



Japanese Architects and Global Modernity in the Middle East and Africa

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Abstract

The question posed by the paper is if the architects in Japan, particularly the Metabolists, presented a distinct form of modernization in the world scenario, which was different from that of the West. Metabolism, which was conceived in Japan post World War II, was a concept wherein architecture was regarded as a flexible infrastructure system. It also established itself as a model that could potentially be transferred beyond its original context. Due to the oil crisis in 1973, leading to recession in Japan and the West, and coincidentally, the decolonization across the Middle East and Africa, led Japanese architects to become active players in projects for newly independent nations and fast-developing states in the Middle East and Africa that were looking for new forms of architectural and urban identity. However, it is essential to determine whether their work was indeed a non-Western, global modernization in both situations, as is widely acknowledged at present.

Introduction

Concentrating specifically on post-colonial Africa and the fast-emerging Gulf States, this paper takes a comparative approach towards analyzing how the same architecture concepts led to different results. In the Gulf region, it is common for Japanese architects to receive contracts from central government bodies, which makes big infrastructure and architectural projects feasible. However, in Africa their engagement was often mediated through international planning organizations and institutional frameworks, leading to more limited or fragmented implementation.

The paper argues, by juxtaposing these two, that Japanese architecture was not an alternative to Western modernization in and of itself. Instead, its ability to function as such was shaped by the political, economic and institutional circumstances that influenced architectural

authorship and execution. In this sense, the global trajectory of Metabolist ideas shows less the universality of architectural ideas and more the conditions of their specific implementation.

Metabolism as a Global Architectural Proposition

Metabolism emerged from post-war Japan as a design philosophy that viewed architecture not as a static entity but rather as a dynamic system that can grow and adapt over time. As outlined in the Metabolism Manifesto published in 1960, Metabolism advocated for a drastic change in the approach towards architecture amidst the challenges brought about by urbanization, technology, and societal changes. "Metabolism is the name of the group, in which each member proposes future designs of our coming world through his concrete designs and illustrations. We regard human society as a vital process,

a continuous development from atom to nebula. The reason why we use such a biological word, the metabolism, is that, we believe, design and technology should be a denotation of human vitality. We are not going to accept the metabolism as a natural historical process, but we are trying to encourage active metabolic development of our society through our proposals.”¹ The buildings that were envisioned by Metabolists were not seen as a rigid composition but rather as living organisms that had a structure that allowed them to evolve through additions and changes within the structure. In other words, Metabolist architects saw buildings not as an end product but as something that evolved throughout its lifecycle.

The key aspect of the metabolism movement was the idea that architecture should operate at the scale of systems rather than objects, or as to say a whole rather than as an individual. Projects such as Kenzo Tange’s Tokyo Bay Plan (1960) exemplifies this approach, proposing large-scale infrastructural networks that could accommodate continuous expansion and transformation according to the taste of each resident.² Kiyonori Kikutake’s Sky House(1958-) a house transforming(metabolising) as time passes by leading to different spatial organization represents how the metabolism idea could be implemented in a smallest unit, a cell.³

As can be observed in both of these representative proposals, the metabolism movement framed architecture as a form of organizational logic, capable of structuring growth while remaining open to change. In a way, Metabolism aligned itself with broader postwar discourses on cybernetics, systems theory, and megastructural

thinking, positioning architecture as an interface between technological processes and human habitation.⁴

Since Metabolism stressed the importance of flexibility and an infrastructural approach rather than any culturally specific formal language, as well as the intention to make a name for themselves and their buildings abroad, as Rem Koolhaas argues in *Project Japan*,⁵ it seemed that the theory offered a paradigm of modernization that would be applicable even outside Japan. Indeed, it contained an element of universality that made it particularly pertinent to countries facing issues with rapid modernization or nation-building. In newly independent African countries and quickly industrialized nations of the Gulf, there was a demand for architectural paradigms that could facilitate massive transformation at the same time as constructing a new national image.

However, while Metabolism was conceptually transferable, its translation into built form proved far more complex. As can be inferred from Atsushi Shimokobe’s conversation with Kiyohide Terai, “We did nothing but long-term, deficit-making projects. This is today almost entirely denied”, The movement’s proposals often relied on strong institutional coordination, long-term planning, and significant economic investment: conditions that were unevenly distributed across different global contexts. Thus, the seeming universalism of the Metabolists’ concepts obscured the degree to which their actualization relied upon particular institutional, political, and economic structures. The dialectical nature of such an approach is key in understanding how similar concepts played out differently in the development of architectural projects in the Gulf and Africa.

The Gulf: Realization Through Direct State Commission

1 - Kawazoe, N., Kikutake, K., Kurokawa, K., Maki, F., & Ōtaka, M. (2011). *Metabolism: The proposals for new urbanism* = 都市への提案. 森美術館: Echelle-1, pg 5

2 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 284

3 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 142

4 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 143

5 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 135



Fig. 1. Kenzo Tange, *King Faisal Foundation Headquarters Complex*, Riyadh, Saudi Arabia, 1982. Source: "King Faisal Foundation Headquarters Complex," *Architecture History*, Architecture History

In the rapidly developing Gulf States, many of the conditions necessary for the realization of Metabolist ideas were present. Supported by oil wealth and directed through centralized state authority, countries such as Kuwait, Saudi Arabia, and the United Arab Emirates proceeded with ambitious modernization efforts during the second half of the twentieth century. These efforts required both a rapid urban expansion and a need for construction of new infrastructures and national institutions. Within this context, architecture became closely tied to processes of state formation and national identity, and large scale projects were frequently commis-

sioned directly by government authorities.⁶⁶

This mode of commissioning proved critical in enabling Japanese architects to operate as primary authors rather than peripheral contributors. Unlike contexts in which design decisions were distributed across multiple agencies or constrained by external planning bodies, the Gulf offered a relatively direct relationship between architect and state. For instance, Kenzo Tange had a direct relationship with King of Faisal which led him to take

6 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 591

charge of King Faisal Foundation Headquarters Complex(1976-1982). This directness allowed for a clearer translation of conceptual ideas into built form. Metabolist principles, particularly those related to infrastructural thinking, modular organization, and large scale coordination, could be implemented with a degree of coherence that was difficult to achieve elsewhere.

Projects such as Kuwait International Airport, designed by Kenzo Tange, are the most representative example of this aforementioned condition. Conceived as a comprehensive infrastructural system rather than a singular building, the project integrates Tange's assertion towards a terminal building as a long corridor in a consistent unified architectural logic.⁷ In addition, it is clear that Tange was able to obtain the commission for the building because he was likely connected to King Faisal through his personal connection. In general, state-sponsored projects in Saudi Arabia and the UAE involving royal compounds and conference cities show that the use of direct commissions to Japanese architects made it possible to carry out ambitious design strategies.

It is evident that the role of centralized authority was essential in sustaining this level of coherence. Strong state control over land, funding, and planning processes reduced the fragmentation that often accompanies large scale urban development, as can be seen in the case of Africa later in this paper. This allowed architects to maintain a degree of authorship across different phases of a project, from conceptual design to implementation. As a result, Metabolist ideas, originally formulated as theoretical propositions, could be realized as tangible architectural and infrastructural forms.

Yet, while at first glance, the context of the Gulf appeared to be an exact repetition of Metabolism as understood in Japan, in reality, the unique circumstances that surrounded the architectural movement allowed for the selective application and adaptation of its inherent

principles. The focus on monumentality, clarity of representation, and the large scale of infrastructure all corresponded to the goals of modernizing nations striving to assert their status in the world through architectural means.⁸

The Gulf can thus be seen as an environment in which the possibilities for adaptability and systems thinking embodied by Metabolism might have been realized. Such a realization, however, did not simply spring forth from the universal nature of Metabolist concepts alone. Rather, it relied upon the existence of centralized power, economic means, and commissions that cast architects in a principal role as designers. This is contrary to many other contexts worldwide, where Metabolist ideas were met with institutional environments that yielded very different results.

Africa: Mediation Through Institutional Frameworks

In contrast to the Gulf region, the implementation of the Metabolist vision in postcolonial Africa occurred in a completely distinct political, economic, and bureaucratic setting. Right from the moment of achieving their independence, several African states were faced with the challenge of establishing a capital city and building infrastructures. This might have presented an exciting avenue for experimenting with innovative approaches to architectural design, but there were many layers of international organizations, development agencies, and foreign architects in the process of planning. In this regard, architecture became a product of negotiations rather than an interaction between an architect and their client.⁹

7 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 607

8 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 599

9 - Manuel Herz, Ingrid Schröder, Hans Focketyn, and Julia Jamrozik, eds. *African Modernism: The Architecture of Independence*. Zurich: Park Books, 2015.



Fig. 2. Kenzo Tange Associates, *Central Area of New Federal Capital City of Nigeria, Abuja*, 1979.

Source: "Central Area of New Federal Capital City of Nigeria," TANGE Associates, 2026. https://www.tangeweb.com/works/works_no-66/.

In this case, the Japanese architects played vital roles in designing significant projects, such as the urban design of Abuja, the University of Oran, and planned cities like Dodoma. Nevertheless, all these projects were part of larger processes, which involved the organization of International Planning Associates and the Japan International Cooperation Agency¹⁰ in orchestrating vast designs that would bring together many experts in engineering, economics, administration, policy making, and architecture.

Despite the inevitability of this inter-disciplinary coordination due to the scale of nation-building exercises immediately after independence, it implied that no single vision of architecture could be implemented.

The institution-mediated process had a lot of direct consequences on the realization of Metabolic ideas architecturally. In contrast to the case of the Gulf region, in which centralized control made it possible to apply large-scale architectural systems consistently, there was usually a fragmented decision-making process in Africa. Financial limitations also meant that it was not always possible to realize the ambitious infrastructure ideas proposed by Metabolist architects, which forced changes or modifications to be made to the original concepts.

For instance, in the Abuja masterplan, while Kenzo Tange Associates helped in designing the center following their victory in the competition, the overall master plan was done through a group of American companies (Planning Research Corporation; Wallace McHarg Roberts & Todd; and Archisystems).¹¹ In this scenario, there is no doubt that while the Japanese architects participated in creating an idea, the process of actualization of this idea was dependent on other institutions as well,

thus making it more of a collective responsibility than that of architects. Due to this fragmentation of architecture practice, it became increasingly difficult to maintain coherence in ideas.

On the other hand, it is not accurate enough to claim that the reasons for limited application of the Metabolist approach in Africa can only be found in economic and technological limitations. Traditional colonial administrative systems, as well as dependency on foreign experts, defined the process of commissions and construction, favoring standardization and incremental development rather than speculation and boldness that are key features of Metabolism. Therefore, the design had to comply with certain developmental goals which went beyond spatial and formal considerations.

It is clear from the case of Africa how much architects' thinking is dependent on the organizational framework within which their visions can be put into practice. Although Metabolism provided a vision of adaptable and scalable modernization, it needed an organizational consistency and level of control that was not present within these frameworks. Rather than translating Metabolic concepts into a whole system of architecture, they found their way into fragmented planning systems that partially adopted them.

The differences between the two become more apparent in the context of a key thesis put forward in this paper. Namely, the reason behind the varying outcomes found in the different regions was not due to the theoretical value or relevance of the concepts within the framework of the Metabolists.

Instead, the success of implementation became dependent on how the architecture was mediated, specifically within the institutional framework found in Africa.

Comparative Analysis: Authorship, System, and the Conditions of Realization

The comparison between the Gulf States and post independence Africa reveals a fundamental distinction in

10 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 632

11 - Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011. Pg 632

how architectural ideas are translated into built form. While both contexts engaged with similar concepts associated with Metabolism, their outcomes diverged due to differences in authorship, institutional structure, and the distribution of decision making power. This divergence suggests that the realization of architecture is not determined by the conceptual strength of an idea alone, but by the conditions that enable its execution.

In the Gulf, architectural authorship was largely concentrated. Centralized state authority allowed for direct commissioning processes in which architects operated as primary agents of design. This concentration of control enabled a continuity between concept and realization. The architect's vision could be maintained across different stages of a project, allowing large scale systems to be implemented with clarity and coherence, as can be seen in examples like Kuwait international airport and the King Faisal Foundation Headquarters Complex. As a result, Metabolist principles, particularly those related to infrastructural organization and adaptability, could be realized as integrated architectural systems.

In contrast, in African contexts, authorship was dispersed across multiple actors. International planning organizations, development agencies, and governmental bodies collectively shaped projects through layered decision making processes. This allocation of responsibility created fragmentation both in terms of design and implementation. Instead of one unified vision for the architectural form directing the process, decisions would be negotiated according to competing pressures of practicality, politics, and procedure. In this way, architecture was no longer conceived as a whole, but rather as a set of partial solutions.

The distinction between concentrated and distributed authorship is also an example of a more general contrast between direct and mediated methods of production. While architecture was able to function as a coherent system due to its relative directness in relation to the state in the Gulf, architecture in Africa became part of the planning system through the mediation of architectural concepts by way of institutions. This shift from be-

ing an author to becoming a consultant has also changed the status of the architectural project itself.

What makes such a comparison especially important is the question of the universality of architecture's ability to transfer ideas. While the same ideas have the potential to become a tool for architectural action, the very transferal process involves their mediation according to a set of conditions which dictate how such ideas can be implemented. In other words, it would be incorrect to assume that architecture is a self-sufficient discipline capable of functioning outside of these conditions.

Thus, the contrast between the Gulf and Africa highlights an important lesson. The achievement of Metabolism was not based on how flexible they were as an idea but rather whether there was an environment where they could be implemented successfully. In cases where the elements came together, the concept of architecture functioned as a unified whole. But when the elements were fragmented, the concept of Metabolism became fragmented as well.

Rethinking Alternative Modernity

This analysis raises doubts about the idea that Japanese architecture, and Metabolism in particular, was inherently an alternative to Western models of modernization. Indeed, despite Metabolist proposals for a new type of architecture based on adaptability, infrastructure, and systematism, their global circulation indicates that these properties in themselves were not enough to become an alternative paradigm. Rather, the ability to act as such depended on the context in which the project was implemented.

The concept of alternative modernity implies that architectural projects of various cultures or regions may be independent in relation to dominant models. However, as the examples considered in this article show, architecture is inevitably embedded in global processes of power and capital relations. For example, the implementation of the Metabolist agenda in the Gulf was made possible not due to differences with Western models,

but because of circumstances that also allowed the formation of large modernist complexes. The involvement of Japanese architects in the region may have been seen as a divergence from established models of modernization; however, it did not mean breaking away from them, but rather adapting to them.

In the case of Africa, the challenges facing the Metabolists add another layer of complexity to the idea of alternative modernity. In this case, the dependence on international planning agencies and development strategies meant that the architectural products emerged from the same global system which maintained many of the same hierarchies and dependencies. Thus, any possibilities for an alternative system were constrained by the processes, structures, and methods required for its realization.

From this perspective, it becomes clear that alternative modernity can no longer be conceived in terms of architectural concepts and designs alone. Instead, it must be understood in the context of the larger system of architectural production. Alternative vs. dominant becomes not only a matter of intent, but one of realization. Without the capability to pursue alternative practice, architectural alternatives cannot move beyond theoretical possibility.

In other words, metabolism is able to show both the possibilities and constraints associated with using architecture as the catalyst for transformation at a global level. The focus on adaptability and organization of systems seemed to have provided an effective way out of the problems caused by rapid development, but at the same time showed that architecture was unable to reconfigure the environment in which it operates. It was the very environment that defined the boundaries for any innovation that could have taken place.

The idea of looking into metabolism from the position of a condition-dependent concept rather than an alternative one serves as a point of departure for this essay. The main goal is to examine the issue of architectural innovation at the global level under these circumstances.

Conclusion

Indeed, this paper has sought to investigate whether the work of Japanese architects, especially Metabolists, could be seen as an alternative to the dominant Western paradigm of modernization. Based on an analysis of projects in the Gulf States and in post-colonial African states, it has been established that the different fates of similarly motivated architectural projects were not due to their own conceptual deficiencies but the specificities of their realization within particular socio-political and economic frameworks.

The global course of Metabolic thought has shown that while architecture possesses a considerable degree of autonomy, it is nevertheless always conditioned by the framework within which it functions. The case of the Gulf shows how a centralized and unified system of power, coupled with a direct commission from state institutions and ample funding sources, enabled the construction of an integral large-scale architectural system. In the process, the role of Japanese architects as the main interpreters of a conceptual idea was greatly amplified.

In contrast, however, the case of Africa highlights the constraints of mediated production systems. The involvement of foreign planning bodies, development institutions, and legacy bureaucratic processes split both authorship and process to the point where architectural proposals became modified, scaled down, or incomplete in their execution. In this way, the potential for implementation of system-based concepts was severely constrained. This scenario was not due to a failure of the Metabolism movement in itself, but rather because of the lack of an institutional structure through which it could be properly supported.

These examples collectively demonstrate how architectural ideas do not have a built-in capability to act as universal or alternative models. It would be difficult to suggest that Japanese architecture represented an alternative to Western modernist design when success was contingent on similar conditions to those that support-

ed modernist building elsewhere. Where the appropriate conditions existed, as in the Gulf region, Metabolism could achieve successful application. Where these conditions were lacking, as in Africa, so too were the concepts themselves.

It appears that the idea of alternative modernity should be rethought as well. It is important not to consider any distinctions related to either the design or the theory behind a particular architectural approach; one needs to look at what enables and hinders the architectural creation. Architecture is not just a product of certain ideas; architecture emerges through systems that determine what can and cannot be designed. From this perspective, it is less important to consider an architectural paradigm alternative; the key is whether the conditions that would allow such a paradigm to work as such are available.

The point is that the importance of Metabolism goes further than simply introducing some innovations in terms of architectural forms. Metabolism had promised a more adaptive and systematized approach to architecture, which, unfortunately, could hardly ever be realized due to various external factors. Considering architecture as being condition-dependent, this paper demonstrates that architectural ideas depend on certain conditions and cannot operate without them. It is impossible to achieve any significant architectural changes based solely on theory; what matters most is the ability of a theory to match conditions successfully.

Bibliography

Koolhaas, Rem, Kayoko Ota, and James Westcott. *Project Japan: Metabolism talks--*. Köln: TASCHEN GmbH, 2011
Manuel Herz, Ingrid Schröder, Hans Focketyn, and Julia Jamrozik, eds. *African Modernism: The Architecture of Independence*. Zurich: Park Books, 2015.

Kawazoe, N., Kikutake, K., Kurokawa, K., Maki, F., & Ōtaka, M. (2011). *Metabolism: The proposals for new urbanism* = 都市への提案. 森美術館: Echelle-1,

"King Faisal Foundation Headquarters Complex." *Architecture History*, 2026.

<https://architecture-history.org/architects/architects/TANGE/OBJECTS/1982,%20King%20Faisal%20Foundation%20Headquarters%20Complex,%20Riyadh,%20Saudi%20Arabia.html>

"Central Area of New Federal Capital City of Nigeria." *TANGE Associates*, 2026. https://www.tangeweb.com/works/works_no-66/.

