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A New Lesson from the Territory of Bandiagara, Mali:
the Dogon Landscape Transformation of the Cliff
1 INTRODUCTION

Although much has been written about the architecture and culture of the Dogon people of Mali (Africa), little or nothing has been said about the transformation of the cliff territory they inhabit. For decades this people has attracted architects and researchers because of the architectural value of the Dogon settlements discovered by Dutch national television,1 and in the 70’s, his student Joop van Stigt, started building a series of structures to help the people of Bandiagara.2

To grasp the meaning that lies within the anthropic changes of the Dogon territory, this particular research had to use multidisciplinary and integrated studies, which include, among others, architecture, anthropology, and natural and social sciences. This paper adds much more new information than those of the modern of the 60’s. It highlights the deep-seated relationship between the Dogon people and the desert plateau and brings new light to the cultural structure that preserves, expands and renews the anthropic heritage and the design of the cliff.

2 THE CLIFF REGION OF BANDIAGARA, IN MALI

From a morphological point of view, the Dogon settlements developed on the dry and rocky land of the cliff Bandiagara, Mali (Africa). The region is subjected to considerable problems of drought and desertification.3

During the hottest months (April and May) temperatures reach 40 to 50°C in the shade, while the rest of the year they are around 30 to 40°C. As small stone canals and streams. During the rainy season these barriers prevent the fertile land from slipping into the valley, so limiting the hard work of the plow, which guides landscape transformation, which is the livelihood of the village, becomes the edge, which guides landscape transformation, for example, the Dogon are supported by mnemonic forms, such as the grid and the checkerboard pattern, which help connecting reality and myth.

According to the Dogon people, knowledge is deeply imprinted in the living environment, and in everyday objects. The Dogons read meaning regarding their myth-ology and cosmogony into architectural and technical matters, such as crop design, and individual and collective gestures, such as rituals. Therefore in the Dogon scenario, the cultivation system becomes the basis of communicating knowledge, a great “book of cosmogony” and an “altar of ancestors”. It allows the Dogon tribes to remember their origins, therefore helping them to expiate the violence perpetuated by architecture and natural life in the world.

5 THE ROLE AND MANAGEMENT OF CULTIVATED AREAS

Frequently, as myth dictates, in the cultivated land of the village the Dogons recognize an ancient and sacred centre from which the other lands obtained the shape of an ideal checked pattern. Nowa-
days, these most ancient centres produce the crops used exclusively in sacred rites and libations, highlighting the fact that the pressure on nature is considered a violation of the natural order. “The central point of development is formed by three ritual fields, associated to the three ancestors and to the three fundamental cults. Starting from these three fields, the fields belonging to the various kin groups, and finally the individual fields are ordered.”

The central land is administered by the priest of the group, who is a direct male descendant of the settlement founder. He also organizes the work and distributes the harvest. During the priest’s leadership, following the pater familias subordination principle, the youngest of the group cultivates this land and is responsible for the rituals of the community. This land belongs to the village and can therefore not be sold by the people who cultivate it. While this land is in the collective ownership, it is the commune’s obligation to each family supports the village economy, providing food (millet, vegetables, tobacco and onions) to the dwellers who are usually the children, elders, and the out of work of the tribe. Like the land in the central area, these plots cannot be sold by the younger who cultivates them. If this should happen, Individual land management comes last in the Dogon land management system and is based on the conjugal family. These plots, the most distant from the core, are administered by the father and cultivated by his own children. This land then passes as inheritance from the elder to his eldest son, who has to provide for his brothers.

6 DOGON UNDIVIDED COMMON LAND

According to the people of the cliff, the group (from the biggest community of the village to the smallest conjugal family) is the only one to be involved in landscape transformation. The group protects the undivided communal land by relying on those who possess the necessary experience, the elders. Thanks to this practice the group demonstrates a...
projective capacity that exceeds the time of a single generation. For example, on the death of the elder who administers the land, his successor redistributes the plots among the men of the group. The time between one distribution and the following redistribution is shorter if the succession happens frequently. Traditionally common soil is managed by the oldest among the elders and so it follows that there is a greater chance of a frequent re-distribution of it. This practice bears off a personal attachment to the common land by young Dogons and allows the collective plot system to preserve itself and to self-regulate during the growth of the settlement. Moreover, redistribution allows young people to enter the working cycle a little at a time. Over the years, they can learn how to manage the territorial transformation. When they are young they work on the common land, supervised and counseled by the elders on cultivation techniques, when they are adults they inherit their own land and are able to feed the conjugal family, and later in life, once they have acquired the necessary competences, they are called on to manage the common family land.

7 CONCLUSION
Over the centuries the Dogon system of landscape transformation has neither led to a gradual disintegration of the property nor to a gradual privatization of common land. The Dogon family ownership has never led to multiple inheritances; due to having to manage the legacy of a common ancestor and the desire to periodically deploy the assets between all family members. As previously explained, this form of land collectivism is effective, both within the limits of each family group and within the settlement system of the Dogon villages. Moreover, it is deeply rooted in the social and territorial structure that nourishes it.

Nowadays, it allows us to get a glimpse of the deep structures that preserve and renew the entire anthropic cliff heritage: the Dogon people have received the land from their fathers and they will leave it to their children. Territorial transformation is guided by a strong sense of responsibility towards their ancestors, which leads the Dogon people to modify the land with regards to this. In addition, they are also very aware of their obligations as far as their children and the future generations are concerned, which permits them to understand the territory as a legacy of passage.

"Blood’s community, land’s community" (Pauline, 1940 p.49): the Dogons are an organization that can be compared to Moroccan ikhs, to Serbian zadruga, and to European medieval villages. However, in the desert plateau area, the Dogon show an articulate system of land management and a transformation process, which is extremely aware of common space. This Dogon attitude contains many elements capable of shedding new light on the profound values that bind together the reality, culture and common land transformation of the cliff. It is a connection that much contemporary architecture has forgotten. A relationship that today, in the great urgency of the age of globalization, would be fitting to be allowed to re-emerge.

NOTES
3 For a description of Herman Haan’s life and career see: Voltaard, P. 1995. Herman Haan architect. Rotterdam, Uitgeverij O10
5 The Dogon area is located in the Sahel region of Africa, south of the Sahara. It is part of the plateau of Bandiagara, Mali. Together with the neighbouring regions of West Africa, this area is suffering a progressive phenomenon of desertification. See: Daviau, S. 1959. Recherches morphologiques sur le pays dogon. Dakar, IFAN
7 For a geological description of the cliff of Bandiagara see: Daviau, S. 1959. Recherches morphologiques sur le region de Bandjagara. Dakar, IFAN
9 The most famous work of Solange de Ganay is: Ganay DE, S. 1941. Les Devises des Dogon. Paris, Institut d’ethnologie
10 The "Griaule school" is a group of researchers that studied Dogon culture from the ‘30s to the ‘80s. The most important member and founder of the group is the French anthropologist Marcel Griaule. His daughter Geneviève Calame-Griaule has worked with him, together with Germaine Dietzler, Solange de Ganay, Denise Pauline, Michel Louris, André Schaeffer, Dominique Zehou, Jean Paul Lebreu, Jaen Roux and Luc de Hauw.
11 Solange de Ganay’s notes about the Dogon people of Mali, that have never been published, are preserved in the Fonds Solange-de-Ganay, Bibliothèque Éric-de-Dampierre, MAE, Université de Paris Ouest, Nanterre La Défense, France
12 Fonds Marcel-Griaule, Bibliothèque Éric-de-Dampierre, MAE, Université de Paris Ouest, Nanterre La Défense, France

FIGURES
2 Aerial photo of the Dogon village called Ogol, by Marcel Griaule in 1935. The village occupies the rocky outcrops of the plateau. It leaves the little available fertile land at the foot of the rock for crops.
3 Dogon landscape transformation. The crop system, a seasonal river and a baobab near the Dogon village of Ogol (Mali, 2009). Photo by Elisa Dainese.