭典)[3] It uses the "FGS Translation Portal" (FGS Intelligent Translation Portal), which includes "DeepL" for text translation, "Wordtune" for sentence structure optimization, and "Power thesaurus" for grammatical accuracy, in order to improve the efficiency and accuracy of Buddhist translation (Zhi 2022). As Venerable Miao Guang mentioned in her lecture "The English Translation of the Fo Guang Dictionaries with the Support of Artificial Intelligence"[4], AI translation can effectively save the time of repeated inquiries, help translators quickly complete their first drafts, and provide the relevant information required through big data. Based on this, "the Fo Guang Dictionaries" will have many characteristics such as immediate query,

hyper-linked information, consistency in translation, and strong extensibility. So, this is undoubtedly a great tool for the translation of Buddhist texts.

2.3. Use of New Media Technology

Master Hsing Yun of Fo Guang Shan in Taiwan proposed that the modernization of Buddhism needs to rely on the "modern technology" of preaching, and should adopt diversified ways to propagate the Dharma: "In the past, it was a black-and-white world of photocopying, but now it has entered a colorful world which is attractive, and in the future, the Internet and satellite broadcasting will be widely used tools for the propagation of the Dharma through technology"(Master Hsing Yun 2006). Mentioning new technologies such as the Internet, especially AI, as an important way to propagate Dharma. Humanistic Buddhism and Master Hsing Yun always advocate the use of new technologies to promote dharma propagation in an efficient, innovative, and widespread way.

In recent years, it is not uncommon for humanistic Buddhism in Taiwan to use AI screens and VR technology to propagate the Dharma. During the Spring Festival in 2021, Fo Guang Shan hosted a technology experiential event, which fully demonstrated the creative role of AI and VR technology in promoting the philosophy of Humanistic Buddhism. The second version of "Journey to the Land of Buddha" (佛國之旅), developed by Fo Guang Shan, enables users to enter the Buddhist experience by creating a virtual reality. The audience can scan their faces with the device and transform into a random character such as a Venerable Master or a believer, then enter the Venerable Master's building as a virtual identity. On the one hand, this high-tech format is interesting so that it can attract audiences of younger ages and stimulate their curiosity to understand Buddhist theory. On the other hand, it is profoundly thoughtful and has the ability to enlighten wisdom. So, it combines interesting forms with the educational value of Buddhism.

Another case of using AI and VR new media technology is the "Four Seasons of Blossoming Flowers: The Taiwan Flower Scene Photography Exhibition by Chiu-Pang Hsu" exhibited in Fo Guang Shan. Through the combination of graphic video works and AR technology, visitors can enjoy visual effects, videos, animations, and augmented images to gain a richer aesthetic experience. A similar case of using VR technology to propagate Buddhism is the first monastery-themed VR film, "Can Jian Xiaoshifu" (參見小師父), shot at Cao Shan Baoji Temple in Jiangxi Province in 2016. The film shows the thousand-year history of Cao Shan Baoji Temple through VR technology, promoting Buddhist culture with the latest media technology. As professor Shi Anbin from Tsinghua University said, "The two core advantages of VR technology as a communication medium are its ability to highly simulate realistic situations and its ability to simulate human organs with the help of devices, which makes the audience feel as if they are immersed in the scene of a story" (Shi 2016). VR technology can facilitate the propagation of Dharma by reaching the state of "empathy". So, people can experience the Buddha's majesty and understand Buddha's teachings more intuitively.

2.4. The Development Trend of Online Worship and Digital Dharma

"Digital Dharma is the Buddhism that users encounter on the screen" (Grieve 2016, p. 6). Due to the spread of COVID-19, many forms of cyber rituals and online ceremonies were created. Fo Guang Shan released the English and Chinese versions of "Light Up Lamps Online" (雲端點燈), a web platform with AI technology (Du 2021). It is a creative simulation of the light-up ritual: users can light up three lotus lamps by moving the three match points on the screen and praying for their wishes.

"Light Up Lamps Online" can be used not only on cell phones but also in the Dharma Hall. And on the LED screen, provides a more immersive feeling and a better understanding of Buddha's solemnity. Under the space barrier created by COVID-19, "Light Up Lamps Online" has built a bridge for religious people in different spaces.

This kind of online worship, as well as the case of propagating Dharma by using VR technology mentioned in the previous section, shows the trend that Humanistic Buddhism is gradually becoming virtualized by using cutting-edge technology. There have been many

studies on the networkization of Buddhism and the practice of Buddhism in virtual worlds in recent years. For example, Grieve found that in the virtual online world "Second Life", Zen Buddhism flourished and people practiced "online religion", which created a place of unrestricted interaction. "Second Life's online religion enabled users not only to gather information but also, as epitomized by BodhiDharma's online meditation, to engage in ritual and other types of digitally mediated religious practices" (Grieve 2016, p. 2). And according to Grieve's research, this Digital Dharma is often done through group meditation and praying. Also, the real-life Buddhist gesture of pressing palms together as an act of piety and prayer is transformed into a virtual symbol, _/! _. This online Buddhist practice allows one to sense the interconnected nature of the world. Such online Buddhist communities and virtual practices might offer up alternative possibilities for emergent communities, identities, locations, and spiritual practices.

Humanistic Buddhism's promotion of "Light Up Lamps Online", the establishment of an online praying model, as well as the formation of many online praying communities, reflects the gradual networkization of Humanistic Buddhism in recent years, aided by the use of AI technology and the spread of digital media.

In addition, Humanistic Buddhism has also released a virtual game software, which can be used by believers to practice online. This software is called Fo Guang GO (佛光GO, version 3.1.2), which includes online practice activities such as praying, meditating, chanting, and scripture copying, etc. The software also includes a map and tour of Taiwan's Fo Guang Shan Temple, allowing people to visit the 360-degree Fo Guang Shan in the virtual world. Also, a virtual AI monk, "Fo Guang Xiao Sha Mi" (佛光小沙彌), has been created to provide virtual guidance. Thus, through AI and media technologies, a virtual practice space is established to guide people toward goodness.

Unlike Western societies (e.g., Second Life), which started to develop Buddhist practices in virtual games earlier, Chinese Buddhism began to use Digital Dharma a little later. However, through the cases of Humanistic Buddhism's "Light Up Lamps Online" and "Fo Guang GO", it is possible to see people's demand for Digital Dharma and the trend of Buddhist virtualization with the help of scientific technology.

The above cases of interaction between Cutting-edge digital technology and the modernization of Buddhism show that AI is extremely important to the transformation of contemporary Chinese Buddhism. By using different approaches to AI, it provides rich and vivid forms of Buddhist propagation, making it more convenient, efficient, and attractive. It also facilitates the creation of new propagation forms in the era of global epidemic.

Through these cases that Humanistic Buddhism uses AI as a tool to spread the Dharma, it is not difficult to realize that it reflects the inevitable trend of secularization of Asian religions in modern societies. The so-called diffuse nature of religions, and the use of new technologies, seem to make it easier for religions to enter the daily lives of ordinary people, thus expanding the influence of Buddhism in contemporary society. This is also a way for religious practitioners in modern societies to stimulate interest in Buddhism by adopting some of the new media channels to increase visitor flow to their temples and to rebuild the relevance of Buddhism to contemporary life. Especially in China after the secularization of religion, temples are further integrated with mass culture. With the advancement of science and technology, temples are trying to make Buddhism closely related to the daily life of ordinary people.

As in *Buddhism, the Internet, and Digital Media: The Pixel in the Lotus*, co-authored by Daniel Veidlinger and Grieve, in which they explore Buddhist practices and teachings in an increasingly networked and digital age (Grieve and Veidlinger 2014). The core reflection is on the role that Buddhism plays and the ways it is presented in digital media. As a workaround, Digital Religion is a means of overcoming the problems of a "liquid modern life," addressing the concerns, dilemmas, and opportunities of modern life in a wired age. "Digital religion is ever-changing, as the Buddhist notion of constant flux holds" (Grieve and Veidlinger 2014, p. 14).

In essence, the usage of digital technology and AI in modern Humanistic Buddhism can address the crises of modern life and rediscover the value of Buddhism in an ever-changing modernized society.

3. Similarities between AI and Humanistic Buddhism in Theoretical Dimensions: Using Master Hsing Yun's thought as an Example

After analyzing some cases of how AI has been applied to Humanistic Buddhism, it is necessary to explore the relevance of AI to Humanistic Buddhism in terms of the theories derived from AI.

Under the impact of intelligent technology represented by artificial intelligence, the traditional humanistic view that human nature is stable has been shaken. and the concepts of "post-human" and "post-human society" have appeared. "Post-humanism" is a rethinking of human beings and human evolution, which has developed on a critique of anthropocentrism. Michel Foucault criticized anthropocentrism by proclaiming the "death of man" (Foucault 2005, p. 422), arguing that human beings are nothing more than the creation of a series of historical events. In Rosi Braidotti's view, post-humanism can be traced back to the anti-humanism of the 1960s (Braidotti 2013). In addition, it incorporates anti-anthropocentrism. Hence, post-humanism is not only critical of all human-centered thoughts, but also critical of the hierarchical division of species, and calls for the restoration of ecological justice.

Based on post-humanism, the ideological tendency of transhumanism has also emerged. Transhumanists believe that through the application of science and technology, the human condition can be fundamentally improved. It is possible to overcome the limitations of human beings. It is viewed as a liberation movement that advocates complete liberation from biology. Transhumanism can also be seen as a transcendence of humanism, which attempts to transcend the biological and mental limitations of human beings with the help of technology. So, in both post-humanism and transhumanism, the most obvious feature of these theories derived from the development of AI technology is the transcendence of the concept of "anthropocentricity". The aim is to blur the boundary between human beings and machines through scientific biotechnology, transcending the original boundaries of the human body so that humans can overcome the constraints of life, gain a longer lifespan, and escape from the traditional barrier between life and death. Thus, they can become immortal and unrestricted individuals.

Based on this, James J. Hughes, an important researcher of transhumanism and Buddhism, points out in his article Buddhism and Our Posthuman Future: "Buddhism and human enhancement have some affinities and some useful complementarities". In traditional Buddhism, humans usually evolve into gods and super-beings. While Buddhism opposes being obsessive, it does not reject the use of medical or spiritual techniques to extend life or gain superhuman abilities: "In Buddhist eschatology, human beings are expected to have 80,000-year lifespans in a future posthuman utopia on Earth"(Hughes 2019). Another scholar, Ross B, also mentions that while Buddhists view meditation and self-discipline as tools for releasing our posthuman potential, transhumanists expect drug technologies to provide something similar (Ross 2020). Even if Buddhist enlightenment cannot be accelerated by a pill, at least prolonging the lifespan into a posthuman body enables one to have more time to achieve enlightenment. As Hughes points out, "For Buddhists, on the other hand, humans are intended to achieve a posthuman state through their own efforts" (Hughes 2019). In this way, it is shown that both transhumanism and Buddhism have a transcendental purpose.

While in the West, transhumanists have interpreted the relevance of Buddhist philosophy to their own ideas, emphasizing that Buddhism fits the core of posthuman and transhumanist theory better than other religions. "The Buddhist modernists are far readier to engage with modernity and transhumanism than Christians, in both Asia and the West" (Macer 2012). And as Hughes mentions, the Buddhist teaching of "no-self" (無我) which recognizes the illusion of the self, would in fact fit the very nature of the transhumanism (Hughes 2013). In a transhumanist future, embracing the illusory nature of the self will become inevitable.

In addition, Rajakishore Nath and Riya Manna emphasized it is important to analyze the authenticity of the posthuman cyborg as an agent, and their relations with the emergence of "AI ethics" (Rajakishore and Manna 2023, p. 185). The use of AI in religion has also led to new discussions about posthuman theory. Especially with the emergence of AI Monk, the boundary between humans and robots has become more blurred in religious uses. According to the posthuman theory, is it possible for an automated AI system to be considered a moral subject, and can it be considered a subject for spreading Buddhist teaching?

In this section, I will explain how AI ethics are compatible with Humanistic Buddhism in terms of Buddhist doctrine from the perspective of theoretical comparison. Through combing through the writings of Master Hsing Yun and referring to other Buddhist theories, the concepts of Humanistic Buddhism coincide to a certain extent with the concepts of post-humanism under the trend of AI. In this section, we will try to analyze the similarities between post-humanism and Humanistic Buddhism from the theoretical perspective of the three dimensions of body, life, and death, and "Insentient beings have buddha nature".

3.1. The Similarity of Body Concept: The Post-Humanistic Body Concept and Master Hsing Yun's View of "Oneness and Coexistence"

The similarities between Master Hsing Yun's Buddhist philosophy and post-human theory are firstly reflected in views of the body, both pointing to an equal, non-differentiated body concept, which greatly transcends the limitations of the original human body. Looking at the post-human body view, there are three dimensions.

One is that the post-human cyborg body can break through the boundaries of the physical species and try to achieve a harmonious state where all beings are unified. The second is that the post-human embodied cyborg transcends the limitations of the physical body and finally achieves unification with the world and perception. The transcendental aesthetics of the body can be further revealed through technology. The third is the ecological dimension of the post-human body, which is sympathetic across the boundaries of species and advocates an ecological consciousness that includes the pluralistic coexistence of humans and other beings.

There is an underlying similar view of the body between Master Hsing Yun's Buddhist philosophy and the ethics of post-humanity. It is mainly manifested in three aspects.

Firstly, the concept of "Oneness and Coexistence" eliminates the boundaries between various living beings. In his "*Buddha-Dharma Pure and Simple*" (佛法真義), Master Hsing Yun points out that "human beings cannot live alone in the world, but they are all oneness and co-existence" (Master Hsing Yun 2020). "Oneness" contains the meaning of equality and tolerance, while "coexistence" means compassion and integration. It coincides with the purpose of the cyborg body, which is to break down binary oppositions and species boundaries.

Secondly, the concept of Embodiment contained in "Oneness" is consistent with the concept of post-human idea. According to post-human body ethics, the human body is used to perceive the world, but technology can expand the human body. Master Hsing Yun's concept of "Oneness" can provide a theoretical source for this embodiment. He has never denigrated the importance of the body, even pointing out that "the human body is a good dojo" (人的身體就是好道場) (Master Hsing Yun 2007, p. 160), emphasizing the oneness of the body and the spirit. So, his theory resonates with the "inner unity of the world, perception, and body" which post-human ethics aims to achieve through technology.

Thirdly, Master Hsing Yun's discussion on the oneness of all beings from a biological science perspective also reveals his concern for nature. He believes that from insects, fish, and birds to people of different races, even from inanimate things to living beings, all of them are part of the universe. This ecological concern is like the ecological orientation of post-human ethics. Both manifest the desire to eliminate anthropocentrism and to live in a world where all things coexist as one body.

3.2. The Similarity of Views on Life and Death: The Post-Humanistic View of Life and Death and Master Hsing Yun's View of "Life & Death Are the Two Faces of the Same Coin"

Taking humanistic Buddhism as an example of contemporary Chinese Buddhist philosophy, the similarity between its theory and post-human theory is also reflected in the concept

of life and death. Master Hsing Yun has a deep understanding of the saying "Sheng Si You Ta, Sheng Si Zi Ru" (生死由它、生死自如) (Master Hsing Yun 2008b, p. 903). It means that life and death are the two sides of the same coin. Life is the continuation of death, and death is the transformation of life. They are only cyclical phenomena. Master Hsing Yun also pointed out that when people reach the end of their lives, their physical body will become decayed, but the essence of life will never change. The goal of AI and post-humanity is also to transcend the differences between life and death. AI and biotechnology help humans gradually overcome the limitations of natural selection. In the post-human era, life is self-selecting and even reshaped for humans, the boundary between life and death is gradually disappearing.

Regarding the concept of life and death, both the Humanistic Buddhism of Master Hsing Yun and the post-humanistic concept hope to make the boundary between life and death blurred, trying to let modern people understand that the seemingly obvious difference between life and death can be eliminated.

Firstly, for post-humanism, or even transhumanism, it is believed that human beings can overcome the effects of death using human enhancement technology, so that life can be prolonged with the support of technology, and death can be prevented or postponed. It can be said that the sharp boundary between life and death gradually disappears through technology. Life can be prolonged, and there is the possibility of rebirth within potential death, and thus death and rebirth are transformed.

Secondly, based on the theory of post-humanism, after the transformation of the human body into a posthuman being, there is a transgression of the physical body. To a large extent, this will change the traditional concept of death. Human bodies can be infinitely opened to receive transplants from others, to be enhanced by neuroscientific techniques, and to be transplanted with their own organs. The boundaries between the self and others, life and death all become unclear. Is it one's own life or others' lives? Am I the enhanced survivor? Who is dying, myself or the other who shares the body and the life with me? In this way, post-human and trans-human cross the boundaries of the physical body, thus making it difficult to clearly define the traditional division between the self and the other, or between life and death.

In addition, reflections on life and death permeate Master Hsing Yun's theoretical work. It should be noted that unlike most religions, which denigrate the practice of transcendence through human-enhanced technology, Humanistic Buddhism does not reject the practice of life extension. Further, the core purpose of Master Hsing Yun's Buddhist concept is to explain the oneness of life and death, so that people can face death directly, and thus deal with their lives in a better way. In his view, the concept of death encompasses both death in the present world and rebirth in the afterlife. It shows the circulation of life in which both this world and the afterlife are integrated. Therefore, the concept of the circulation of birth and death breaks the antithesis between life and death. This life contains the death of the previous life, and the afterlife also contains the death of this life. Just as in the case of posthuman and trans-human who have extended their physical bodies through the technology of human enhancement, each time of enhancement can be regarded as a transformation between the new life and the demise of the old one. In this cycle, the boundary between life and death is eliminated. This shows the similarity between Master Hsing Yun's non-dual concept of life and death and the posthuman transformation theory.

However, it should be noted that the measures taken by Humanistic Buddhism and Posthumanism are not the same. Humanistic Buddhism emphasizes the unlimited nature of life, which enables a better acceptance of death when one realizes there is no boundary between life and death. In contrast, posthuman and transhumanist theories emphasize the use of technology to prolong human life and make it sustainable. Despite their different approaches to life, the fundamental logic of their concepts of life and death is founded on the idea of eliminating the boundary between life and death.

3.3. Master Hsing Yun's "Buddha-Nature of Insentient Beings" and the Nature of Cyborg

Responding to a question that has been noticed by academia in recent years: Does AI have a Buddha nature? This is clarified by reviewing the theoretical background of the "Doc-

trine of Insentient being". It can be divided into three concepts: "Insentient being has Buddha-nature" (無情草木皆有性), "Insentient being becomes/is Buddha" and "Insentient being preaches the dharma". In the theoretical history of Chan Buddhism from the 8th to the 12th centuries, the term "Insentient thing" was used as a collective term for natural objects such as "mountains, rivers, earth, grass, trees, etc".

From the teachings of the *Lengqie shizi ji* (楞伽師資記) (Jing 2021) on the nature of insentient beings, to Jizang (吉藏, 549–623), who pointed out the buddha-nature of grass and trees, to Fa Rong (法融, 594–657), who made similar arguments, to *Zutang ji* (祖堂集) (Zutang ji 1991), which presented the case of "Insentient being preaches the dharma", and then to Zhanran (湛然, 711–782), who gave the most detailed explanation. Zhanran broke the limitations of people's understanding of Buddha-Nature and pointed out that insentient beings can understand the reality of Buddha-Nature. Therefore, humans should put aside their distinction from insentient beings.

"Doctrine of Insentient being" has been discussed by many previous scholars. Tong Sau Lin's Zhan Ran's Doctrine of the Buddha-nature of Insentient Beings and the Question of the subjectivity of Buddha-nature (Tong 2016, pp. 209–39) and Zhan Ran's Doctrine of the Buddha-nature of Insentient Beings and the Notion of Non-duality of Matter and Mind (Tong 2017, pp. 225–64) both explain Zhan Ran's specific doctrine of the Insentient being's buddha-nature. Lin Wushi's article *From Ji-zang to Fa-jung: a profile of Chan's formation– the change and process of non-sentient beings* (Lin 2014, p. 61) possess Buddha-Nature also explains the development of "the doctrine on insentient being". It can be said that the theoretical explanation is detailed. However, these studies rarely relate AI robots to insentient things or use "doctrine on insentient beings" to justify AI theories. Based on the distinction between "sentient being" and "insentient being", AI can undoubtedly be an important part of insentient beings. It can provide a good theoretical basis for the issue of the relationship between Buddhism and AI.

With the argument that "Insentient beings can possess Buddha-nature", Master Hsing Yun has further developed the discussion that insentient beings can also become Buddhas. This discussion provides an important theoretical reference for exploring whether post-human beings can become Buddhas and whether Cyborg can also possess Buddha nature.

First, Master Hsing Yun advocates that "insentient beings" are the essence, characteristics, and function (體、相、用) of the Buddha's dharma body. He developed the saying of Zhanran and wrote about "flowers and trees have Buddha-nature" (花草樹木皆有佛性), "insects, fish, birds have Buddha-mind" (蟲魚鳥獸皆有佛心), "mountains, rivers, and earth are all Buddha-bodies" (山河大地皆為佛體), and "the sun, moon, wind, and thunder are all Buddha-function" (日月風雷皆為佛用), in order to illustrate that insentient beings also have Buddha-nature. Master Hsing Yun emphasizes the Buddha nature of plants. He cites Charles Darwin's (1809–1882) "The tendrils of plants have the ability to move on their own" to prove that insentient plants also have "a lively and fascinating Buddha nature" (Master Hsing Yun 2008a, p. 4). What Master Hsing Yun advocates is that all insentient beings are the Buddha's body that contains immense merit and virtue. Although they are insentient, they are all the Buddha's essence, characteristics, and function.

Secondly, insentient beings are the evolution of human self-nature (svabhāva, 自性). Master Hsing Yun pointed out that the fundamental issue of whether insentient beings can become Buddhas is if people themselves can become Buddhas. Everything in the universe evolves from our own self-nature, and all insentient beings are in our hearts. Only if human beings become Buddhas, then the insentient beings that people see also become Buddhas.

Furthermore, Master Hsing Yun discusses another dimension of insentient beings in "Teaching by insentient beings" (無情說法). This means that insentient beings such as mountains, rivers, and flowers can explain Dharma to people. For example, the natural sequence of spring and autumn is to tell people the truth that "All worldly things are impermanent" (世事無常). This points out that another important aspect of sentient beings is to explain the Buddha's teachings to people and to help them become enlightened.

Master Hsing Yun's three interpretations of "insentient beings have Buddha-nature" undoubtedly provide an excellent theoretical basis for questions such as "will AI become Buddha". The "Doctrine of Insentient being" emphasizes the fact that Buddha-nature exists constantly and universally, not only in sentient beings but also in objects without feelings. Undoubtedly, AI is not an insentient being, it was created by human beings as a tool. When human beings eliminate egocentrism remove the boundary between the self and the other, and then look at the AI machine as a tool, they will find that it also embodies the Buddha nature. Thus, in Humanistic Buddhism, although AI is a technological product, it is also the embodiment of the perfect Buddha nature, just like human beings. This may provide some theoretical reference to the question of "whether AI can become a Buddha".

From Master Hsing Yun's explanation of the "Buddha-Nature of Insentient Beings", the following question can be further supported. Can the post-human being presented as a machine or semi-machine also be regarded as the essence, characteristics, and function (體、相、用) of the Buddha's dharma body? Post-human also follows the principles of "Dependent Origination and Emptiness" (緣起性空) and "All things lack inherent identity (self) "(諸法無我), can manifest the "thusness" (Tathatā, 真如) even though it is insentient. Secondly, post-human beings also reflect the evolution of human self-nature. All products made by machines, like everything in the universe, are projections of the self. They change according to the human mind. Moreover, the post-human cyborg can manifest the truth of the universe. Although cyborg has no sentiments, it can also show the Buddha's teachings.

4. Potential Dangers and Challenges of AI Artificial Intelligence on Humanistic Buddhism

4.1. The Humanist Crisis of "Strong AI"[5] and "Techno-Naturalism"[6]

After analyzing the case of Humanistic Buddhism using AI as well as the correlation between Humanistic Buddhism and theories derived from AI, it is also necessary to consider the potential pitfalls that may be brought about by the rapid development of AI in recent years.

The cases used in analyzing the use of AI in Humanistic Buddhism above are basically "Artificial Narrow Intelligence", which mostly focuses on a single task and performs repetitive work across a range of functions. It usually learns from large amounts of data, typically from the internet, for example, yet only learns in the specific area in which it has been programmed. For instance, the Buddhist scripture AI translation software and the answers provided by the AI Monk in the virtual practice world are all operating within the scope of their programmed roles and not relying on their own will to make decisions. So, they belong to the artificial narrow intelligence.

But in contrast to Artificial Narrow Intelligence, there is "Artificial General Intelligence" (Strong AI), an AI capable of performing any intellectual task that humans can accomplish, and it will also lead to more AI ethical crises. In March 2023, more than 1000 technologists called for "all AI labs to immediately suspend training for at least six months on AI systems more powerful than the GPT-4," Carissa Véliz of the Institute for AI Ethics at Oxford University warned that AI could create misinformation at a very high rate. The White House announced in a statement on 4 May 2023 that AI is one of the most powerful technologies of our time, but in order to seize the opportunities it presents, we must first reduce the risks it poses. From this, it is easy to see the pitfalls of Artificial General Intelligence, its power can bring misinformation and risk. More importantly, this strong AI with self-awareness, autonomous learning, and autonomous decision-making abilities needs to be regulated in terms of its rights, obligations, and responsibilities. Also, the ethical relationship between human beings and intelligent machines needs to be re-examined.

Apart from these specific problems that may be brought about by strong AI, it might also lead to a conflict between the religion of technology and traditional humanistic religions. With AI being considered as physical functionalism, some Western theorists even

strengthen the efficacy of AI to a kind of "scientific religion". They reduce human intelligence to data streams and even regard all living beings including humans as algorithmic systems. So human consciousness is regarded as a subsidiary phenomenon of physical activity, and also as an illusion of subjectivity. The traditional religious system based on ontology and epistemology has been challenged.

Thus, by continuing the tradition of scientific religion, when strong AI is further developed, it is also likely to cause the cult of science and technology, and thus physical functionalism will be further strengthened. It attempts to subvert the humanistic tradition of Buddhism with a new instrumental rationality. Although what was discussed above does not show this extreme trend of post-humanism, it cannot be ignored that AI may generate another kind of physical functionalism. However, Humanistic Buddhism is based on humanism. It advocates equality in caring for all sentient and insentient beings. So, it is opposed to technological naturalism.

4.2. The Paradox between "Unity of Mind & Body" Practice Tradition and "Strong AI"

The "scientific religion" strongly emphasizes the uniqueness of science and denies the subjective value of humanity. However, the transcendence pursued by Chinese religions does not rely on external forces but requires harmony between inner humanity and the natural order. In Chinese philosophy, since Zhuangzi's "The Theory of Qiwu" (齊物論), it has been said that "I have lost myself" (吾喪我). Through the loss of the social self, people become the unconscious or original self, thus achieving a state of mind-body unity. Taoism uses the concept of "Xing Ming Shuang Xiu" (性命雙修) to show that the innate state of life is originally integrated. Taoist practice emphasizes the inner exercise of consciousness to open the connection with the universe. However, strong AI may interfere with the physical functions of the human body from the outside. By placing mechanical materials into the human body, this approach may exacerbate the conflict between mind and body. This is far inferior to a gradual practice that will ultimately lead to a stronger body.

The Buddhist tradition also emphasizes the theory of "non-duality of mind and body" (a-dvaya; non-duality). Western Buddhist scholar C.W. Huntington has pointed out that: "Not only is consciousness an unavoidable 'nothingness' in our experience of self and world; mental and physical objects are as well a similarly unavoidable 'nothingness' in consciousness. It is both the observer and the observed to appear as what they are not, for neither exists outside of their relationship with the other" (Edelglass and Garfield 2009, p. 311). It is not difficult to find that the Buddhist discussion of mind and body is directed towards the nature of nothingness. It eliminates the dualism between mind and body and regards them as oneness that is essentially empty. Buddhist doctrine indicates that human beings are born from the "convergence of the five aggregates" (五蘊和合)[7]. So, body and mind cannot be viewed in isolation. Unlike the Western "mind-body dualism" since René Descartes, and at the peak of technological naturalism, Buddhism proposes a way of integrating mind and body.

Master Hsing Yun also emphasized the importance of the "purification of mind and body" (身心淨化), from the purification of mind, body, and pure Land. He quoted from the Vimalakirti Sutra: "If a Bodhisattva wishes to attain the Pure Land, he should purify his mind, and as his mind is pure, the Buddha's Land is pure" (Vimalakirti Sutra 2021).[8] This is to emphasize the importance of cultivating one's mind in order to purify it and then to reach the Pure Land, which is based on the non-duality of mind and body.

The extreme "techno-naturalism" derived from AI emphasizes bodily transformation and external forces while neglecting the importance of moral edification. Therefore, it cannot be overlooked that AI and post-human ethics may lead to a challenge to humanism. However, because of this potential crisis of human subjectivity, Humanistic Buddhism offers a solution. It contains humanistic concerns and a non-dualistic view of mind and body, which can save humanity from the sacredness of technology.

4.3. Potential Realistic Problems of Artificial Intelligence Application in Humanistic Buddhism

In Sections 4.1 and 4.2, the development of AI into 'strong AI' and the potential for hidden risks has been explored. Here, the possible problems of AI application in Humanistic Buddhism should be further pointed out.

Firstly, many religions have previously used AI Monk and cutting-edge media technologies with a certain utilitarian purpose. According to relevant research, the emergence of AI Monk "Pepper" in Japan is to cope with the social problems presented by Japanese society, such as the aging of the population, the shrinking of the labor force, etc., and the temple structure has also shown an unstable tendency, with fewer and fewer young monks being willing to engage in the business of their family temples. Thus, robots appeared as a remedy for the social problems and the decline of Buddhists in Japan.

In addition, AI Priests have also appeared in Western Christian societies, and their appearance is partly due to the need to deal with the problems that have arisen in the Christian religion. In *Appearance and Reality in AI: the Case of the Robot Priest*, it is argued that contemporary scandals related to Christianity have occurred frequently, leading to a breakdown of trust in churches or pastoral organizations. As a result, the original religious community has experienced problems, and its functions need to be replaced.

Therefore, it can be said that there is a necessity for the emergence of robotic technologies such as AI Monk. On the one hand, they are usually used by religions to cope with some problems arising in modern secular societies, such as facing a decline in the number of believers or a weakening of religious life, etc. By adopting the most advanced and interesting technologies, it is possible to attract a part of the public and promote Buddhist propaganda more conveniently.

On the other hand, these internal problems of religions are related to the political, economic, demographic, and other major problems of society. The emergence of AI Monk not only comes from the rapid development of technology, but also the potential driving force of applying it to religions is the many problems of modern society. Because of the need to satisfy the religious demands of modern people, as well as to cover up social problems, AI Monk has taken on many practical functions. Although Humanistic Buddhism's use of AI tools does not directly reflect a utilitarian tendency, it still raises the concern that the combination of AI and Buddhism is partly to cover up the weakness of the religion, or will tend to make the development of the religion more utilitarian?

In addition to the utilitarian tendencies that AI Monk may contain, it is also important to pay attention to AI-assisted virtual Buddhist communities. As Grieve points out in his study of virtual Buddhism in the game "Second Life", Buddhist practice communities in virtual game worlds, and even Buddhism in the United States from the second half of the twentieth century until now, have a cybernetic inner core. He cautiously points out that "What is at stake is the ability to understand convert Zen as an existentially authentic media practice and not reduce it to Network Consumer ideology or a popular form of orientalism" (Grieve 2016, p. 20).

Although Humanistic Buddhism is a home-grown Chinese Buddhism, it needs to raise thoughts on whether the online practice provided by AI-supported virtual Buddhist communities or game software can be understood as an effective mode of practice, or is just a simplified and entertaining way?

What I need to highlight here are the specific potential pitfalls that Humanistic Buddhism may encounter when using AI. The first is that AI Monk may be used to cover up practical problems or for utilitarian purposes. Secondly, it is necessary to be wary of the possibility that AI-assisted virtual Buddhist games or online practice spaces may become entertaining and superficial, as well as be cautious of their consumerist and orientalist tendencies.

5. Conclusions

The relationship between science and religion has always been regarded as contradictory but mutually advancing and complementary. Humanistic Buddhism embodies the

contemporary interaction between religion and scientific technology both in theory and in practice. "Buddhism is not only incompatible with modern science but also contains those things that modern science does not. This should be a correct concept of Buddhism" (Cheng 2018, p. 52). This points to the mutually reinforcing and complementary relationship between Humanistic Buddhism and modern science. As the most cutting-edge technology in modern science, AI, and the concept of post-humanism based on AI technology, should also be placed in the theoretical context of Buddhism.

The help that Artificial Intelligence gives to Humanistic Buddhism in spreading the Dharma is obvious. Especially in the present society, AI has facilitated the propagation of Humanistic Buddhism with technology. Through robotic monks, virtual VR media, AI translations of Buddhist scriptures, and Online Games and Virtual Practice Communities, AI has contributed to the development of Humanistic Buddhism from a technological perspective. Undoubtedly it is efficient, innovative, and widespread, enables the propagation of Buddhism across time and space, and facilitates the global spread of Humanistic Buddhism. And these are all manifestations of "Artificial Narrow Intelligence".

Buddhist doctrine can also support AI, the "post-human" ethics derived from AI technology resonates with Humanistic Buddhism. The above example of Master Hsing Yun's teachings shows a common emphasis on a sense of oneness and coexistence. It also contains an ecological concern with the desire to eliminate anthropocentrism. There is also a similarity between the Buddhist view of "life & death as unity" and the post-human theory. Because the post-human theory also seeks to eliminate the difference between life and death through body enhancement techniques. Furthermore, Master Hsing Yun's theory of "Buddha-Nature of Insentient Beings" regards insentient beings as the essence, characteristics, and function of the Buddha's dharma body. They are considered human self-nature and can explain Dharma to humans. That is why contemporary Buddhist theory opens a new space for discussing the controversial question of "whether insentient AI can become a Buddha".

In this way, the frontier technologies of artificial intelligence and post-human theory have demonstrated a mutually motivating effect with Humanistic Buddhism in both the technical and ethical dimensions.

However, the potential dangers of artificial intelligence cannot be ignored. "Strong artificial intelligence" and "technological naturalism" derived from AI pay too much attention to the scientific enhancement of technology and the external body, while neglecting the inner spiritual practice. Although the original post-human philosophy could eliminate the mind-body duality, physical functionalism creates a new mind-body dichotomy. It may contradict the Buddhist practice of "mind-body unity". Hence, Humanistic Buddhism also needs to keep a critical distance from science and technology. Humanistic Buddhism, as a case that deserves to be examined, provides a possible perspective for considering the relationship between contemporary religions and artificial intelligence.

Notes

[1] The preservation of traditional Buddhist scriptures has been rapidly transformed into an electronic database for Buddhist studies. Since 1977, Fo Guang Shan has been dedicated to the electronification of Buddhist scriptures and has edited the "Fo Guang Shan Buddhist Electronic Texts" (佛光山電子大藏經). By electronically uploading "the Prajna Sutra" and "the Dharma Flower Sutra" one by one, people are allowed to read Buddhist scriptures without the constraints of time and place. Notably, AI has already been used in the digitalisation of the CBETA, and from 2023, the CBETA Foundation has started to strongly advocate the use of AI in CBETA, such as the use of AI auto-punctuation in AI CBETA online (2021–), the use of participles (2022–), and the promotion of the AI Buddhist Text initative. See: Huimin, Buddhist Studies in the Age of AI: An Example of CBETA (Electronic Buddhist Texts Integration) and the Yogacharya Dhammapada Database, 21 November 2023, online resource. With

the precedent of AI CBETA, there is a great tendency for Humanistic Buddhism to use AI tools to promote the AI version of the Fo Guang Shan Buddhist Electronic Texts.

2   Fo Guang Shan Institute of Humanistic Buddhism (佛光山人間佛教研究院): Founded in 2012, the Fo Guang Shan Institute of Humanistic Buddhism aims to promote the Buddha's original intent of Humanistic Buddhism; to establish a system of contemporary Humanistic Buddhist thought advocated by Venerable Master Hsing Yun; to collect and compile academic research literature on Humanistic Buddhism; and to promote the popularization of Humanistic Buddhism thought". See http://www.humanisticbuddhism.org/ (accessed on 17 December 2023).

3   "Fo Guang Dictionaries" (佛光大辭典): It is the most authoritative and comprehensive Buddhist dictionary so far, supervised by Master Hsing Yun and edited by Venerable Ci Yi of Fo Guang Shan. See https://etext.fgs.org.tw/Sutra_02.aspx (accessed on 2 May 2023).

4   Venerable Miao Guang's lecture: *The English translation of the Buddha's Great Dictionary with the support of artificial intelligence*, online lecture on 7 October 2022.

5   "Strong AI": Strong AI aims to create intelligent machines that are indistinguishable from the human mind.

6   "Techno-Naturalism": The dualism of René Descartes (1596–1650), in which animals were considered as machines, was followed by the argument of Julien Offroy De La Mettrie (1709–1751) that "man is a machine". In the second half of the 20th century, physicalism and naturalism became the dominant doctrines. Technological naturalism holds that man is a naturally evolving creature and does not have an eternal human natural. Technological calculations are more reasonable and reliable than people' own intuitive experiences. It attributes intelligence, morality and sensibility to physiological elements, which can be explained by physical and biological sciences. As a result, technological naturalism has turned into another stage of anthropocentrism, which considers technology to be higher than human nature, thus deconstructing the eternal nature of human beings.

7   "Convergence of the five aggregates" (五蘊和合): Our life is the convergence of the five aggregates.' (Master Hsing Yun 2019) The five aggregates refer to all things in the universe.

8   Vimalakirti Sutra, vol. 1, *The Taisho Collection* (大正藏), vol. 14, p. 538, in Chinese: 佛法不僅不與現代科學相違背，且包含了現代科學所不及者，這是我們對佛教應當建立的一個正確的觀念.

References

Baffelli, Erica. 2021. The Android and the Fax: Robots, AI and Buddhism in Japan. In *Itineraries of an Anthropologist: Studies in Honor of Massimo Raveri*. Edited by Giovanni Bulian and Silvia Rivadossi. Venice: Edizioni Ca' Foscari, p. 249.

Braidotti, Rosi. 2013. Posthuman humanities. *European Educational Research Journal* 12: 1–19. [CrossRef]

Chen, Jianhuang. 2019. The Realization of the Pure Land of Humanity and the Internationalization of Humanistic Buddhism: The Future of Humanistic Buddhism. *Humanistic Buddhism Summit Forum*, 95–107.

Cheng, Gongrang. 2018. *A Study of Master Hsing Yun's Humanistic Buddhist Thought*. Kaohsiung: Buddha Light Culture Co.

Du, Yasui. 2021. Experience the AI Intelligent Screen and VR Technology Interaction at Buddha's Light Mountain in Spring. Available online: https://ynews.page.link/sJUP (accessed on 19 February 2021).

Edelglass, William, and Jay Garfield. 2009. *Buddhist Philosophy*. Oxford: Oxford University Press.

Foucault, Michel. 2005. *The Order of Things: An Archaeology of the Human Sciences*. London: Routledge.

Gould, H., and H. Walters. 2020. Bad Buddhists, Good Robots: Techno-Salvationist Designs for Nirvana. *Journal of Global Buddhism* 21: 277–94.

Grieve, Gregory, and Daniel Veidlinger. 2014. *Buddhism, the Internet, and Digital Media: The Pixel in the Lotus*. London: Routledge.

Grieve, Gregory. 2016. *Cyber Zen: Imagining Authentic Buddhist Identity, Community, and Practices in the Virtual World of Second Life*. London: Routledge.

Hughes, James J. 2013. Transhumanism and personal identity. In *The Transhumanist Reader*. Chichester: Wiley, pp. 227–34.

Hughes, James J. 2019. Buddhism and Our Posthuman Future. *SOPHIA* 58: 653–62. [CrossRef]

Jing, Jue. 2021. Lèngqié shīzi jì (楞伽師資記). In *The Taisho Collection* (大正藏). 85 vols. Beijing: China Book Store Publisher.

Lin, Wushi. 2014. From Ji-zang to Fa-jung: A profile of Chan's formation—The change and process of non-sentient beings possess Buddha-Nature. *Satyābhisamaya* 69: 61–117.

Macer, Darryl. 2012. Ethical consequences of the positive views of enhancement in Asia. *Health Care Analysis* 20: 385–97. [CrossRef] [PubMed]

Master Hsing Yun. 2006. *The Four Transformations of Modern Buddhism*. Humanistic Buddhism Series 5: Humanity and Practice; Taipei: Gandha Samudra Culture Company, p. 5.

Master Hsing Yun. 2007. *The Language Norms of the Buddhist Jungle 6*. Taipei: Gandha Samudra Culture Company.

Master Hsing Yun. 2008a. *Buddhism and Natural Ecology*. Humanistic Buddhism Essay 5. Taipei: Gandha Samudra Culture Company.

Master Hsing Yun. 2008b. *Lectures on the Platform Sutra of the Sixth Patriarch—Paying the Testament*. Beijing: New World Press.

Master Hsing Yun. 2019. *Buddha-Dharma Pure and Simple*. Kaohsiung: Fo Guang Shan Institute of Humanistic Buddhism, vol. 1.

Master Hsing Yun. 2020. *Buddha-Dharma Pure and Simple*. Kaohsiung: Fo Guang Shan Institute of Humanistic Buddhism, vol. 2.

Rajakishore, Nath, and Riya Manna. 2023. From posthumanism to ethics of artificial intelligence. *AI & SOCIETY* 38: 185–96.

Ross, Benjamin. 2020. Transhumanism and Buddhist Philosophy: Two Approaches to Suffering. In *The Philosophy of Transhumanism*. Bingley: Emerald Publishing Limited, pp. 147–66.

Shi, Anbin. 2016. Virtual reality technology as a communication medium: Theoretical traceability and practical reflection. *People's Forum—Academic Frontier* 24: 11.

Shi, Juexi. 2003. A New Platform for the Propagation of Buddhism: The Internationalization of Humanistic Buddhism from Buddha's Light Satellite Television to Human Satellite Television. *Pu Men Xuebao* 14: 333–44.

Shi, Qiufeng. 2021. Humanistic Buddhism in the Age of AI lecture at Nikkoji Temple. *Published Online*, March 10.

Tang, Zhongmao. 2017. Discussion of Secularization in the Development of Humanistic Buddhism. *Journal of Humanistic Buddhism—Art and Literature* 7: 106–25.

Tong, Sau Lin. 2016. Zhan Ran's Doctrine of the Buddha-nature of Insentient Beings and the Question of the subjectivity of Buddha-nature. *International Journal for the Study of Chan Buddhism and Human Civilization* 1: 209–39.

Tong, Sau Lin. 2017. Zhan Ran's Doctrine of the Buddha-nature of Insentient Beings and the Notion of Non-duality of Matter and Mind. *Studies in Humanistic Buddhism* 8: 225–64.

Vimalakirti Sutra (維摩詰經). 2021. vol. 1, *The Taisho Collection* (大正藏). 14 vols. Beijing: China Book Store Publisher.

Yang, Jing. 2016. Internet+Buddhism: The Birth of Monk Xian Er of Longquan Temple. *Office Automatio* 326: 15–21.

Zhi, Mu. 2022. Buddhist Dictionary Translation Talent Training Artificial Intelligence to Enhance Translation Effectiveness. April 1. Available online: http://www.lnanews.com/news/142108 (accessed on 1 April 2022).

Zutang ji (祖堂集). 1991. Zhengzhou: Zhongzhou Ancient Books Publishing House.