Interview with Manuel Herz*

***Conducted and/or edited by the Volume Editors.**

Volume Editors: Your work spans research and practice across various territories around the globe. What have you learned from your latest project—the Tambacounda Hospital in Senegal?

MH: Tambacounda hospital is the main hospital of eastern Senegal, serving the region of Tambacounda with its 700,000 inhabitants, and beyond. The Josef and Anni Albers Foundation, together with its own NGO "Le Korsa", has been supporting the hospital for more than fifteen years and is currently constructing a major new pediatric and maternity clinic as part of the hospital, designed by my architectural office, Manuel Herz Architects. With approximately 150 beds, the clinic is scheduled to open towards the end of 2020.

The story of the planning, construction and implementation of the new hospital clinic gives an account of the context of the wider urbanization processes taking place in Tambacounda and in eastern Senegal. Instead of seeing the clinic purely as medical infrastructure (and therefore seeing it as just serving the issue of public health, and hence of SDG 3—good health and wellbeing) I want to understand its process of design and construction as participating in the overall development of sustainable cities and communities. This also allows us to recognize the design and construction process in a much wider dimension, looking at questions such as: Who is involved in the design process? Who are the construction workers? Where does the money come from? And which other projects get initiated in the context of the hospital?

My office has been involved in planning and research projects throughout the African continent for several years, working, amongst others, in the context of forced migration. Nevertheless, I do not consider my architectural practice as specializing neither in "humanitarian architecture", nor in the health sector. What unites my projects, whether they are located in Europe or on the African continent, and whether they deal with housing, commercial or public programs, is the fact that their programming and design is developed from an in-depth analysis of the urban dimension and the urban condition they are embedded in. I believe that it is this urban focus that lies at the origin of each project, which allows the pediatric and maternity clinic of the Tambacounda Hospital to operate also as an urban catalyst.

VEs: Tell us about the background and context of this project.

MH: The city of Tambacounda with a population of approximately 100,000 inhabitants is the capital of the eponymous region of eastern Senegal. The city was founded at the end of the 19th century and marked one of the main stops on the Dakar–Niger train line that allowed connection between the Niger River in Mali and the harbor of Dakar, and hence, connection to a global trade network. A standardized master plan was used for the establishment of Tambacounda, similar to other French-founded cities along the train line, with the colonial European neighborhoods being located in a lush environment to the north of the train line, and the much denser and dustier African city located to the south of the train line, the train line hence acting as a cordon sanitaire (Ross 2015; Dupon 1964). Until today, that difference within the urban fabric is markedly visible, with the colonial-era racial segregation being today replaced by an economic segregation.

Tambacounda region is the largest of the fourteen regions in terms of geographic size, being roughly the size of Switzerland, but is thinly inhabited with only 700,000 inhabitants. It is also the least developed region of Senegal, with low levels of health, income and education indexes, and a human development index comparable to some of the least developed countries (https://globaldatalab.org/shdi/shdi/).

The city's main connection to the rest of the country is with the national highway passing through it, as both the train line and the airport have been inoperative for years. The national highway N1 from Dakar to Tambacounda continues east to Mali, or forks off to the mountainous area of Senegal's southeast. Economy of Tambacounda is dominated by small scale trade and market activities, as well as agriculture. Everyday urban life has a strong traditional dimension, and could be described as semi-rural, as for example, animal husbandry persists even in the inner city, whereas Western-influenced activities of amusement, such as restaurants, bars, branded shops and western-styled consumerism, is very rare or virtually non- existent.

The city and its region have a harsh climate with an extended period of very high temperatures, and virtually no rainfall from October to June, and a brief rainy season from middle of July to middle of September that brings slightly lower temperatures, though generally little wind (Les Atlas Jeune Afrique: Atlas du Sénégal 1983).

The city of Tambacounda, as well as its rural hinterland, are experiencing an out-migration to the larger urban centers in the west of Senegal. Due to the low overall development and few economic perspectives, amongst other reasons, Tambacounda has suffered from a "well-established flow of poor rural migrants to Dakar and

abroad to find work [that] will accelerate, driving Tambacounda region further into a spiral of economic and environmental decline." (Wisner et al. 2015).

VEs: We understand that the project also received support from the Albers Foundation. What can you tell us about the role they played?

MH: The Josef and Anni Albers Foundation, established in 1971, is responsible for the heritage of the renowned Bauhaus artists of Josef and Anni Albers and pursues activities in their spirit (Coxon 2018; Weber 2013; Albers 2013). Located in Connecticut near New Haven, it organizes and supports exhibitions and publications of their namesakes, as well as sponsoring younger artists through residency programs. Through its affiliated NGO "Le Korsa" it has been supporting activities in the health sector, in education, and in the arts in Senegal. Even though the Albers had no particular relationship with Senegal, the Albers Foundation sees their activities in the country as following the explorative and humanistic spirit of the two artists. The foundations have constructed and supported several rural clinics in eastern Senegal, have supplied Tambacounda Hospital with substantial medical equipment, constructed schools in rural eastern Senegal and a girl's boarding school and education center in Tambacounda, have constructed a community-based radio station, and have constructed a major artist residency facility in the rural village of Sinthian that attracts upcoming artists from all over the world. The long-time engagement, the thoughtfulness of their work, and the fact that they are very locally engaged have allowed them to develop a network of local partners and deep trust in the local population and administration.
The project started in 2017, when my office was approached by the Albers Foundation and invited to participate in a competition for the design of the new maternity and pediatric clinic at the Tambacounda Hospital. The head of the foundation, Nick Weber, mentioned in his invitation email that the ten participating architects will need to understand their engagement in a spirit of philanthropy, as little or no money will be earned with this project. After thoroughly considering my participation, I responded by writing that as much as I am interested in the region, and as much as I understand the importance to do pro bono work, I decided to withdraw from the competition; I disagree with a process of asking ten firms located in Berlin, Basel, Paris, New York, and London for an architectural "solution" for a place they have never been to, for a climate and a culture they do not know, and for doctors and patients that they have never spoken to. Instead of the competitive approach, I would have preferred a collaborative approach to develop an architectural response to a

need that is anyway not yet clear. I thanked the foundation for their invitation and wished them good luck with the project.
A few hours later, I received an email from Nick Weber telling me that my message had given him much food for thought, and that we should meet. What followed was a wonderful meeting, where we exchanged our views of how such a project could, or should be approached, and different experiences of working in Senegal and Sub-Saharan Africa. Out of that very inspiring discussions eventually grew the appointment to work on the clinic. Without intending it, the rejection to participate in a competition led to the commission with that very project. But it also revealed an institution that is not fixed in its own processes and pathways, but a foundation that reacts to comments and critiques by others, an organization that considers the input of others, an organization that listens.

VEs: In what ways does the project articulate the relationships between design and research?

MH: Architectural design is often based on a process that manifests a relationship of power, establishing a clear order of control. The architect— often together with the client—is designing for users who will inhabit the building. The link between the architect and the users is often feeble at best. How can architectural design be developed in a process that is less imposing, less top-down, a process that makes fewer assumptions about a local condition without having observed it first, a process that allows to alter its course, that listens to the stakeholders involved?
After being commissioned with the project, I travelled to Tambacounda to learn as much as possible on aspects such as climate, the fauna and flora, and construction methods, but also on the local geography, economy, urban fabric, the local culture, traditional housing typologies, existing rural clinics and the regional and local stakeholders. We made a detailed analysis of the existing hospital buildings, their benefits and drawbacks, the exterior spaces of the hospital and how they are being used. We sat with the doctors and nurses of the existing pediatric and maternity clinics and asked them about their needs and how they would organize their respective clinics. The medical staff in fact made the first sketches of a program and a functional layout for their new clinics. All this information we collected, arranged and edited, and put together as a research book. Back home in Switzerland, we added information on the structure and organization of other clinics and a comparative analysis of operation blocks and delivery rooms.
Some of the main lessons of this survey was the significance of social and communal spaces for lingering, as the young mothers often came with their families and stayed

in the hospital for several days. How the design of the building would integrate the climate would be of utmost importance. But more than just reacting to the climate, we could imagine a building that would create its own climate, though without the use of air conditioning (except for the operation section and the intensive care units). Thirdly, we wanted to create building that would react to the existing (circular) buildings on site, without replicating them, but also offer a system for future further extensions. And last but not least, we wanted to develop a design that could be built (at least to the largest possible extent) using technology and building materials that were available locally and with local team of construction workers, so that most of the invested funds would remain within the region.
Based on these premises, we developed a design for the building, with a two-story volume that is as long as possible, and as thin as possible, curving around the existing circular buildings, as well as around a major tree. The extended length of the building allows us to arrange several communal and social spaces along a main corridor, therefore providing many different kinds of spaces of waiting and lingering of varying sizes to be always nearby. The narrowness of the building allows us to have rooms to only one side of the corridor opening the possibility of cross-ventilation for every room. The corridor is always located on the concave side in the curvilinear layout, and is shielded by a perforated brick wall as a brise-soleil that allows the wind to pass through, but keeps the sun and the rain out. The roof above the upper floor has a double-vaulted construction, with the inner vault made of concrete and the outer vault made of metal. Combined with ventilation holes in the inner vault, the double-vaulted construction produces a heat buffer from the sun and creates a chimney effect that pulls out the hot air from the rooms and allows cooler air to enter via the perforated areas of the walls. The building hence starts to regulate, or even create its own microclimate. Beyond that, the curvatures of the volume and the brise-soleil walls create a playful geometric pattern and sensual contrast of light and shadows.

VEs: What was your experience in getting planning permission for the project?

MH: A few months after my first visit, I returned to Tambacounda to present the design to the directrice of the hospital, to the medical and administrative staff, as well as to the governor of Tambacounda region. About ten people from hospital staff were seated in a meeting room waiting for the governor, who was delayed. He finally arrived, dressed in a military-styled uniform, and accompanied by his personal entourage. I had prepared a screen presentation of the design and brought a model from Switzerland. Seeing the governor walk into the room in a very self-

assured way, I feared though, that he would barely have the patience or time to listen to my presentation, and probably even try to explain the project himself, without having seen it.
It all developed very differently, though. Not only did he take the time to listen to my twenty-minute presentation without interrupting me a single time, after this, he gave his understanding and assessment of the project, which was very sharp, to the point, and gave evidence that he had fully understood all the details and the drawings. But most surprising was what happened then. He asked every single member of hospital staff present, from the doctors, to the nurses and midwifes to the janitor, for his or her opinion of the design proposal. They all answered in very nuanced and precise ways, with the midwife, for example, proposing a different arrangement of the doors, and the doctors commenting on the flow of clean and unclean materials in the operations block. Their comments clearly indicated that the hospital staff had understood the layouts, something that is often quite hard without prior training in architectural drawings. This round of comments lasted approximately two hours, with the governor showing little signs of impatience, listening carefully to the reactions in the room. When eventually all members of staff had spoken, he gave a final summary and then ended by saying that he will grant us planning permission on the condition that I respect all the comments that have been mentioned and make the necessary modifications! This is a remarkable and quite wonderful combination of authoritarianism and direct democracy. The governor knows that he has the power to grant planning permission by simple exclamation, through the prerogative of his position. On the other hand, it was a process where everybody who had a stake in the project could voice his or her opinion, critical or positive, and could make proposals for adjustments that would be integrated into the design. This power to speak did not depend on hierarchy or on a rank, but at least for the two hours of the meeting, everybody's voice was heard. It was also an exercise in listening. Not only did the governor listen to all remarks, but by making the planning permission contingent on me incorporating the necessary changes, he made sure that I listen to the stakeholders as well.

VEs: Who built the building? Where did the money go?

MH: With its approximately 3000 sqm of floor area, its two stories and its challenging design, the Maternity and Pediatric Clinic for the Tambacounda Hospital represents one of the largest and complex constructions currently being built in the region. To construct the building, we selected Magueye Ba, a contractor that the Albers

Foundation had already previously worked with, and who has become a central figure in the implementation of this, and several other projects for the foundation.
Magueye Ba's story is a fascinating one. He grew up in western Senegal, to a father who was a taxi driver, and a mother who received little formal education. Magueye went on to study medicine in Dakar. After the completion of his studies, he did not decide to stay in Dakar, nor go to one of the larger hospitals in the country, but rather decided to move to eastern Senegal and open a village clinic in the rural area of the country. He gained local trust when he saved a young girl from dying by giving her the proper medical care. In the village of Sinthian, he constructed a clinic with the support of the Albers Foundation. It turned out that he was not only a good medical doctor, but also an excellent organizer and had a good understanding of craft and construction. In the following years, Magueye Ba continued to be involved in several construction projects for the Albers Foundation, constructing, for example, the award-winning Thread Artist Residency and Cultural Centre, designed by the American architect Toshiko Mori. Today, Magueye Ba is a contractor by day-time, managing the logistics and a staff of twenty people on the construction site of the Tambacounda Hospital, and being a village doctor by night-time. The commitment that Magueye shows to the projects, to the region and to its people is overwhelming and has earned him much praise and respect in the region.
Magueye Ba has put together a team of craftsmen and workers for the construction site that are all locally based. The team has worked together before, and it bestows them with a shared trust and a mutual reliance. It also means that virtually all the budget of the hospital remains in the region. Instead of the Albers Foundation hiring a construction troupe from China or France, which would have been obvious and expectable with a project of that size, relying on a network of local contacts and key people that they had affiliated with over their many years in Senegal, had ensured that the project is not only produced more reliably, but also fully embedded in a local context, in terms of benefit to the local economy, in terms of trust and acceptance by the local population, and in terms of a collaborative implementation.

VEs: What can you tell us about the façade of the building?

MH: One of the central aspects of the hospital design is the perforated brick wall. Not only does it play an important role in the visual appearance of the building, but more importantly it regulates the climate of the building and shields the main corridors from rain and sun. Because of the importance to the building, and the fact that this kind of brickwork was new to the contractor, we asked him to build a test façade. With this test façade, we wanted to verify the structural capacity of

the brickwork, understand the effort it took to create the bricks and the wall itself, study the amount of rain and sun that it lets in, and examine its visual qualities in detail. We sent the contractor drawings for a section of the wall of approximate 10 m in length and 4 m in height, and asked him to build it somewhere in a back area of the hospital compound. I would examine it there during my next trip in two or three months. During the following weeks we received photos showing the progress of building the test façade. Subsequent photos showed more of the façade, but also left us wondering where Magueye Ba was building the wall, as we did not recognize the site. Our questions hereto were left unanswered. Eventually we received the photos of the finished wall, and were startled, or even stunned. Not only was it clear from the photos that the test façade was built somewhere in the rural regions of eastern Senegal, outside of Tambacounda, it was also not just a wall! Magueye Ba had extended the façade by three additional walls and a vaulted roof to create a small building; it had become a village school in rural Senegal. Knowing that the small village of Makabing Sidi, approximately one hour south of Tambacounda, needed a school, Magueye Ba had decided to build the test façade in that village and to extend it into a school. He had taken my 'Western' logic of erecting test facades—that are usually torn down after having looked at them for a short while—and translated it into his logic of thinking about the needs of the local community. This hybrid test façade—school, was also a hybrid in terms of design. My façade design with slightly changed proportions and extended according to the design of Magueye Ba. The meeting of different minds, interests, and logics had produced a completely new outcome that is characterized by hybridity and somehow due to serendipity, and in a certain way is much more beautiful than if it had been a pure object. The test façade became much more meaningful by gaining the program of a village school and an otherwise standard village school gained comfort and quality of climate and light through the use of the perforated bricks and the vaulted roof. Magueye Ba and myself can now claim joint authorship to a small school in Makabing Sidi.

VEs: What about the hospital staff—does the building provide provisions for them in terms of housing or other amenities?

MH: The medical and administrational staff of Tambacounda Hospital is Senegalese but mostly not from Tambacounda itself, having often studied in the universities in Dakar, St. Louis or Thies. Educated in and used to cosmopolitan life in Senegal's coastal urban centers, moving to Tambacounda is a major shift for many of the hospital's employees. They are often located many hours of travel from the rest of their families and cannot use the facilities and comforts that they were used to

in Dakar or the other cities in the west of the country. Restaurants and venues for nightlife or recreation hardly exist in Tambacounda, and neither do shops or branded consumer goods. Residential typologies are also often substandard. This perceived low quality of life combined with the harsh climate in eastern Senegal makes Tambacounda a city disliked by potential hospital staff. The hospital has problems attracting employees. The ones that come are often young, are hence, relatively unexperienced and frequently do not remain long, moving to another hospital as soon as an opportunity arises.

The Albers Foundation understood that the construction of a new clinic is not sufficient in itself. What use is a new clinic when it is understaffed and when the doctors are permanently rotating. Advised by the directrice of the hospital, it initiated the design and construction of staff housing that can be made available to employees. The new housing aims to deliver residential spaces with a high standard, in close proximity to the hospital facilities. Four single-family houses and a communal/collaborative housing unit for six tenants will be constructed starting in spring 2020. The design for the housing is inspired by the weaving and textile art of Anni Albers on the one hand, while also reacting to the existing urban fabric and architectural typologies of Tambacounda. It consists of a series of interconnected single-floor volumes, open courtyards and covered exterior spaces that create a low-rise, residential carpet typology. Every room is exposed to at least two exterior sides, allowing every space to be naturally cross-ventilated, obviating the need for air-conditioning. The bed rooms are arranged around living rooms, shared communal spaces and exterior courtyards. While the single-family homes allow doctors to move to Tambacounda with their families, the collaborative housing typology gives shared resources, such as a large living room and vegetable garden, to hospital staff while also providing sufficient privacy in the individual living units. Consistent in the spirit of a textile weaving, the overall arrangement of the housing is in an orthogonal geometry while sharing the perforated brick patterned walls and the vaulted roofs of the nearby maternity and pediatric clinic.

The staff housing represents a crucial element for the hospital project, but also goes beyond that. It aims at attracting highly educated staff to move to Tambacounda, raising the quality of life in the city and trying to reverse a trend of out-migration. We understand that there is a close relationship between health and housing. When speaking about his medical NGO working in disenfranchised communities, the American medical anthropologist and physician Paul Farmer is quoted saying "We're building housing (Cary 2017)". Farmers understood that housing can have

a fundamental impact on well-being. To develop a better quality of housing is also improving general conditions of public health.

VEs: What other insights emerged from this project for you?

MH: "Humanitarian Architecture" has a long history and has become a well-established part of our discipline. Being very much aware of the blurry boundaries of this concept, it can include activities such as architects donating their architectural expertise to NGOs, to slum upgrading, to the construction of schools, clinics or low-cost housing in disenfranchised regions, to the emergency response after disasters. Following the period of glossy 'starchitecture' (Heathcote 2017) of the 1990s and the early 2000s, and especially with the recession of 2008, it has become a popular activity, practiced often for example in the universities of the Western world. Dozens of design studios in numerous schools offer the chance to build a kindergarten in a slum of an African city, or a small orphanage in a region in Asia, recently destroyed by an earthquake or a tropical storm. This "humanitarian turn" of architecture is often seen as inherently virtuous, and while many of these projects do indeed bring benefit to a local population, it doesn't absolve us from our responsibility to question and critically assess this practice. What are the potential contradictions? How can doing good also have repercussions that are counterproductive?
In the case of the Tambacounda hospital, a number of such questions arise. We can ask first of all, if it is wise that a private organization constructs the clinics and hospitals, which is a task that by the nature of health policies should rather be situated within the realm of the government, and hence, in the public realm. It runs the danger of a private organization influencing public health policies, but it also runs the danger of the state withdrawing even further from its own responsibilities of providing these services to its populations. Another question we need to ask is regarding my own involvement. Why not hire a Senegalese architect? Would this not offer an opportunity to the local scene of architects, while also making sure that more money remains in the region?
These are complicated questions, to which there are no easy answers. We could respond by saying that all the engineers, technical planners, site supervisors, and builders involved are Senegalese, and that this already is a major step in involving local knowledge. Furthermore, there are no architects in Tambacounda. For most Dakar-based architects, the eastern province of Tambacounda is also something like a foreign country, and an exchange of experience is always beneficial to all sides. Regarding the question of the foundation's involvement in public health, we could respond that it would be cynical to keep the medical services on a

low level just to "teach" the government they should meet their responsibilities (which they are anyway trying to do). We could also respond by saying that the involvement of an international foundation and a foreign architect gives easier access to funding and raises awareness for a region that few people outside of Senegal are aware of. Nevertheless, it becomes clear, that these answers cannot remove every contradiction. The "humanitarian turn" of architecture brings in new inconsistencies, new complications that we need to be aware of, and that we need to face honestly and transparently, even knowing that we can never completely solve them.

What becomes clear in the narrative of the design, building, and implementation process of the pediatric and maternity clinic of Tambacounda is that this process is about much more than just a clinic in a city of eastern Senegal. We start to understand that this clinic sits in a context of additional building activity, social interventions, and collaborative processes that affect a substantial part of the population, and that sets a benchmark for how to do architectural and urban projects in general. The new clinic is inscribed in a multiplicity of other projects, whether they be a new village school in rural Senegal, a communal housing project in the city of Tambacounda, the first playground for eastern Senegal, and a collaborative planning process that can become a template for future projects. It impacts the local economy by making sure that the largest share of the budget is spent and remains in the region, while also giving local builders and craftsmen a chance to develop new skills. By giving employment opportunity and higher quality housing it makes allows that people do not leave Tambacounda for economic reasons, but maybe even draws more people to move to eastern Senegal. It is an example for how a clinic can affect much more than just the strategic development goals for health and wellbeing, but have a substantial impact on a just and resourceful urban development, as well as on the economic development and employment opportunities of a previously deprived region.

But more than that, it allows us to see our architectural approaches in a different way. Projects such as the Tambacounda Hospital are mostly seen as being on the margins of our discipline. We like to consider cultural or residential projects in cities such as Zurich, New York, Tokyo or Beijing as representing the desirable objectives of, but also the point of reference for our profession. Projects such as kindergartens, clinics or sports arenas in areas that we like to call the 'Global South' are seen as architectural diversions (in the sense of leisure). They are often produced by students, where an aspiring young architect can train his or her dexterity. They are seen as being marginal both in terms of their location and in terms of what they can add to the experience and the portfolio of an office.

I would like to claim that contrary to this understanding, projects such as Tambacounda Hospital sit at the very center of our discipline. These projects can show us how our architectural interventions have repercussions that go far beyond the actual building. They can show us the intricacies of the planning process and the power of negotiation and collaboration between stakeholders, and they show you the potential of resourcefulness. Instead of understanding Tambacounda Hospital, or similar projects, as sitting on the margins of our discipline, we need to see them as what they should be: the new norm!

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