Camillo Magni School architecture in the Global South. Opportunities and experiments within the processes of International Cooperation

Abstract

The contexts of the Global South offer, in many ways, a rich and fertile field of experimentation full of new opportunities. The reduction of regulatory constraints, for example, stimulates a renewed investigation of the relationship between space and function; economic constraints are a means of avoiding the most commonplace construction models; and the encounter between different cultures facilitates expressive contamination. Among these projects, the school building plays a significant role, representing the most important infrastructure carried out in the framework of International Cooperation. In the following paper, I will try to explain the reasons for this leading role by highlighting the most significant aspects that recent school buildings have highlighted.

Keywords Global South — International Cooperation — School

Many people believe that planning in international cooperation in the context of the "South of the World" (the Global South) is based solely on humanitarian and social values. This view is short-sighted and limited. A great effort must be made to escape the «rhetorical attrition that accompanies the ways in which these places are described, analysed, experienced and, above all, communicated by the media. For architects working in the different countries of the Global South, where it is not easy to know both the present conditions and the past, traditions and cultures, rhetoric is a serious danger from every perspective. It is particularly so when architecture uses it to demonstrate its ability to adhere to the celebration of the other, turning diversity into a simulacrum, a rhetorical device»¹ (AA. VV. 2020). But if this is the risk, what antidote can be put in place? Perhaps one way to begin to work on it would be to start studying the places, processes and contexts in which we operate. The aim would be to understand the opportunities, recurrences, and most significant design challenges within a process that is, by its very nature, complicated and contradictory and which sees architecture as one of the privileged means of promoting the development of local communities. The goal is to dissolve the rhetoric in order to learn what the most significant implications are for those working in the context of the Global South. At the same time, as architects, the objective is to question ourselves on the value of architecture in relation to these places, the consequences of our work, the opportunities and the challenges that these projects offer to disciplinary reflection.

In the following lines, I will try to focus on a specific type of building that characterises a large number of projects carried out in the sphere of International Cooperation: architecture for schools. I will try to argue the



reasons for this choice by highlighting the most innovative and significant aspects that recent school buildings have revealed.

Architecture vs. local development

The main objective of any action promoted by International Cooperation is the development of the beneficiary communities. For this reason, the first question to be tackled concerns the type of development that architecture is capable of facilitating. To answer this question it is necessary to weigh, with witty intellectual honesty, the differences between promoters and beneficiaries, measure the relevant economic and social difficulties and consider the different points of view. When you build a school in an informal or remote context, what idea of development are you promoting for local communities?

This issue characterises an open and evolving debate that has involved international actors and politicians for about seventy years as well as architects since the 1956 CIAM of Dubrovnick² when the theme of decolonisation and "modernisation" of African cities became central.

«Think, for example, of Portuguese architects and their experiences in Angola and Mozambique during the years of dictatorship between 1926 and 1974, which were prevented to them in their homeland; or the work of Otto Königsberger who, after leaving Nazi Germany, studied in Cairo, worked in India and then directed the Department of Tropical Architecture at the Architectural Association in London; or people such as Maxwell Fry, Jane Drew and Ernst May, the designer of the Siedlungen in Frankfurt» (AA. VV. 2020). Among the many other architects that could be mentioned, it is particularly interesting to return to the words of Egyptian architect Hassan Fathy who, in a 1963 letter³ addressed to Gamal Abdel Nasser, President of his country, claimed in extraordinarily contemporary tones the value of architecture as a tool for promoting community development.

More than half a century has passed since Fathy wrote to Nasser.

It would be appropriate to keep this in mind when reading his pages, so bitter in their in dealing with the theme of the 'African city' and post-colonial development.

«Forgive me, Your Excellency, for leaving my field, architecture, and entering the field of politics. If I have done so, it is because development is intimately linked to politics and because it is my firm belief that the challenges for rural Egypt are identical to those faced by other parts of the world in Asia and Latin America. [...] There are currently no cities on our continent that can be called African in the true sense of the word, whereas there are European cities located in Africa [...]. Nubian houses and mosques are far more beautiful and architecturally more harmonious than any residential complex built by any government or international organisation in the world [...]. The miserable state of most Egyptian villages is due to the widespread ignorance and poverty that afflicts the buildings in the countryside, produced by the feudal system of land ownership, and has nothing to do with whether the buildings are made of earthen bricks or reinforced concrete. [...] the decline of traditional building methods, which made it easy for many people to build their own houses and at the same time ensured the preservation of ancient artistic values. The widespread imposition of Western building styles and methods in the Egyptian countryside, as a prerequisite for development, led to the extinction of old techniques before new skills took their place. Many planners and architects consider the fastest possible construction of towns and villages as a nec-



essary evil. To take this approach to its logical conclusion, let us imagine that villages and towns could be prepared overnight and offered to the population. That would be the worst thing we could do for them: we would be destroying the culture and civilisation that come from mobilising the local populations' inventiveness, creativity, and craftsmanship. By building things, people build a sense of self: forging a citizen with skills and the ability to build is more important than erecting a building».

These words, seventy years later, strike a chord with the most adverse problem: how does architecture promote the development of its inhabitants? How does a school, in our case, generate growth that involves not only the students who attend it, but also the inhabitants who live there?

The relevance of the role of schools: identity and civic value

Despite the many rhetorical statements, there has been an undeniable interest in architecture from the "South of the World" in recent years. This interest is confirmed by a swirling critical debate on the subject, one of the most significant moments of which was the 15th Venice Biennale in 2016, "Reporting from the Front", curated by Alejandro Aravena⁴. The reasons for this interest are found in a number of factors, including: the originality of the solutions adopted; the research product, in which the culture of the project finds the answers rather than absolute faith in technology; freedom of expression, where the design constraints are part of the disciplinary sphere in which we work, rather than a system of often anachronistic rules; and a way of searching for meaning in the profession of architectecture which finds immediate confirmation in these places in terms of social sustainability. The idea that the projects realised in these contexts contain aspects of relevance thrives for the entire architectural community. Among these, the school function plays a leading role, representing the most important building promoted by international cooperation. Figures such as Francis Kere⁵, for example, have built their notoriety on the careful production of schools, which, in their various forms, have explored multiple typological variations.

The reasons for this prominence can be traced back to several factors. First of all, the financial aspects: both the major international players and the smaller, independent voluntary associations see (with farsightedness) educational projects as one of the primary sectors for promoting local development. This approach has led to considerable financial resources of various kinds being channeled into educational projects, which have in turn led, among other things, to the construction of numerous school buildings. This growing demand has involved both local and international architects, encouraging a flourishing disciplinary reflection around this specific building type. A second reason can be found in the symbolic value of the school: in many cases, the educational building takes on a significance that goes beyond its functional purpose. They are located in poor places where practically everything is missing: roads, water, electricity, houses, sewers. In other cases they are to be found in remote areas where the desolation and remoteness from urbanised areas make any construction particularly complex. In these places, the school building takes on a remarkable civic value. As well as housing the teaching activities, the school becomes, by definition, the public building. It testifies the presence of the state, represents the civic value of the community and interprets them in one place. It is much more than an educational building; it is the space in which the physical, social and economic efforts of its inhabitants are concentrated.





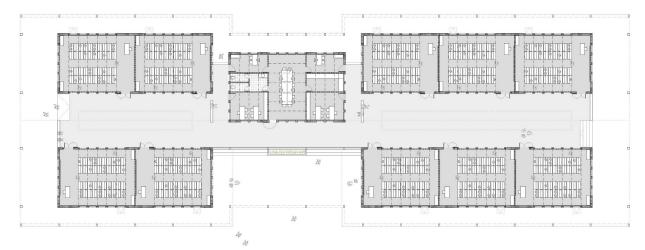


Fig. 1

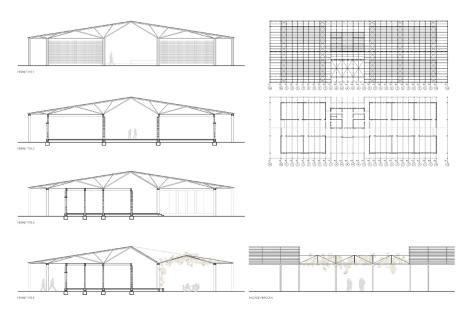
Secondary school and service buildings of the Bangre Veenem school complex, Koudougou, Burkina Faso. Frontal view with the double-pitched metal roof.

Fig. 2

Secondary school and service buildings of the Bangre Veenem school complex, Koudougou, Burkina Faso. Ground floor plan.

Fig. 3

Secondary school and service buildings of the Bangre Veenem school complex, Koudougou, Burkina Faso. Diagram of the metal structure of the roof.





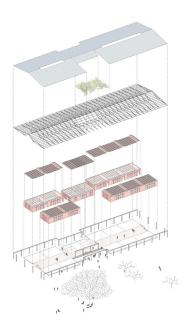


Fig. 4

Secondary school and service buildings of the Bangre Veenem school complex, Koudougou, Burkina Faso. The axonometric cross-section shows the different construction components.

Fig. 5

Secondary school and service buildings of the Bangre Veenem school complex, Koudougou, Burkina Faso. Interior view of classrooms.



A few examples I draw from experiences in the field and which I take the liberty of sharing in this scientific paper in order to evoke the social conditions that characterise these places: the school is the place where at least one full meal a day is offered, where people take refuge during tornadoes, where students' uniforms are always clean, ironed and in good order even in the most desperate contexts, where teachers sleep on the ground at night because they are too far from home. It is the place where humanitarian aid is concentrated; it is the tallest, largest, most visible building, with the most trees and shade, where pets do not enter and where community festivals are organised and where, of course, people (occasionally) vote. From this perspective, the school takes on a symbolic priority value within the community, the importance of which can be found both in the functions it performs and in the virtues it evokes.

A third reason is related to identity aspects. As occured, for example, in nineteenth-century Milan, when the large school complexes, occupying entire blocks, were able to hinge on the urban plan for the development of the city drawn up first by Beruto and then by Albertini⁶, contributing to the identity of the new nineteenth-century bourgeois Milan. So too can the schools in the countries of the South of the World participate in the construction of a national identity. These are relatively young nations, the result of colonial legacies that too often ignored the real boundaries of pre-existing cultures. They are nations where school architecture contributes to the construction of a national identity. This is why typological research, settlement principles, materials, shapes and colours can contribute to defining a national identity through the systematic organisation of one of its most representative buildings. A few examples are proof of this: in recent decades, a fervent proliferation of manuals dedicated to school construction has characterised the projects of actors such as UNICEF7 in collaboration with local governments. This approach reflects a broader political design aimed at overcoming the repetition of individual local actions in favour of a more complex vision of identity capable of incorporating pedagogical reflections, typology, building systems, settlement principles, use of materials, with the ambition of training technicians and local offices responsible for governing the process.

A second example concerns the relationship with vernacular architecture.









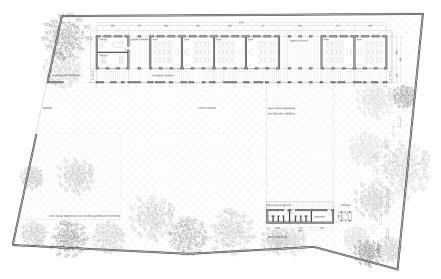
Figg. 6 a-b-c

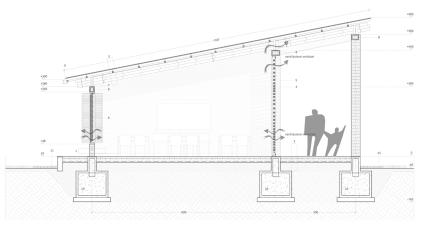
Architetti senza Frontiere Italia, Rong Village Secondary School, Cambodia. View of the internal corridor with the bamboo panels separating the classroom from the outside, detail of the external façade and front view.

Fig. 7 a-b-c

Architetti senza Frontiere Italia, Rong Village Secondary School, Cambodia. Ground floor plan, cross section

and elevations.





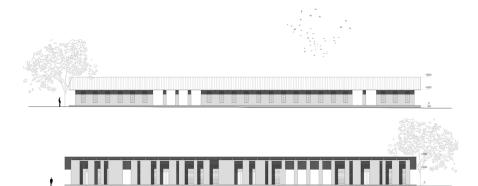






Fig. 8

Architetti senza Frontiere Italia, secondary school in Rong village, Cambodia.

The construction phases highlight the use of raw earth block and natural plasters. Many contemporary examples explore successful reinterpretations of traditional building systems and the use of local materials. These include the work of Francis Kerè or Albert Faus in Burkina Faso, the schools of the Caravatti studio in Mali, the works of Fabrizio Carola in the Sahel, and many others starting with the already mentioned Hassan Fathy. This sensitivity highlights, among other things, the successful attempt to build a link with the history of the people who inhabit these reasons, strengthening the identity aspects that characterise these places.

The civic value, the social contribution, and the identity aspects are some of the characteristics that make explicit the importance of the school building in these contexts. It cannot be assimilated with other services or buildings; it is the most representative and prominent building in any village or neighbourhood. The traditional relationship between signified and signifier goes beyond any hierarchy, highlighting how the latter (signifier), as well as the former (signified), is the instrument with which to govern the settlement and identity processes of these places.

Schools as instruments of innovation

The contexts of the Global South offer, in many ways, a rich and fertile field of experimentation and new opportunities. The reduction in regulatory constraints, for example, stimulates renewed investigation of the relationship between space and function; economic restrictions are a way of avoiding the most commonplace construction models in favour of new, more efficient forms; and finally the encounter between different cultures makes it easier for designers to listen more closely to local places and cultures.

In these contexts, the design of a school is freed from the many schematics induced by the various conventions (regulatory, economic and social) and can go back to investigating, with renewed creativity, the construction of space as a unique setting for learning. Natural light, local materials and spatial relations become the elements with which to organise teaching spaces. The abandonment of all unnecessary features, all forms of excess



and redundancy leads the project to express itself in its most natural simplicity. In the strength of this radical simplicity lies the value of this architecture, which does not limit itself to a Franciscan reduction of elements, but displays the Paulist sobriety of forms.

Observing the school buildings constructed in the last decade in the field of international cooperation (ASFItalia, E. Caravatti, E. Roswag/A. Heringer, Tyin architects, ...) one can see, despite the heterogeneity of the places and professionals, a common design matrix capable of combining contemporary languages and vernacular atmospheres. This approach evokes a post-modern root, emptied of the anti-modernist ideology that characterised the 1980s. In a somewhat chaotic form, these projects demonstrate an uninhibited way of drawing on very distinct formal repertoires, through which different cultures are brought together as a result of the encounter between beneficiaries and donors. The positivism that supported the Modern Movement and the various experiments it carried out in the young nations of the southern hemisphere between the 1950s and 1970s gives way to the pragmatic approach of those who aim to solve concrete problems through architecture and who are not afraid to contaminate the project in order to embrace all its contradictions.

For these various reasons, observing the design experiences carried out in these contexts from our perspective, without relegating them to critical specialisations or regionalisms, allows us to nurture a disciplinary debate on a specific type of building. It nourishes fertile reflections that help broaden the theme by recovering the essence of the problems as they are more evident where the problems are more urgent and the superstructures less oppressive.

It is with renewed interest, therefore, that we turn away from all romanticism and the many rhetorics in order to also apply the rigour of typological and morphological analysis to the contexts of the Global South with the ambition of discovering new and exciting architectures.

Notes

¹ With these words the Casabella editorial staff opened a long article dedicated to two school buildings by Albert Faus in Burkina Faso and André Benaim in Ethiopia. Casabella 910, June 2020, 3.

² In 1956, the 10th CIAM congress took place in Dubrovnik. There, in addition to the famous generational rupture that gave rise to Team X (both Le Corbusier and Gropius did not participate in the event, limiting themselves to sending written reflections), new design attentions spread around the drafting of the "Charter of Habitat", associating the idea of the city with those of "cluster", "mobility", "growth and change". In particular, the British MARS group related urban development to social development by adding the terms 'identity', 'association'. Of the 35 case study panels, some were devoted to projects in countries in the South.

³ The text in question is taken from Salma Samar Damluji and Viola Bertini's beautiful book, *Hassan Fathy. Earth & Utopia*, 2018, Laurence King Pub, London, 2018, 86.

⁴ Alejandro Aravena – starting with the design experience of Elemental - is the most recognised interpreter of the relationship between architecture and social projects. Awarded the Prizker Price in 2016 with the curatorship of the XV Venice Biennale



"Reporting from the Front", he has been able to consolidate a field of disciplinary reflection in the contemporary debate.

⁵ Francis Kerè, an architect originally from Burkina Faso, studied and currently works in Germany. At the beginning of the millennium, a number of his works in his home country of Gando attracted a great deal of international interest, also thanks to the visibility generated by the Aga kahn Award.

⁶ Cesare Beruto, author of the first Milan City Plan in 1884-89 (AA. VV. (1992) – La Milano del Piano Beruto. 1884-1889, Società, urbanistica e architettura nella seconda metà dell'Ottocento. Edizioni Angelo Guerini e Associati, Milan). The Pavia Masera Plan of 1912 and the Albertini Plan of 1934 followed the same principles.

⁷ Under the leadership of Unicef headquarters over the past 30 years, multiple national programmes have been initiated to support the education policies of various local governments.

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Camillo Magni, (1973) teaches Architectural Design as Adjunct Professor at Politecnico of Milan and is Director of the Master "Design for development in the Global South". He is author of more than 90 scientific papers, two books and co-editor for Casabella. In 2007 he founded "Operastudio" a design office in Milan and New York soon achieving notoriety and awards. He leads the NGO Architetti senza frontiere Italia, working in several countries around the word and winning in 2015 the honorable medal of "Medaglia d'oro all'architettura italiana" and Silver medal "Fassa Bortolo" for the school project in Cambodia.

