It was no military march but Joseph Kabasele Tshiamala Grand Kalle’s *Independance Cha Cha* served as the theme music for the Congo’s struggle for independence, led by Patrice Lumumba.

We wait, with trepidation, and dedicate the exhibition *Africa Big Change Big Chance* to that proud spirit of joyful Freedom.
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One of the main tasks of La Triennale is to reflect not simply on its own country and its own city but rather to look at the changes affecting the world.

With the great universal expos of the past and, in particular, the XVII Triennale di Milano, *World Cities and the Future of the Metropolis* and, more recently, with *USE Uncertain States of Europe* and *Architecture of the World*, our institution has entered the great debate on metropolitan and other areas, and on how they are changing and will change in the future.

The *Africa: Big Change Big Chance* exhibition takes up this line of research pursued by La Triennale, focusing its investigation on the urban and architectural transformations and huge changes sweeping through Africa. It reflects on the character of the continent and on the great problems and on the opportunities that it offers the world.

With regard to Africa, there is a general feeling of guilt about colonialism, and about the wars and exploitation of nations and peoples, especially by the countries of the northern hemisphere. We do however believe that these feelings should also be accompanied by serious analysis of, and reflections on, the changes currently under way. These include rapid population growth,
vast, uncontrolled urbanisation, and African and international projects of great interest in terms of design and aesthetics. This exhibition, which for the first time puts the focus on Africa, examines projects on a continental and global scale that affect us all. It looks at the rise of new African metropolises, and examines a continent of enormous potential that is undergoing intense transformation. Our hope is that the experience offered by this exhibition will give visitors an understanding of what will be one of the major issues for everyone in the coming years. In particular, we hope that young people will be able to approach these problems without preconceptions or false beliefs.

My thanks go to Alberto Ferlenga, Benno Albrecht and all the staff who have worked so hard and with such dedication on this project.

*CLAUDIO DE ALBERTIS
PRESIDENT OF THE TRIENNALE DI MILANO*
FOREWORDS

Africa Big Change Big Chance is an overview of the architecture and transformations in progress in Africa. The changes affect the control of large numbers, they show huge shifts of people, pressure caused by urbanisation, the inappropriate use of natural resources and territories.

The transformation – the Big Change – and the opportunity – the Big Chance – reflect the order of prospects available today for a better and sustainable future in Africa. The continent will be the theatre of a new modernity, where a different global and cosmopolitan culture may be developed.
rity in these agro-silvo-pastoral communities is basically connected with the sustainable management of the territory and its natural resources. One form of adaptation and resilience for these communities is migration to “new areas,” where the land is then used to the detriment of the forests and other green areas. This situation has been ongoing for some decades and has led to the destruction of the social and economic fabric of these societies, triggering large-scale migration. The environmental and social crisis this has engendered looks set to worsen in coming decades due to the over-exploitation of natural resources, and in the context of serious climatic change. Regardless of every effort and occasional victory, the effects and impact of desertification and climate change remain central to Africa’s concerns. In view of this situation, therefore, under the aegis of the heads of state and government of the nations of the Sahara-Sahel, the Great Green Wall of Africa Initiative (GGWAI) was set up in 2005.

The Great Green Wall is Africa’s latest response to the problem of desertification and climate change. A key feature of the vision behind the initiative is the holistic transformation of the agricultural areas of the Sahel into rural hubs of economic emergency with which to create and consolidate a line of defense by means of reforestation projects, agro-forest protection, and revival of productive lands and systems with measures aimed at accompanying access to social and economic structures with income-generating and supportive activities. The main objectives include creating favourable conditions for good local governance and profitable activities that will induce migrants to return to their lands for economic and environmental reasons, as well as a more efficient territorial planning. By 2035, the overall aim is to overhaul transportation networks, ecosystems, systems of production and the living conditions of the local populations thanks to the collaborative management and inclusive approach involving the community and the local populations within a framework of regional cooperation and synergic actions taken by Saharan-Sahelian states. The CGW initiative rests upon holistic criteria, synergetic action, and a participatory approach, supported by a realistic outlook, and aims to set priorities and adopt gradual approaches that will take into account the questions and needs of the communities, on the basis of a strategic planning that identifies objectives, expected outcomes, and performance targets. The strategy is multi-sectorial and rests upon a raft of measures, including agro-forest protection, reforestation, assisted natural regeneration, sustainable management of pastoral and agricultural systems, and income-generating activities.

DOXIADIS’S ONE BIG PAN AFRICA | Panayotis Pyla, Giannis Papadopoulos

Coordinated development on a comprehensive continental scale was the cornerstone of Doxiadis Associates’ (DA) urban planning proposals for Africa in the 1960s. According to this Athens-based international firm led by the global visionary planner Constantinos Doxiadis, development in Africa “must be undertaken by the continent as a whole”.

Doxiadis Archives

Whether the firm was operating on an urban scale (the design of the new city of Tema), or on a regional scale (the structuring of the Volta River Triangle), Doxiadis Associates was casting each of these projects in a Pan-African perspective. In one sense, this was rather expected as typical of Doxiadis Associates’ “Ekistics approach,” which emphasized the intertwining of buildings and cities with transportation and communication networks, social patterns and natural landscapes. Doxiadis, who become known, around that time as a “busy remodeler of the world,” regularly cast all his urban plans in larger perspectives (and his firm would support such macroscopic research on larger regions even in the absence of official commission or external funding).


The planning for restructuring Baghdad in 1958 was cast in the context of a national housing program for Iraq; the “Detroia area project” was inserted in the larger picture of a “great lakes megalopolis.” Or, the design of Pakistan’s new capital Islamabad, in 1961 was cast in the global network “ecumenopolis” — a coordinated network of cities (and natural areas) envisioned by Doxiadis himself as covering the entire globe by the end of the twenty-first century.

In the case of Africa, however, the emphasis on “one continent” as a whole also
had other, particular types of significance. For one, seeing Africa “one continent” would offer a remedy to colonial urban practices which had concentrated development on the coastline, linking select parts of Africa to “overseas metropolises,” and leaving the rest of the continent to stagnation. Second, this continental gaze on Africa’s problems and prospects would facilitate the expediting of its development, and Doxiadis was rather explicit in arguing that Africa needed to strategize on bypassing “certain stages” of development.

Picking up the pace was generally important both for planners and for the national or international funding institutions of that era, because according to the dominant developmentalist visions, all countries and regions were on a linear path to development, except at different stages of this path.

One important strategy for building a unified “new Africa” was the African Transport Plan, basically a system of highways complemented by secondary networks of railways and flight paths that were structured around “nodes” of a transportation network that covered the entire continent—precisely create a “balanced pattern”, in the processes of trade, urbanization, and industrialization across regions of Africa. The transport plan had a multiple benefits. For one, it would nurture an introverted development that would reverse the colonial inequalities; further, it would diffuse urban density, to create the seeds for the growth of more urban centers in the future; and also, it would systematize the continent’s connections with the intercontinental network envisioned by Doxiadis’s “ecumenopolis.”

The macroscopic view of a Pan-Africa as having a unified transportation system and a more even urban density found a concrete manifestation in the firm’s plans for the triangle Accra-Tema-Akoso, also known as The Volta River Triangle. This regional triangle’s economic significance and development prospects had already been recognized by colonial authorities, which had advanced a groundbreaking development plan, known as the Volta River Project, aiming to tap into the region’s natural resources and water power. Ghana’s first independent government had already adopted the view of the Volta River triangle as a hub of industrialization and its leader’s emphasis on modernization and social reform provided particularly fertile ground for DA’s vision.

From the perspective of DA’s planning strategies, the triangle was both a valuable “node” in the continental transport network and a pilot case study for the strategy of “inducing urbanization.” Recognized as “the country’s most important area of economic activity” with “at least the two thirds of the anticipated increase of industrial production and employment” to be concentrated in this area, DA embraced this region’s planning as a smooth transition from the continental scale (the transport plan) to the urban scale (e.g. plan for Tema).

Whether one considers DA’s exhaustive analyses of Africa’s people and resources; or the continental network system; or the restructuring of regional space—all these echo a developmentalist optimism characteristic of 20th C. visionary designers, who rationalized the processes of the built environment and the distribution of planetary resources—as in Fuller’s geoscope projects or other Doshiadis’s plans for a steady state for urbanization. The proposal for a unified Pan-African urban development echoes a similar attachment to the scientific claims of exhaustive data collection, and an anti-urban aesthetic that capitalized on transportation networks and favored diffusion and sprawl. However, there is more to Doshiadis’s approach to Africa: This emphasis on Africa as a whole was also a way of sidestepping the political complexities to emerging national borders, the tensions in “geopolitical ambitions and cold-war affiliations”, and also...
unresolved religious or other cultural differences. 4 P. Prokidas, De-implanting Africa. Architecture, Planning, and Climate in the 1990s and 1980s, Detroit: Michigan, 2012, pp. 77, 82; p. 80.

Considered from this perspective, it seems as no coincidence that Doxiadis’s pan-African planning had a political ideological counterpart, expressed most vividly by Ghana’s political leader Kwame Nkrumah, the prime advocate of the pan-Africanism in continental and global political circles at the time.

FROM DISPUTED LAND TO PLURALISTIC LANDSCAPE? FORMATION AND [RE]CONSTRUCTION OF A TERRITORY. THE VOLTA RIVER PROJECT IN GHANA | Viviana D’Auria

In November 1964, half a century after the geologist Alfred Kinsey had pointed to the potential of a dam on the Volta River, the Akosombo Dam was completed and Lake Volta began to fill with water. Once full, the waters would occupy 4% of the national territory, making it the largest artificial lake in the world. 1. J. Moser, Volta: Man’s Largest Lake, Andre Deutsch, London: 1969. Built seven years after Ghana had become the first sub-Saharan African nation to gain independence, the Volta River project seemed to have all it needed for rapid development. Hydroelectric power, mechanised agriculture, new industries, cities and towns would readily modernise the emerging country, helped by a dense network of infrastructure, which extended beyond the four borders of the colony, which was the same reason the project was to enlarge its objectives. It was no longer just a matter of generating electricity for the nascent industries, which also included a large steel plant, but also to provide water for irrigation and to increase agricultural production. New towns and villages were to accommodate the emancipated Ghanaian workers, members of agricultural cooperatives, and the managers and workers of industries created in order to ensure that the economy diversified. A number of internationally renowned town planners, including Albert Mayer, who had been a consultant in Chandigarh, and Constantin Doxiadis, who had already worked in Pakistan and Iraq, as well as in post-war Greece, were called in to plan them.

In the early 1950s, the construction of a port that would deconstruct Accra, providing a port for the export of local artefacts (and not just raw materials) was the first tangible sign of the Volta project, making it a multi-sector operation 5 V. D’Auria & D. De Meulder, Unravelling landscapes: New settlements for the Volta River Project between tradition and transition (1950–1970), OASE Journal of Architec
ture, 82, 2013, pp. 119–148. In the following decade, the seven-year development plan of the now independently Ghana (1961–70) included a graphic summary of the supposed benefits that the Volta project would offer to the people closest to the shores of the lake: recreational areas, transport, fishing, agriculture and new land and water links. 6 K. Planning Commission, Seven Year Development Plan (1961–70): A Brief Outline, Accra, 1961. The imagery emphasised the importance of building consensus among Ghanaians, whose country – and national identity – were still in the making. For Nkrumah, the construction of the dam and of Akosombo, the town that would see to the maintenance of the hydroelectric plant, as well as the construction of the port city of Tema, would be the symbols of a nation in the process of freeing itself from the colonial injustice it had suffered. Such was his confidence in the Volta project that he was later criterionised for considering the development project as an ideal means for the future development of the country.

To make sure that the people relocated from their villages could share this idea, the process of re-settlement would have to proceed smoothly. To achieve this, the 740 villages that would disappear after the closing of the Akosombo Dam were to be replaced by 52 new settlements. Equipped with social facilities and amenities, these settlements were essential to ensure that the resettled population could have a modern, prosperous life. Public and private investments – amounting to 20 and 24.5 million pounds sterling respectively – were to build the housing, complete with electricity. In many cases, the new villages incorporated and expanded existing ones, often underestimating the ethnic incompatibilities, which were later exacerbated by the fact that many services failed to materialise. The Volta project was not just a strategy for modernising a nation with very recently drawn borders but also a way of reorganising an entire area. An irrigation system was to rationalise the agriculture, and the landscape it would create would have a positive impact on the needs of the inhabitants and on their conflicts involving territory, resources and space.

The new homes were designed to allow the displaced families to reestablish immediately. Consisting of a roof that extended over a larger area than the walls of the single room, the houses were designed in such a way that they could later be enlarged. The conquest of a new territory and the building of a unique and sovereign identity symbolically coincided with a type of housing that erased any differences between the ethnic groups along the Volta River and the particular nature of their habitats. Each family was to receive a house that could be enlarged when more space was needed and when their economic situation made this possible. The families concerned were allowed to choose when to enlarge their home, but this was always done in coordination with urban and architectural regulations based on strict development phases for the home, imposing particular building materials and layouts.

The process of re-settlement was complicated not only by the fall of Nkrumah in 1966, but also by the lack of knowledge of the Ghanaian territory among the many experts involved. The difficulties involved in clearing the land for cultivation made it impossible to allocate the plots of land required for the basic subsistence of every family, and there was certainly no way of increasing crop yields so that they could also be sold. In addition to these practical difficulties, there was also a minorisation process, in the form of model settlements in which the supremacy of an aesthetic and visual order made it possible to simplify the complex processes of occupying the area, and this tended to perpetuate the traditional relationships with the land. 7 C. Scott, Seeing Like a State, New Haven: Yale University Press, 1998. For example, the classification of agricultural activities in three macro-areas prevented diversified means of subsistence for a majority of the new residents. The standardisation of housing and production practices for the resettled population reflected a limited understanding of the variety of their culture, which included nomadism and polygamy. This denied the traditional pluralism of the sub-Saharan African nation, despite the possibilities offered by the Volta project and the situation was made worse by an imbalance in the way the electricity was managed. At the national level, most of the production was to be concentrated in the industrial triangle formed by Accra, Tema and Akosombo, but the policy of favouring surrounding communities simply exacerbated an already difficult situation in the new villages, where the supposed modernity did not necessarily include electrical installations.

It is therefore no coincidence that the Volta project has been considered as a most...