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Original
Horizontal exchanges as a design method. Africa urbanisation as a case study / Gugliotta, R.. - STAMPA. - 2:(2020), pp. 1724-1734. (EAAE-ARCC International Conference & 2nd VIBRArch: The architect and the city Valencia (SP) 11-14 novembre 2020).

Availability:
This version is available at: 11583/2973504 since: 2022-11-30T14:26:51Z

Publisher:
Editorial Universitat Politècnica de València

Published
DOI:

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14 October 2026

PAPER #8.08

HORIZONTAL EXCHANGES AS A DESIGN METHOD. AFRICA URBANISATION AS A CASE STUDY.

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ABSTRACT

Within a globalised world, it is easy to find community problems, especially outside our boundaries, in countries that are growing up quickly. Therefore, there is the tendency, not only for architects, to direct their efforts for the benefit of society; from it, the participatory approach became a tool in the design process. There are different ways to understand participation in the design process, and each of them can lead to different results: in terms of effects on the building and its grade of acceptance. All of it is directed by the mutual exchange of competences and information between the actors inside the process. In all of these dynamics, the architect is playing a role. Moreover, what happens when the community is one of the main actors inside the urbanisation of a country should be the point to address this research. Through the observation of the urbanisation of sub-Saharan countries and the study of European based studio projects inside the continent, is possible to explain how the participatory approach is not just a manner of design but a process ruled by different interactions. The question is not how to involve the community inside the process but who is driving it out, which role the architect is playing. The core issue is localising in which stage of the process the community is taken into consideration. Meanwhile, the bottom-up method is going to be overlaid by a horizontal exchange became essential to question the reason why this kind of method can be useful inside the process of design. Is it the community approach led just by willingness or it is the result of a complex process of interaction? The main issue remains how much this kind of participation may contribute to a useful involvement for the community inside the project. It can be an opportunity for the community to recognise its identity inside the building, or instead can slip into a mere way to publicise an elusive ethic approach.

KEYWORDS

Design process; sub-saharan Africa; exchange; architect role; design method.

INTRODUCTION

Inside the process of urbanisation of Sub-Saharan Africa that is spreading out in the last ten years, the strong involvement of the community is still one of the main bulwarks inside the process of building and construction of the new face of the continent. Considering it as a unique vehicle for a good design inside the region is still a mistake that this research is trying to avoid. Moreover, foreign architectural studios, many of which are European based one, lead most of the projects developed to increase the services inside the continent (Lepik, 2013). For this reason, the comparison of cases study of built educational facilities in Sub-Saharan Africa made by European based studio gives a general overview of the facts and the typical dynamics that are easily employed inside the process of urbanisation of small urban and rural centres. The number of projects carried out from local architect is inconsistent compared with the European. Each of them,

in different ways, address how the architect is actually playing a different role inside the urbanisation of the country and how straight, or sometimes indirect, communication with client and community leads to a different level of involvement and approach to participation processes.
Architect, client and community are the three main actors taken into consideration during the analysis. Each of them shapes the process of design in a different way; moreover, the mutual interactions characterise the results of each project. All the main actors are placed at the same level to understand the transformation inside the continent. The multiple configurations of the relationship that spreads out give to the reader different point of view of the project that, on the surface, have the same purpose: community interest in the first place.
Starting from an overview of the continent and the brand new directions of the participatory process inside marginalised realities the research lead to unlocking a debate about the urbanisation of the continent from a different point of view; not only economy but also from the operative way of doing architecture.

1. COMMUNITY APPROACH

Inside the books of theory of architecture or design, usually, there is no direct relationship between the architect and the community as a user of the project or deterministic actor of design choices. On the contrary, the community is associated with the terms of society. This word was one of the main issue addressed by the prevailing attitude spreading out in the fifty. The collective vision and the political conception of architecture have given rise to a reaction of internal opposition to the entire system of values that are still rediscovered today by social practice (Biraghi, 2019). In "The architecture of reality", Antonio Monestiroli (1999) even defines the function of the architect as the detector of collective reason. Still, Giancarlo de Carlo was one of the promoters, in Italy, of the participation of the community inside the process of design. Not only as an informed person, moreover, as an active actor inside the design; someone that is taking place inside the process and is shaping it (De Carlo, 2013).
In recent years, the theory shifted from a purely participatory approach to overcoming it. Within a globalised world, it is easy to encounter societal problems, especially outside one's borders, in developing countries. Hence the tendency, not only for architects and designers, to direct their efforts for the benefit of society (Tromp, Hekkert, 2019). A significant number of organisations devote their work on communitarian projects implementing and using the community to archive the goals (Abuom, 2005). Numerous critical issues related to a transcultural approach to architecture undoubtedly accompany this vision (Hernandez, 2012). Especially when the debate is moved to an extra-continental environment, the role of the architect inside the process of transition of different culture became essential. The task of the architect became very complicated, especially in the post-colonial context, as Sub-Saharan Africa can be. There is an essential need for mediation inside the design process. Mediation between two cultures (one of the architects and the one of the community) with the purpose, at the same time, to archive adequate spaces and satisfy the need of the society (Hernandez, 2012). In this environment, the participation of the community to the design process can allow the architect to archive goals that he could not reach by himself. Upstream of all, according to reflective practice, the designer is finding himself again, trying to solve a problem that a previous project has done (Tromp, Hekkert, 2019). According to the definition of Tromp and Hekker, social design based its roots on an effect driven design in which the social effect that the designer would like to obtain depends on the analysis of the behaviour of

the community. The context and its analysis are the ones that are shaping the behaviour thought the final artefact. Between these two levels (social effect of the artefact and behaviour around it) is placed the mediation as a definition of common objectives to arrive, through an approach that takes into account the architect and the community, to a final product that meets the vicissitudes required and in which the community can be recognised (Tromp, Hekkert, 2019). Again the world mediation inside the process of design is coming out to underline how deep can be the relation between the process to obtain a specific artefact and the tangible results. Once again, facing a paradigm of being inside the system but against it (Biraghi, 2019), the architect places himself in a central position of mediation and interaction between the parties. The architect remains the subject that deals with the design, understood as a purely technical and disciplinary fact (Armando, Durbiano, 2017). However, the community is taken as an essential element with which to activate relations and cognitive and interpretative dialogues that lead to a conscious design that reflects shared social values. The architect thus aims at a general involvement able to produce changes starting from small projects of activism within the community system that transforms itself from a static actor concerning which to assume a set of values, to a dynamic subject that generates effects on the design system (Lepik, 2010).

2. RESEARCH APPROACH AFRICA

The African continent was, for a long time, a sort of heterotrophy for occidental designers. Especially in the context of architecture after 2000 began to emerge the tendency of "not-for-profit aid-architecture" (Albrecht, 2014). The prevalence of foreign architects building in Africa is connected with a particular situation of architectural education. The range of architectural school is way lower than the European average, and the number of architects cannot supply the needs of the country (Lepik, 2013). Often European studios to validate the project inside a marginalised reality use this kind of sharing processes between the designer and the community. It is often publicised as a method of integration of the artefact inside the cultural environment, using local materials and employing the villagers as shapers of the project. However, this is not still enough to design and build a good architecture that will supply the need of the community. Numerous are the projects made that are not working. Above all, because of the lack of sense of belonging of the artefact to the community. Static buildings that are not keeping the essence of practical use (Di Campo, 2018). Going deeper into the field is possible to understand how many different points of view can be generated by this kind of approach. Sometimes it is just promotion of intention, but in other cases, internal dynamics can lead to a co-shaped result.

Sub-Saharian Africa, as a case study, leads to understanding the dynamic of cooperation project and the participation of the users inside the project. The research is structured in two different part: the identification of a body of knowledge about African projects and the comparison of five cases study. The first part is based on interactions of different parameters that, through the attention on the role of the architect inside the design project, are going to understand how different relations are giving new interpretations of a participatory approach. Moreover, the primary assumption is asking how the relationship between architect and client are shaping the relation that design has with the local community. Projects in the sub-Saharan country give us the condition to study a phenomenon where the community is still one of the major actors inside the processes of the continent. To have a comparable analysis sample is necessary to fix some

specific characteristic that each architecture should observe. The localisation of the intervention and the year of construction is limited to have a general historical frame that can be comparable inside the sub-Saharan continent. Each case study is focused on instruction building realised from 2000 to 2019 (form when the not-for-profit project by Europe begins till nowadays). For instance, other parameters are taken into consideration to amplify the richness of the sample. That information became essential to define the general assessment inside the panorama of the interventions "not for profit" that are spreading out inside the continent. That will not give a detailed analysis but a general frame to define a common tendency and the most common process of design laded by European based architects.

Moreover, it should be clear how the community could be an influencer inside the urbanisation of the continent. In fact, with a variety of approach, the European architect is searching to emphasise a communitarian sense, local tradition and construction typology. The common element is that most of them would like to involve the community inside the process of design and construction of the building. This approach aims to create conventional narratives that will help the community to recognise deserves inside the building. The architecture in this way will be the vehicle of new practices and social engagement, nonetheless a matter of importance for the interpretation of the tradition. The building in itself is a representation of the community that can shape and reframe social asset and dynamics all around (Africa Architecture Culture Identity, 2015). Case of White Elephants is spreading inside the continent. This kind of project is often characterised of a lack of reality inside the socio-economical condition of the environment (Africa Architecture Culture Identity, 2015). The community became an essential subject helping the architect to take some choice and face with the real problem that should be taken into consideration during the design process.

Among the tasks that European architects aim to develop through projects in Africa is to initiate a new aspiration towards the use of effective techniques. The level of engagement of the community assumes particular importance within the production process, not only concerning the development of an identity feeling that allows the recognition of the community within the building but also to open a sort of reflection and re-evaluation of local experiences (Marschall, 1998). All these practices that are defined as participatory are nothing more, for African culture than common practices of discussion within rural villages (Albrecht, 2014). For years, the self-regulating practices of African rural communities without any administrative system have been studied with fascination (Carbone, 2005). Everyone in the community also has a specific role when it comes to design and which the architect must take into account if he wants to establish a constructive dialogue within the community.

3. AFRICAN PROJECTS

The second part of the research is more focused on the direct observation of chosen case studies. Through a compositive analysis and the interview with the architect, it was possible to frame a critic scenario of the Sub-Saharan continent and the European designer in it.

Many projects inside the continent are experimenting process of participation of the local community. The most crucial difference is the level of participation of the citizen in it. The level of involvement and how architects are dealing with the community is different. To have a general framework, are taken into consideration five case studies: Gando Primary school by Françis Kéré, the communitarian school of N'tyani by Caravatti, Gaugorouboru Primary school by LEVS, the

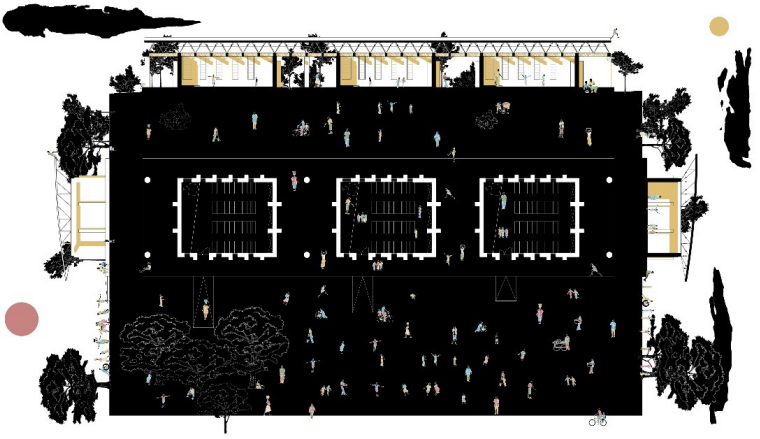

Figure 1. Gando Primary School by Françis Kéré. Source: (Gugliotta R. 2019)

library of Muyinga by BC and 5 Kindergartens by ColectivoMEL. The choice of these cases is led by the willingness of having a brother panorama to understand how different studio, by size and experience in the continent, can have different outcomes on the project. All the studios are European based but apart from the control case (Kéré architect), have not cultural relation with the continent, and some of them were even neophytes in Africa.

As the first case, Françis Kéré reflects the voice outside the chorus against which other designers can be compared. In addition to being widely familiar within the continent, his experience as a citizen of Burkina Faso and designer in the same area, allows him to have a broader general vision and to possess much more in-depth specific skills. With his project of the Gando primary school (Fig. 1), he tried to go deeper inside the process of participation of the community inside the process of design. He knew precisely the need of the community because he was part of it during its life. The same, he was also conscious about the difficulty of getting the community involved in a project coming from outside. The vehiculation of new construction systems, coming from the tradition of the place, were spread out from a long interaction and communication process with the locals. Projet LOCOMAT instructed the men, an agency of the Ministry of Transport promoting the use of local materials and traditional techniques, for making bricks, the children helped transport the stones, and the women supplied water. Each of the members of the community was included to develop belonging and ownership of the building gradually.

Caravatti, a studio in Monza, with projects in Mali since before the early 2000s, presents two types of projects: those carried out for an association of missionaries to which they have been linked for a long time, and those carried out through their own NGO. The Africabougou organisation, which deals with development projects in Malian territory and raising funds for interventions, is recognised in the figure of Emilio and Matteo Caravatti. The association is assimilated directly to designers rather than the studio. Inside the project of the communitarian school of N'tyani, the local community was involved in the design through meetings (an essential method to exchange information) to agree

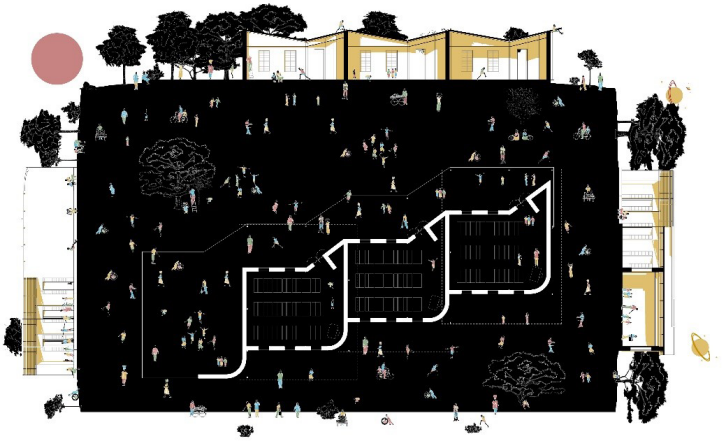

Figure 2. Communitarian School by Caravatti. Source: (Gugliotta R. 2019)

in which times, materials and technologies used. The school was built in raw bricks made by the local population. The interaction that the architect developed inside the community of N'tyani, not only with the primary school (Fig. 2), allows facing a horizontal exchange in which the design is just a small step inside all process of life of the building. They start to develop their project in a territorial grid to have a system of intervention and not just a white mosquito. The building and the community are free to develop by themselves after the intervention.

LEVS, a studio based in Amsterdam and initiated projects in Mali by the figure of Joop van Stigt, as Caravatti holds an NGO, Partners Pays-Dogon, which deals with projects in Mali with a rather significant position concerning the territorial management of interventions. The association plays both the role (client and financial promoter) for which the question remains about the involvement and relevance of the designer in the process that seems, at first glance, to remain marginal, just confined in the design of the object. Besides, where is the community here? Long-lasting relation of architect and community, in this case, is leading the studio to be part also of the community knowing needs and traditions. The same history for Caravatti; instead, they have a different approach when it comes to talking about design and involvement of the community inside the process of development of a new project inside the villages. The Gangouroubouro Primary School (Fig. 3) is mainly composed of a single block with three classrooms and local services. The architect used a "typical Malian" model to build the classroom joint with particular attention on the details of the buildings. In it, the design process leads to an overtaking of the constant dialogue with the community assuming their knowledge built with years inside the continent as detailed enough.

BC architects, a studio directed by two young Belgian designers, have only recently approached the sub-Saharan panorama, boasting numerous workshops and projects in Morocco. Unlike the other two studios, it does not rely on any particular association but is called to design on behalf of ODEDIM NGO, but sees within the process the alternation of many other associations including SATIMO (Belgian NGO) which is

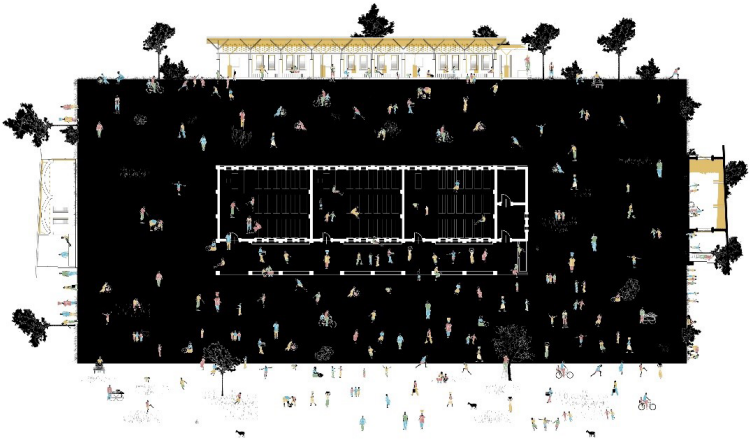

Figure 3. Gangouroubouro Primary School by LEVS. Source: (Gugliotta R. 2019)

responsible for raising funds. Their approach to the project is therefore different, according to an architect-client exchange much more similar to traditional dynamics. The process of engaging the community and the client together became essential to understand how to approach in a first time a different reality. Moreover, workshop and involvement of students inside the processes led to a continuous exchange of knowledge to build the Library of Muyinga (Fig. 4).

The last case study, a project of the Portuguese studio Colectivo MEL in the African continent is examined. They, like BC architects, are not supported by its NGO but they were contacted by a Portuguese organisation operating for

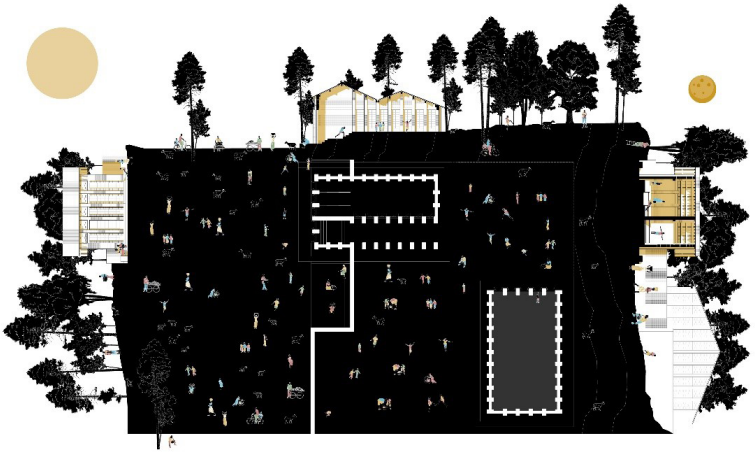

Figure 4. Library of Muyinga by BC architects. Source: (Gugliotta R. 2019)

Figure 5. Kindergartens by Colectivo MEL. Source: (Gugliotta R. 2019)

years in the territory of Guinea-Bissau. In this case, funds raised by the association come from the European Union and the relevance of the client inside the design process is substantial. They became the first interface and the filter between the community and the architect that had no direct relation. For this reason, the project of 5 Kindergartens (Fig. 5), at the end of the construction, does not take all the designed items. The main construction was made by concrete as suggested by the NGO, and at the same time, the community changed the roof cover in straw after the construction with a metal sheet. The traditional in this case was not fitting with the willing of the local.

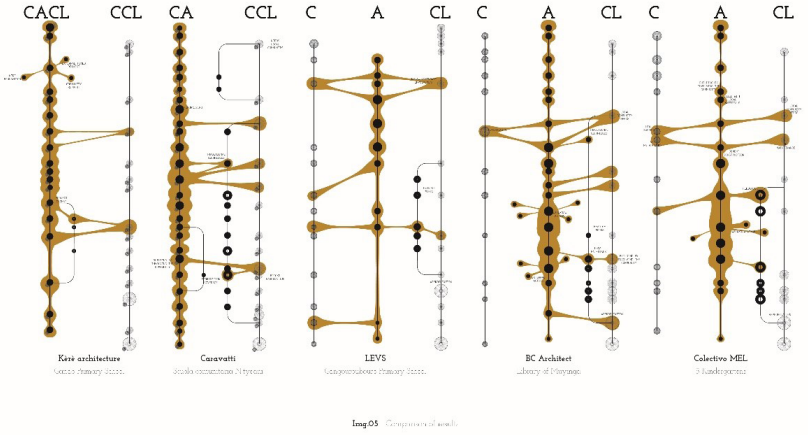

Figure 6. Process comparison. Source: (Gugliotta R. 2019)

Inside the diagram processes (Fig. 6) each relation are showed to understand the approach of the architect inside the design. Each architect has different synergies with the community and the client. Some times they have more than one role: architect, client and member of the community itself. Each studio kept with its strategy a different level of engagement. Sometimes the architect is more present inside the process to deal with the community (Caravatti, Kéré and BC studio) and some others have the client, most of the time NGO, as the most relevant factor inside the process (LEVS and Colectivo MEL). As much as they can share a common characteristic, each studio is approaching differently to the design inside extra-continental reality and the involvement of the community with it.

4. HORIZONTAL EXCHANGE

Each of the studios involved in the inquiry has different approach inside the dynamics with the local community. Sometimes this change of method is leaded from a different involvement of the client inside the process of decision. The customer is often one of the main actors inside the design process of the building. In some case is the one that knows more about the community, it is the one with money, and that is commissioning the intervention.

A particular differentiation occurs in the first instance between architects with a long tradition on the continent and newcomers who approach projects for the first time. The narrative of the reality with which they had to deal is also different. The dynamics of emerging studies are much simpler and easily assimilated to the European context. BC and Colectivo MEL that were analysed in the previous paragraph have a relatively similar relation with the client. Both are depending on it to talk with the community. The difference is henced in dealing with this relation and the stage of involvement of the community. Besides both were approaching for the first time a challenge in the sub-Saharan country, BC architects decide to involve the community from the beginning and keep this relation in different stages of the process: from design to construction. However, Colectivo MEL led heavily from the power of the client, used the community just to keep some knowledge. It was not directly involved inside the consistent part of the process.

The client is a subject with high power but not always definable. Certainly, the obviousness of considering the local community as a client does not provide any change of position concerning the European situation. Instead, the dynamics scattered out by Françis Kéré and Caravatti gives a different point of view on the process of participation inside the continent. The main issue became to develop a sense of identity of the community inside the entire process. Not only explaining them the reason but make them understand the entire mechanism behind the design of the building without losing their volunteer as an architect. The designer, inside the processes, remains the bearer of a value shared by both (client and local community), becoming mediator among the subjects. Through this, any top-down or bottom-up process is eliminated in order to establish dialogue and linear exchange between subjects. The architect becomes an interpreter and translator. Within mediation brings values and contributions to projects that take into account the needs of a client, even if latent, but which at the same time are respectful of the local community. It is not so much a question of community participation in the projects as the involvement of the community itself to enable it to become an active part. The main problem of welfare projects in sub-Saharan Africa derives from the excessive power of the client and the use of the term "local community involvement" as a valid element of the project.

On the contrary, a shared and functional approach by the architect can contribute

to a different degree of awareness than urbanisation projects. The architect as a mediator is therefore not alienated from his own ability to transmit values within the project, on the contrary, he uses his preferred perspective point to observe and identify the strategy of action that allows him to carry out the work through the involvement of community and client. A mediation that turns into a communicative practice between the subjects were meetings, and discussions aim to transport the architect's knowledge of the project within the process.

CONCLUSION

The participatory approach in these cases is not a method directly employed by the architect in a canonical way. Therefore, it is a process of continuous dialogue that allows the community to be part of the project maintaining the designer as a reference point. The community is taken into consideration as an actor that shape the general scheme, and that will have a future impact on it. Reaching horizontal participation inside the process and balancing the weight of each actor results more important than promoting participation and a bottom-up method. In this way, the community is not forced inside the design and construction processes but accompanied in developing a sense of identity toward architecture. In it, practice does not allow to talk about a simple method that can be systematised but moreover of a practice that can be shared and absorbed in the design process in foreign countries. This permits opening a debate on practice and role of architects outside their cultural frame of knowledge and experience.

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