


An abstract graphic consisting of several thin red lines that intersect and curve across the upper portion of the page, creating a sense of movement and geometric complexity.

On Surveillance and Control at Borders and Boundaries

Landscape, Infrastructures and Architecture

The background of the page features several thin, white, intersecting lines that create a complex geometric pattern. These lines form various shapes, including triangles and polygons, against a light gray background. The lines are positioned in the upper and left portions of the page, framing the text area.

Nell'idea di confine come luogo di incontro lo spazio può essere concepito in termini inclusivi e pluridentitari, trasformandosi in un interessante catalizzatore di nuove forme di immaginazione del territorio. Tali contesti comprendono l'idea di un'architettura debole e diffusa, in cui il concetto di debolezza indica un atto creativo fondato sulla modificazione e sulla conoscenza di processi naturali e reversibili.

“Confini” racconta le architetture, le città e i territori legati al confine inteso come separazione, dove si intrecciano aspetti complessi e contraddittori determinati da condizioni fisiche, paesaggistiche, normative, funzionali e socio-culturali.

La collana affronta l'aspetto teorico e applicativo di forme di progettazione sperimentali, che tengono conto dei processi di trasformazione continua del territorio, e immagina un'architettura-filtro flessibile, fatta di sistemi aperti che si adattano alle logiche della collaborazione e della condivisione di beni materiali e immateriali.

On Surveillance and Control at Borders and Boundaries

Landscape, Infrastructures
and Architecture

edited by

ALEJANDRO GONZÁLEZ MILEA
and OLIMPIA NIGLIO

CONFINI

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The city's relationship to emptiness

The absence of a physical border

Christophe Nkuina

abstract: Open space places us in the field of development, urban planning, town planning, landscaping. It leads us to take an interest in the unbuilt, to focus on the hollow spaces rather than in the middle of the urban. The movement of openness is the one that characterizes cities, like the countryside. It results in a lowering of the borders between these two realities. The city-countryside would then be the figure resulting from a double process: the urbanization of the countryside and the ruralization of the cities. The integration of low density spaces in urban systems cannot be sufficient to qualify the movement of ruralization, the formula has the interest of highlighting the idea of a movement coming from the city together with a movement coming from the countryside. The absence of an urban border allows us to free ourselves from reference concepts to qualify the unbuilt, landscape, countryside or nature, concepts which continue to affirm the existence of spaces or worlds of knowledge distinct from those of the urban. In our approach, the objective is to show how open space is constructed both as a conceptual tool and as a tool for public action facilitating the overcoming of categories, giving an increased dimension and thickness to the materiality of the ground. Specific references feed this absence of border, open space, of which the urban park, the green infrastructure, the panorama. The open space thus optimizes the green abstract plane, without compulsory materiality. In this article we will develop our title in the case study of Douala in Cameroon by focusing on the concept of an open city, without borders and with the potential consequences in relation to cities with natural or physical borders. In its relation to emptiness, the city without physical borders becomes the catalyst for urban extension, sometimes exposing it to the impossibility of making the city, of defining it. Urban models both refuted and promoted, the garden city, the city functionalist return to assert and revalue justifying the orientation of public action on the development of contemporary urban spaces.

Keywords: city, border, nature, open space.

Introduction

The open space asserts itself with the explosion of the modern and contemporary city. The transformations of the urban form favor its expansion: with more diffuse and fragmented urbanization, the open space occupies an important place. This sprawl movement should not

be considered in isolation from the process of rural urbanization; it feeds on it. In the context of widespread urbanization, the advertising of countryside and nature contributes to the strengthening of open space.

The city-countryside refers to this new territorial dimension of the urban where open space becomes an integrated part

of the system. The city-countryside is ultimately this formal interweaving between high and low density spaces. It is not just formal. Admittedly, the countryside that has become a landscape under the gaze of city dwellers and in their living environment could be compared to a painting that the city integrates into its daily scene. Advertisements for residential development operations like to refer to the landscape-painting as a selling point.

The landscape cannot be resumed to this. It is animated by a life, populations live there, it has a history. Urban planning, imbued with aesthetics, too often withdrawn into the city, forgot to look at what was really going on in the "window". In this regard, the questioning posed by the city-territory remains difficult. However, as early as the 1950s, precursor views have gone beyond the path, launching avenues for reflection. They will be ignored.

The Thirty Glorious years and the crisis that followed are not favorable contexts: we must move forward and cities are the fulcrums of progress. Their power is asserting itself, and with it their impact on the environment. We must wait for the advent of sustainable development, urban ecology having failed in its task, to change the vision of the urban. The city-country is not the city in the country, but rather the city and the countryside. A countryside that is urban, regardless of its distance from the city, because it lives by and for urban society. In the modern city, through the history of the garden, open spaces appear as «Fundamental urban materials, while by their combination they assume the

primordial role of intermediary between the different urban fragments, their sites, their dimensions, their technical characteristics, their functions and roles organized within certain great figures» (Secchi 2006, p. 128).

In the contemporary city, open space retains this role of mediator. The contemporary city project «is primarily a ground project [project land] capable of constructing a horizon of meaning for a city that is inevitably dispersed, fragmentary and heterogeneous. It invests, necessarily and simultaneously, the different parts of the city by crossing them and linking them together; he uses materials and creates situations in which we can recognize a new urban aesthetic; it constructs spatio-temporal rhythms and sequences in which the social practices of our time can be read». The land dimension of open space requires taking into account the specific rhythm of the territory through its nature.

The city is no longer against nature, it deals with nature. Nature is present in the most intimate spaces of the city, the metabolism of the city includes natural flows. The open space contributes to the "naturalization" of the city. The territory is at the same time the expression of social, economic and political dynamics, the product of a history and a culture. Open space is also this territory. The contemporary city project must deal with this complex materiality which imposes a local approach to situations and an enhancement of their diversity.

This article aims at better understanding the process that results in giving increasing importance to open spac-

es and their materiality in spatial and urban planning.

In the first part of our narration, we will focus on the open city as the result of an absence of physical or natural boundary, and this on a global scale. Our first approach will therefore extend without distinction of geographical area. We will illustrate the fact that the open city, with less concern for the issue of security linked to the presence of physical or natural borders to a high potential for generating natural spaces favorable to well-being. In a second part, we will focus on a particular case, that of the city of Douala in Cameroon. First, through a brief history we will argue about the impact of German colonization on the configuration of urban space with its desire to segment the city by a kind of delimitation that thus became a border.

Then we will illustrate Douala as a place where the open character of the city is very much present (despite the colonizers' attempt to delimit the city by a border) but where the nature present is not configured as such to be a real consequence. Here, disordered urban sprawl becomes particularly the aspect that conveys the sense of open city.

We will then follow the argument generally, with an interest in the absence of a physical border for sustainable urban development – the demand for nature in the city.

The landscape, a vehicle for the elimination of borders in urban areas

For a very long time the garden belonged to the private world. From the 18th century, the garden becomes pub-

lic. A piece of landscaped nature, a meeting of the divine and the aesthetic, at the service of the urban population. The garden remains an enclosed space although it is accessible. The evolution towards the landscape, as an open perspective, occurs with the advent of parks beyond the ramparts, and planted walks that replace the ramparts of the medieval town (Stefulesco 1993). The landscape then becomes the link between art, nature and public space, art as a means of promoting the role of nature in the city and public-private consensus (Rabreau 2006). Art in the 18th century had to refer to the feeling of beauty, taste had to satisfy «the philosophical requirement of respect for the laws of imitation [...] imitation of the supreme creative act bringing man closer to divinity to which he submits» (Rabreau 2006, p. 23). For the utopians of the 18th century, the city is bad in itself, only the return to nature will save humans (Thiberge 2002). This integration is also part of a consensus because it favors «the introduction of shared nature into public spaces and landscaped habitat into private spaces» (Rabreau 2006, p. 25). This landscape vision is reflected in the art of gardens which adopt an Anglo-Chinese taste, favoring irregularity over order (Jorgensen 2005). It also marks the passage from the delimited space of the park and the garden to the landscape as a panorama. «The movement in the landscape and the panoramic view found their best expression in Laugier²³ in his theory of urban embellishments and the art of gardens» (Rabreau 2006, p. 39). Father Laugier developed a naturalistic vision of urban organization in two directions:

the multiplication of garden openings inside the city; the opening of the city to its countryside. By referring to the site of Paris crossed by the course of the Seine, «It is the influence of the city towards the countryside that inspires it, from the silhouette of church domes [...] and the hilly expanse above downstream banks, real paintings of suburban landscapes» (Rabreau 2006, pp. 40-41). This landscape vision is, it seems to us, the founder of open space: it creates a horizon outside the walls, it introduces the panorama as an opening of the field of vision in the city, it is based on the environment (what surrounds) to think of the urban. Art and aesthetics play a central role insofar as the references remain those of landscape painting; the landscape is a composition whose materiality is only tested by the sense of sight. At the same time we see the emergence of the demand for “an urban landscape which has the diversity of nature”.

Openness as a formal characteristic of the contemporary city

The idea of a system brings us back to a coherent whole despite the dispersion, fragmentation and heterogeneity of this whole. Coherence is then the product of relationships and interactions between the different elements of the system. The system places us in the idea of integrating diversity. We are no longer in the logic of a two-sided choice: «urban / rural, center / periphery, continuous / discontinuous, mixed / segregated, full / empty. [...] The urbanity that is emerging today does not wipe out any of these elements. It integrates them all, reorga-

nizes them, redistributes them, makes them interdependent according to a dynamic of “both” a thing and its opposite» (Chalas 2001). «The fragments of the contemporary city are the materials of an open system» (Secchi 2006, p. 129). This association of opposites inspires the seven figures that Y. Chalas uses to illustrate aspects of contemporary urbanity. Five of them refer more specifically to the urban form: the mobile-city, the polycentric-city, the city-territory, the city-nature, the city-empty. The other two are more interested in new ways of living in the city: the city in continuous time, the city of your choice. We will not discuss them here. The mobile city is the founding figure. The automobile and the road and motorway infrastructures that accompany its development give a new dimension to the city. Finally, the urban form can be understood through the logic of its networks (Mangin 2004). Without networks, there is no mobility. We are changing networks, we are changing mobility. It is on this point that the revitalization policies of urban centers insist: making it difficult for cars to travel, reducing speed, giving priority to public transport on a dedicated site. However, mobility cannot be reduced to networks. «Mobility is nowadays the very basis of the social and spatial relationship» (Chalas 2001, p. 18). Understanding the ways people live requires understanding the meaning of their mobility. Studies on peri-urbanization provide an enlightening illustration of this (Dodier 2007; Pinson and Thomann 2001). The mobile city is the vector of the polycentric city. The proliferation of peripheral centralities testifies both to the

strengthening of already existing centralities (villages, towns, small towns), but also to the emergence of new ones linked to various activities (transport, consumption, leisure). These centralities can give rise to significant concentrations which call into question the supremacy of the original centralities. The edge cities of the American peripheries or the technopoles are figures of these new centralities. The mobile city also participates in the advent of the city territory: «The grip of the city territory is that of the city which has become co-extensive with the territory» (Chalas 2001, p. 64). The striking fact is on the one hand the disappearance of the agreed limits of the city (the boundless city), on the other hand the integration into the city of materialities which until then were opposed to it such as nature and the countryside. In fact, for Chalas, the city-nature constitutes one of the figures of the contemporary city. «The city-nature integrates rural and natural spaces serving as identities or new urban references» (Chalas 2001, p. 84). «The city-nature is not a landscape city or a landscaped city, where nature is always seen from afar, without actually being practiced. The resort is precisely the opposite: the very practice of nature, but in the city, through the city and thanks to the city» (Chalas 2001, p. 111). Chalas differentiates the city-nature from the city-empty which, by contrast, refers to poorly identified interstices, hollows, ruptures. The diversity of juxtaposed fragments, the heterogeneity, the discontinuity of the urban are conducive to the emergence of these voids such as wastelands, interstices, abandoned areas. This distinction,

apart from the extent of the spaces considered, is however not very clear. Emptiness is not so much the nature of space as the way we look at it. Town planners have long approached the countryside as a free space offered to their projects. The neologism of city-country or country-city, preferred by the Swiss (Montevanti *et al.* 2008), holds our attention. The city-country emphasizes the idea of a «city lived in the form of the countryside» (Berque 2006). The term finds its origin in a seminar coordinated by A. Berque, C. Ghorra-Gobin and Ph. Bonnin on the three sources of the town-countryside seeking to understand the ideological foundations of this interest of the townspeople for the individual house: why do city dwellers idealize a rural habitat? (Berque 2006, p. 10).

A. Berque himself points out that this expression was first used by the Japanese as a translation of E. Howard's garden city model (Berque 2006, p. 247). The reflection focuses above all on a crossing of three semantic basins (Europe, East Asia, North America) to explore the myth of individual housing and the relationship to nature. P. Donadieu approaches the city-countryside in a more strictly agricultural approach. He considers the term as «an agricultural case of the city-nature» because «it is the farmer or the gardener who is at the origin of the production of the forms of the landscape, with or without the framework of the imposed rules. by city dwellers or in concert with them» (Donadieu 2003, p. 170). Both visions agree that the landscape is a key element of the city-countryside. The following part aims to better understand how the

countryside became landscape and became part of the urban system to found the city-countryside.

The social interest of nature and the ecological perspective for the absence of borders

The contemporary city project entrusts to the design of open spaces the role that once belonged to the garden, that is to say to be the place of experimentation and the development of new ideas (Secchi 2006, p. 128). If the return of the landscape clearly reflects a continuity with the city of the 19th century, the city of the 21st century imposes new challenges on open space: the affirmation of its social, political and ideological role through the "nature" component change comes first from the recognition of failure. a city which does not seek to be diluted in the countryside and nature but which clearly affirms its urbanity. Both accuse functionalist town planning of having emptied the hollow space of its social function. «We have learned that open spaces also have a social role, too often neglected for the benefit of their only hygienic function» (Mumford 1960 cited in Choay 1965, p. 360). Jane Jacobs campaigns for a revitalization of the city, for more urbanity: it is about fostering diversity and meeting others. This involves asserting the city as a place of life. However, this vitality of public space cannot be decreed; it cannot be the only product of a desire for development. Thus, «Parks can and do be a great additional draw in areas that the public already find attractive because of a wide variety of other uses. On

the other hand, they only make neighborhoods devoid of seduction more depressing: they accentuate boredom, insecurity and emptiness» (Mumford 1960 cited in Choay 1965, p. 375). Unlike the street open to all, parks allow withdrawal, hiding, they are therefore conducive to transgressive practices, juvenile delinquency. In fact, the park that has meaning is one that correctly plays its function as a public space. Urban parks «serve to link together, through the use of a common agreement, various neighboring functions, and thereby further contribute to the diversity of the environment» (Mumford 1960 cited in Choay 1965, p. 375). The park thus considered is not an element of nature in the city but rather an element of the city itself, it is part of a whole. «A city is not made of pieces and pieces, like a building with a metal frame [...] The structure of a city resolves itself into a mixture of functions, and we never come closer to its structural secrets than when we deal with the conditions that give rise to its diversity» (Mumford 1960 cited in Choay 1965, p. 378). The city-nature relationship is undergoing an essential turning point under the influence of ecological thinking. All the developments must be linked to one essential point, which is the recognition of the interdependence of the city and nature. Nature thus enters into the multiple relationships that structure the urbanization process. City and nature are no longer seen as inert objects but as interactive processes (Kaika 2005). The nature in question is a nature whose dynamics are described by scientists, most often environmentalists. Therefore, the issue of town planning is no

longer just to draw outlines, to compose atmospheres, but also to take into account the scientific principles of nature to build the city. The change is radical. It was initiated in the 1960s by McHarg in his book *Design with nature (Composer avec la nature)* published in 1969. A pioneering work, but little followed in practice. It was not until the advent of sustainable development that a new impetus was given to this ecological approach to the city. Our hypothesis is that McHarg's publication is the founding act of the contemporary view of open space. The city without borders has also been the catalyst for two benchmark urban planning models: the garden city, the functionalist city.

The model of the garden city proposed by E. Howard seeks to offer an alternative to the industrial city, harmful to humanity, by promoting the union between the nurturing "mother" (countryside, nature, materiality of the earth) and the "Father" protector and educator (the city). City and country must be married, and from this joyous union will spring new hope, new life, new civilization (Howard 1902 in Choay 1965, p. 279). More than opposition to progress and nostalgic thinking, the approach of E. Howard proposes the foundations for a *social revolution*. This change is conceived on the basis of a spatial organization of the city which clearly delimits the built from the unbuilt. A zoning distributes activities in space: the heart is made up of an ornamental garden, commerce and public buildings are located around and form the center, the residences arranged in a halo around the center, industrial activities on the outskirts to distance from dwellings, all surround-

ed by the agricultural belt which shields dispersion and urban expansion. Distinct from this compact city, the functionalist city seeks to de-densify buildings to optimize air circulation, access to the sun and install buildings on a support of nature, a green expanse. Far from divergences, urban planning thoughts have reinforced over time this integrating link between the built and the unbuilt. The evolution is more about the figures used to integrate open space and take into account its materiality. We consider that there are three essential figures; they participate in various ways in the construction of open space: the urban park, the panorama, the green infrastructure. Referring to the urban park, for a very long time the garden belonged to the intimate world. Closed, it is private. It was from the 18th century that the garden became public. A piece of landscaped nature, a meeting of the divine and the aesthetic, at the service of the urban population. The garden remains an enclosed space although it is accessible. The evolution towards the landscape, as an open perspective, occurs with the advent of parks beyond the ramparts, and planted walks that replace the ramparts of the medieval town (Stefulesco 1993). The landscape then becomes the link between art, nature and public space, art as a means of promoting the role of nature in the city and public-private consensus (Rabreau 2006). Landscape architecture, a discipline developed by F.L. Olmsted, tends through the figure of the urban park to promote these objectives with the aim of improving the quality of life of city dwellers, of all city dwellers. If F.L. Olmsted is back on the front of the stage today it is undoubt-

edly that we take the measure of the role that his ideas have played in the history of landscape architecture (Maumi 2008) and in the contemporary design, with the role granted to unbuilt space in the city: a public space intended to improve the quality of life of city dwellers. The urban park offers a new form of public space intended primarily for recreation of city dwellers. The landscape architect must respond to a social demand, but also to make possible new practices and force possible transgressions through forms of regulation (park police proposed for Central Park). For Olmsted, the hygienic function of the park must be accompanied by a social function considered essential: the parks humanize the city by bringing civilization to it and democratize it by mixing social classes (Harter 2002). The park is not an enclave in the city but a part of the urban whole, it opens onto it in a link that aims to be harmonious between the inside and the outside. The opening here is therefore landscaped: giving opportunities to the view, a view that is intended to be attractive and pleasant, reminiscent of the nature *outside*.

The term park refers to several meanings. Originally it was an enclosed space, bounded by a fence for grazing livestock (Brunet 1992). In the evolution of meaning, let us highlight the main meanings that emerge.

1. The park distinguishes an inside and an outside even if, as is the case for natural parks, the limit is not necessarily materialized by a fence.
2. The park which was initially a private space, generally wooded, de-

pendent on castles or properties of wealthy families and intended for walking, became especially from the 19th century a public space dedicated to the recreation of city dwellers.

3. The park, which is a very social construction, can be conceived from the 19th century as "natural". The first natural park was born in 1864 in the United States (Yosemite Valley). It testifies both to the value placed by American society to nature (wilderness) but also to a city vision concerned with preserving what urban society destroys. Recall that the landscape architect F.L. Olmsted, designer of New York's Central Park, is also the editor of the Yosemite Park Protection System. In addition to the recreation area, in the term park, the idea of unspoiled nature will be added, which will give rise to a whole set of variations of environmental zoning with various functions and perimeters.
4. The idea of closure remains strong in the forms of development intended to accommodate specialized activities on the outskirts of built-up areas. It can be an activity park (industrial or service activities), a leisure park, a theme park, a residential park, etc.

The park that is chosen for the preservation of open spaces is a park associated with the idea of nature. In relation to the panorama, the application of functionalist principles will not fundamentally call into question the figure

of the urban park. The bifurcation arises above all from the erasure of materiality, of the landscape dimension of the unbuilt space: functionalism reduces the space open to the panorama and to the void. «Gropius and Le Corbusier are convinced that urban space must change scale and that heightened densification will allow soil de-densification, and therefore the passage to open space» (Thiberge 2002, p. 139). In this greenery, community facilities such as playgrounds can be installed, but the greenery is above all that which is visible from the accommodation. The open space thus constitutes an abstract green plane but without materiality, without roughness.

The high-rise construction intended to open up the accommodation to nature, light and air transforms the open space into a panorama. «In the end, everything happens as if the open space were a space that does not exist, except in the state of panorama. It is only the void that surrounds buildings» (Thiberge 2002, p. 142). There is therefore no longer any need to represent it, it becomes white in development plans, the support on which the city made up of networks and buildings is built (Chiappero 2003). Thus reducing the materiality of free space to the panorama leads to identifying open space as a void as opposed to a full.

Green infrastructure has its origins in landscape planning, which uses landscaped open space as a structuring element of the urban. The park system by F.L. Olmsted, taken up by J.C.N. Forester falls under this approach. Organize the city to come around public spaces

(parks) and landscaped traffic routes (parkways); promoting the connection and continuity of this system at different urban scales (from the square to the peripheral urban park) are the principles defended by these practitioners. Another tool, the green belt forms associated with the idea of the garden city, incorporates the vocabulary of planning. E. Howard, R. Unwin, P. Abercrombie and F.J. Osborn participate in the dissemination of their ideas in Europe and North America where they find an echo (Amati, Taylor 2010). The ecological influence intervenes in the planning of the landscape by developing a systemic approach aiming to better integrate the elements of the urban whole and to overcome the urban / rural, built / unbuilt, artificial / natural divides. Green infrastructure, seen as all "green" networks, is participating in this recomposition.

Green infrastructure feeds on a certain vision of ecology. It favors the link between urban morphology and the nature conservation project. For this, it mobilizes the principles of landscape ecology.

Green infrastructure also refers to approaches that highlight the public and multifunctional dimension of open space. Green infrastructure combines a great diversity of spaces. These references show that open space reconnects with the materiality of the city. To the landscape dimension remobilized today is added the consideration of natural processes, the physical and social dimension of the soil. The functionalist period is not necessarily to be seen as a rupture but as a bifurcation that marked the conception of open space. At the

same time as the idea of openness is reinforced, the construction of the unbuilt as a void deeply marks the thought and practice of town planning. The speeches advocate innovation by reversing the gaze: consider the unbuilt as a solid whose material should inspire the urban project. Green infrastructure offers the discourse and the image of a possible reconciliation between the injunction to attractiveness and innovation that weighs on large agglomerations and the model of the sustainable city, which would aim to limit its dynamics. spatial. The connection of open spaces of the intra-urban scale to the regional territory (metropolitan area) shows a system whose parts are interdependent: a territorial system which wants to be coherent and balanced between built and unbuilt, which connects interstitial spaces from urban to peri-urban land dominated by agricultural, forest and natural areas. This idealized vision, now the benchmark for territorial planning, is a real issue for regional planning faced with the difficulty of territorializing green infrastructure. However, it is important to remember that green infrastructures are structured over the long term (Fabos 1995) and that their characteristics are closely linked to the context in which they emerge (Erickson 2006). The open space that composes them necessarily moves away from the figure of the panorama to inscribe itself in the ground. Natural and agricultural spaces are increasingly associated with it in the unitary vision of an open space serving the urban project. Green infrastructure contributes to the requalification of open spaces.

Urban or agricultural wasteland, interstices produced by the construction of major infrastructures, spaces swallowed up by urban sprawl, forgotten wetlands, river banks, steep slopes are in fact included in this encompassing category. From neglected, the spaces then become nature, admittedly ordinary, but ecological restoration allows them to eventually be promoted to the status of exceptional nature. The renaturation of gravel pits and landfills are part of this movement. It is thus a multitude of vast or micro spaces that are rediscovered and open, in some cases, to the practice of city dwellers. This nature constitutes a formidable potential for reconfiguring urban landscapes. It is in this capacity that it is called upon in urban projects. This requalification offers an opening to new appropriations of the city: rediscovering the banks of the river, browsing the woods, jogging in an inaccessible valley bottom, picnicking on a ridge, or even sunbathing on a beach created on the quays of an urban river, etc. become natural practices close to the daily lives of city dwellers. The nature expected by city dwellers is accessible, amiable, beneficial. Nature that improves the living environment (Boutefeu 2005). The materiality of the open space then takes shape because it is part of the sensory experience of the inhabitants.

Open space is linked to the issue of the place of nature in an urbanized area. Once the question has been asked, «How to determine the place of nature in a large city and its region?» (Boutefeu 2005, p. 51), I. McHarg will no longer use the term nature but rather open space which he systematically puts in quota-

tion marks as if he was not yet sure of the merits of its use. In his remarks, open space refers to the soil which hosts resources important for the reproduction of the ecological system and for ensuring the conditions of the quality of life of city dwellers. Nature "works for free" for man and therefore represents a value. Open space not only reflects the values of nature, it also incorporates risks: flood zones, earthquake risks, landslides, etc. «It is conceivable that such natural areas where there are advantages and disadvantages are the basis of the "open space" of large cities. If this were the case, they would meet a double objective: to guarantee the great vital balances of the natural environment, to use land unsuitable for urbanization in such a way as to protect the environment from the whim of nature. Urbanization should take place in inherently suitable areas, where there is no danger and without causing damage to the natural environment» (Boutefeu 2005, p. 51). The preserved open spaces should not be chosen according to the criteria of land value (economic) or the geometry of the territory (developers) but according to the capacity to accommodate "green" activities. «Ecology suggests that land intended for "open spaces" in the urban area originates from natural areas suitable for "green" activities [agriculture, recreation]. This is the true place of nature in the big city» (Boutefeu 2005, p. 52). Thus, open space is not a residual space, an interstice of the built city, but the result of a deliberate choice to preserve certain spaces rather than others. It is knowledge of the environment, of its potential, that should guide this choice.

The valuation of open space must make it possible to assume it. «The problem is not in terms of the amount of space, but the distribution of that space. We are looking for a concept capable of establishing the link between "open space" and the population. The low social value attributed to "open space" undoubtedly causes its urbanization, within the urban area and on its periphery. Usually urbanization excludes interpretation and devours "peripheral" open space» (Boutefeu 2005, p. 57). In I. McHarg's vision of open space, we find the concern for a functional integration of free space into an urban system that takes on meaning on a regional scale. The development of the city must be accompanied by a permanent concern: the maintenance of natural balances considered as an "inseparable whole" to which we should be able to attribute an economic value. Nature, in his vision, is not the only fact of the planet; it integrates water, soil, air and all the mechanisms of life.

Introduction to a Case study: the city of Douala in Cameroon

As illustrated above on the relationship of nature in urban space as a potential consequence of its open structure, Douala is a particular case where the character of open city is certainly perceptible due to the absence of borders, but the nature present does not assume an organized character as seen well elsewhere. Spaces are not organized and we are witnessing a land use that does not always assume a chronology in evolution. Urban sprawl acquires a strong identity. The periphery is identified in a

dispersion of the building by revealing open spaces, natural but which result in being residues, unthought spaces.

Brief history – The contact with Europe

The History of Cameroon “begins” at Douala. The appellation Cameroun derives from “Rio dos Camaroes”: in 1472, the Portuguese navigators were so surprised by the abundance of shrimp in the Wouri River that they named it “the Shrimp River”. Between 1472 and 1961 Cameroon’s contact with Europe took place and the town of Douala was the center of the country’s relations due to its geographical location.

The town of Douala as we know it today, that is to say as an urban center with its own contours and specificities, did not exist before 1884. Bearing the name *Kamerunstadt* after the signing of the treaty Germano-Douala, then *Dualastadt* after the decree of January 1, 1901 of the *Kolonial Government von Kamerun*, it is a result of the merger of the villages *Duala* which, before the colonization, had relations with the other peoples of the interior of the country, but also with the Europeans who traded in the waters of the *Duala*. Its occupation dates back to the period of Bantu migration and the populations settled there in the form of billiard balls. The first inhabitants of the estuary were the Bakoko and the Bassa who emigrated there around the 17th and 18th century from the Adamawa plateau. Initially farmers and later intermediaries between the *Duala* and the populations of the hinterland, the Bassa occupied the forests and the coasts, driving out the Pygmies and fighting

against the Fang-Beti. These various settlements gave the coast of Cameroon, seen the dynamism of its populations, the reputation it acquired in the various exchanges and made this space a real economic pole and the foundations of the town of Douala.

The settlement and structuring of the city of Douala

The arrival of the colonial system and its effective implementation in the newly acquired territories, throughout Africa and in particular in *Kamerun* (name of Cameroon during the period of German colonization), were accompanied by many changes, including; urbanization. It was following the signing of the Germano-Douala Treaty on July 12, 1842 that the territory that later became *Kamerun* entered a milestone in its history. This historic moment will mark the beginning of a collaboration between the Cameroonian natives represented by *Duala* chiefs and representatives of German economic interests. After the establishment of the German colonial administration in *Kamerun* through the German-Douala treaty and the conquest of the territory, the country was developed, especially in large metropolises like *Duala*. The latter, as an urban entity, was born of the combined genius of both the German colonial administration and the indigenous peoples. However, it must be recognized that *Duala’s* existence predates the arrival of the Germans. They saw the territory as a strategic location; hence the conquest of hinterland was to take shape. Germany, having spent thirty years at

the *Kamerun*, had devoted the first half to conquest and the second half to development. The round-trip passage of the Germans and the French to Douala laid the foundations for the urban development of this agglomeration. Douala's plan was based on Western standards that highlighted the architectural genius of Germany, supported by the physical, intellectual and material effort of the indigenous peoples.

Genesis of the border and its disappearance in the city of Douala

The expropriation of the Joss plateau

We have to go back to this distant event to understand what happened next in Douala in terms of land development. When the Germans landed, following the 1884 Protectorate Treaty, they were in the presence of three (*Quarters 1*) Duala (indigenous people) occupying respectively the three platforms that dominate the Wouri Estuary; from south to north: Joss, Akwa, Deido. Behind this bead, uncharacterized and often marshy terrain extends. The Germans naturally came to foresee the displacement of the villages. A vast urban and harbor development project, developed at the beginning of the century, was based precisely on these three interfluves, intended to be occupied successively starting from that of Joss where the government had already settled. The indigenous populations had to be relocated inland, a few kilometers from the shore, separated from the European city by a strip of land 1000 meters wide (*freie Zone*) completely surrounding it. Neu-Bell was born (the

Duala Bell were the occupants of the Joss heights), then Neu-Akwa and finally Neu-Deido. Only the first phase of this program could be executed before the Germans gave way to the Allies in 1914. It was extremely laborious. The Bell appealed; lawyers sent delegations to Germany and brought the dispute to the Reichstag. The conflict escalated to the point where their leader Manga Bell was sentenced to death. The transfer was finally completed only a few months before the entry of the Franco-British Allies. The Bell companies obviously took advantage of the regime change. Some of them gradually left what had become New Bell to take possession not of the irretrievably lost plateau of Joss. But this was only the first act in a long series of litigation transactions that dominated the Bell administration relationship for a half-century. It is quite obvious that, in the face of this situation, there was never any question of pursuing the German plan. Akwa became the business center, and then the Europeans found housing as tenants in the compensated Bell's, particularly in what was the *freie Zone*.

Prof. Hans Ziemann (1865-1939), a doctor who stayed in *Kamerun* in 1909, is at the origin of the colonial policy of segregation between Europeans and natives. According to him, a one-km stretch of land between the two communities is enough to block mosquitoes, which are malaria carriers in the indigenous populations.

The German colonization used the *freie Zone* to determine territorial fragmentation, social segregation but also to establish local (dis)connection. It was physically an element to separate Euro-

pean quarter from the Douala's. It appears as a tool to organize the territory and the mining rights, to classify and govern local population, and to regulate and tax existing and new trades and no more a tool to ensure the security of the city of Douala indigenous people.

After the German defeat in Cameroon against the Franco-British alliance, the question of urban boundary, long rejected by the indigenous populations as soon as they were expropriated, quickly lost its momentum.

The city of Douala in Cameroon: the colonial frontierisation denied for an open city

The geographical location of the city of Douala gives it many advantages which promote its urban expansion. Among these advantages the *Wouri*, mythical river on which an expedition led by the Portuguese navigator *Fernao do Po* landed in 1472 and whose territory (the estuary and the surrounding plateaus) played and continues to play a major role in the construction of Cameroon, both historically and in terms of town planning. Thus, relying on an identity strongly marked by its relationship to the river, the city of Douala over the years has undergone a profound transformation from a simple fishing village to a sprawling economic metropolis. The elaboration in 1890 of the city's first urbanization plan, following German colonial development plans, introduced the notion of border in order to secure the headquarters of the colonial administration established on the *Joss plateau*. After pushing back the fishing villages that were there. This op-

tion was reinforced by the second urbanization plan in 1896 with the extension of the city on the left bank and the creation of a safety zone (*Freie Zone*) at least one kilometer wide in which the establishment of neighborhoods Africans would be banned. After the 1914-1918 world war, marked by the German defeat, the one kilometer wide (*Freie Zone*) left empty by the Germans and intended to serve as a green space and a buffer zone between the European and native population, will be immediately occupied, transformed and developed. Likewise, the area reserved for colonial administrative buildings will be transformed into a residential area for the natives.

In the 1950s and 1960s, most African countries as Cameroon achieved independence from their colonial masters (Scotto, Giulia 2020, p. 121). The end of direct colonial domination marked the beginning of a phase that could ideally lead to a radical political and territorial transformation. The open, borderless city, that of the culture of the natives accustomed to living side by side without being bothered by the questions of security by urban planning, has therefore experienced its real expansion. To give birth to what we live, I live to this day.

The prospect of a secure border in the urban space of Douala did exist under the colonial impulse and its security character was designed to protect Europeans (Germans for more details) against diseases that could be transmitted by the indigenous populations. Architectural elements that constitute borders have never existed in the city of Douala, leading it to be an open, permeable, limitless and insecure city.

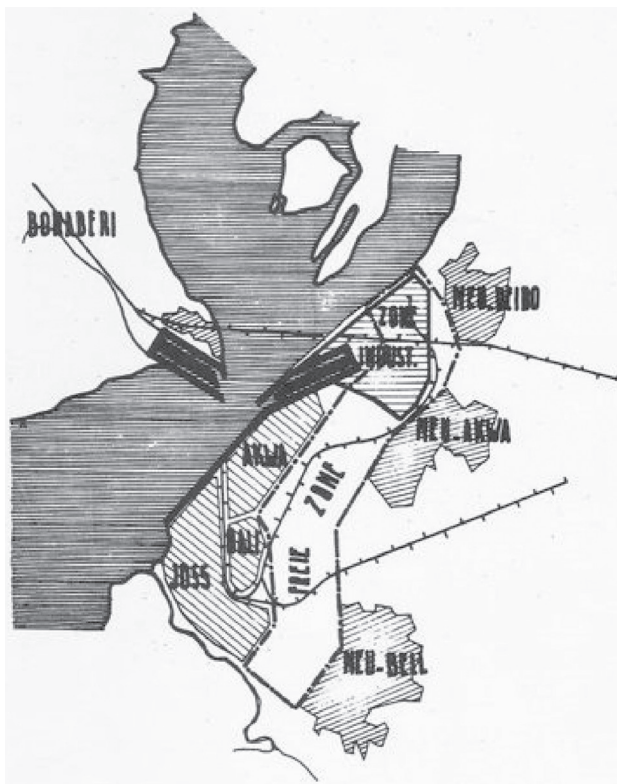


Figure 1. Sketch of the German urban plan.

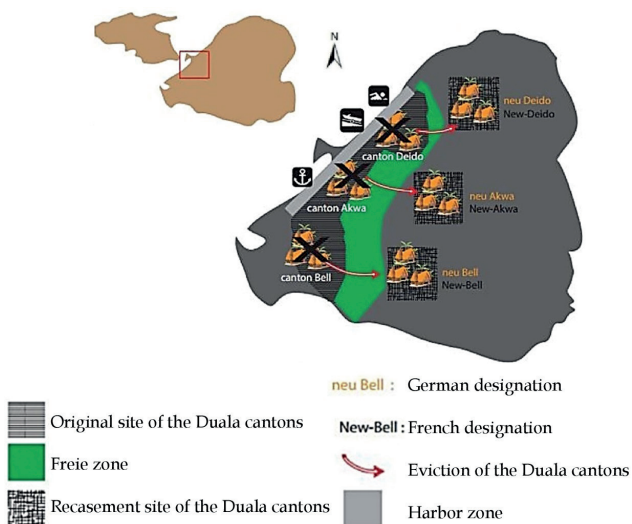


Figure 2. Diagram of relocation of the Duala cantons. Source: Kalieu 2016.

The general paradox of an absence of border: the impossible city – case of Douala

The urban perimeter is widening, the sometimes asserted desire to do away with the idea of a territorial limit under the pretext of an infinite superposition of networks seems to me completely insane. This word border or limit is too often misused, because it initially evokes segregation. The question of the wall or of the limit (physical or immaterial) induces on the one hand that of the nature of the spaces and the contents located on both sides and, on the other hand, that of the nature of the limit itself. same: its degree of porosity, its material, its variability. The wall is the first element of architecture, it is part of the landscape first to protect, often to separate a private space (the shelter) from a public or natural space but it can also become a landmark, a support, a meeting place at the right of its doors and sometimes allow to connect, because according to its nature it can be a path, a place of walk, like the beach which separates the sea and the land. By reasoning this time through the absurd, we see that the absence of a limit on the scale of a territory produces the urban but prevents the creation of a city and the production of a density capable of offering all services. related. It suffices for this to observe, everywhere in France, the uncontrolled extension of historic towns by industrial or commercial zones which produce peri-urban spaces whose nature it is difficult to qualify and which, in addition to their great ugliness, produce uniform monofunctional zones,

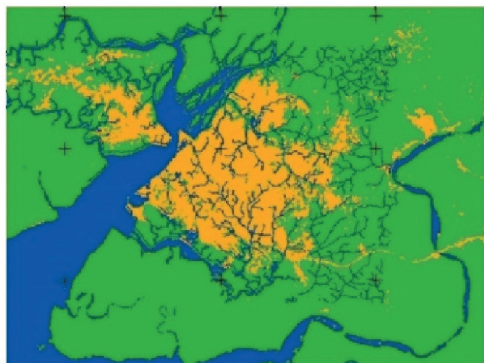
unsuitable for lifestyles. “Uninhabitable” areas because they are both urbanized and too sparsely populated, the consequences of a constant search for financial savings. It is much easier to build an inexpensive, environmentally friendly building on virgin land with good soil than in an urban hollow tooth. Consequently, without regulation by the public authorities, the infinite extension of the territories with mediocre buildings built at a lower cost while benefiting – this is a paradox – from expensive and unsuitable infrastructures (huge roundabouts, wide automobile roads) is not ready to stop.

Imagine that Douala extends as far as Limbe (city of Cameroon, at south of Douala) to reach the sea, that would be nonsense. Douala in itself is full of inequalities (inequities) between the wealth of intramural Douala – where the density offers a quality of service (transport, shops, cultures, facilities) all accessible on foot – and the distended public space of the former and especially second crowns (width of streets, median, etc.).

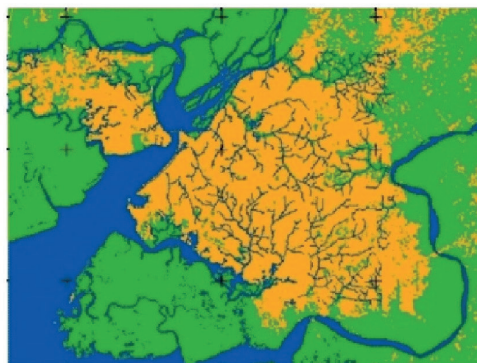
The sprawl in the strict sense of the city of Douala is measured first and foremost from a demographic point of view. This demographic change is reflected in the land use. The process of spreading out the city of Douala has in fact been identified for several years as a harmful phenomenon for its agglomeration. Inexorably, the city continues to sprawl under different urban dynamics with determinants that contrast with planning tools developed to organize urban development.





Urban growth at the origin of multiple urban disorders materialized by

DOUALA 1986



DOUALA 2017



-  Streams_Rivers
-  Urban spot
-  River
-  Green space

Entities	1986	2017	Difference
Urban spot (in hectare)	10708.5	24726.6	+14018.1
River green space (in hectare)	52668.5	38659.9	-14008.6
Annual change in urban area (452 hect/year)			

Figure 3. Urban dynamics in Douala between 1986 and 2017. Source: the author.



Figure 4. Illegal construction in green areas in Logbessou Quater (Douala). Source: CUD/Tchappi.

overcrowded neighborhoods, insecurity, anarchic occupation of space, the uncontrolled extension of the city to areas unsuitable for housing and the disorganization of powers at the local level require a paradigm shift. For, rational spatial planning is increasingly a political and economic issue and even more an essential condition for improving the conditions and living environment of citizens in urban areas. Urban engineering as a response to the problem of the stability of the city has for purpose, the structuring and the formation of the city.

The notion of stabilization of the city can be understood as the delimitation of spaces and their uses, a mode of stabilization of social relations and their inclusion over time.

Faced with the rapid spatial transformations experienced by the city of Douala, the urgency of a systematic intervention at the inter-municipal level in urban areas is felt. Decentralized cooperation in urban development that has taken place so far is extremely underdeveloped and limited.

Faced with the rapid spatial transformations experienced by the city of Douala, the urgency of a systematic intervention at the inter-municipal level in urban areas is felt. Decentralized cooperation in urban development that has taken place so far is extremely underdeveloped and limited.

The galloping expansion of the city of Douala in its various different constituent areas is none other than the consequence of a refusal dating back to the colonial era with the rejection of the aspirations of the colonizer who wanted to close the city by bordering it. For the city

of Douala, this expression in itself has consequences not always in favor of the city itself since the urban planning tools do not participate in the control of this acceleration in order to guarantee an urban quality that aligns with the principles of contemporary cities.

However, because of the densification and the extension of the city on the peri-urban space calling into question the borders between different administrative territories, the intercommunality by the mutualisation of the means and the competences presents considerable advantages in the development and the implementation of strategies for a coherent management of space. The inter-municipal approach is a challenge and it is around this model of the city's development that we should think about moving Douala out of villagization into a metropolis worthy of its rank, in line with its prestigious past and its promising future.

The absence of a physical border for sustainable urban development and for nature in the city

Of the three pillars, economic, social and environmental, it is undoubtedly the latter that receives the most media coverage because it is considered both the most innovative and the most promising in terms of image. The social, a persistent theme of the urban problematic, remains all in all less attractive. The main fields of application of sustainable development in the city are then the reduction of the ecological footprint and greenhouse gases, biodiversity. Environmental education

intervenes transversally as a means of action. In the first theme we find all the operations concerning mobility. The objectives are to reduce the need for mobility, to reduce speed, to promote diversification of modes of transport. Reducing the ecological footprint also means reducing all forms of energy consumption and recycling as much as possible. Waste management policies have been successful in terms of the ability and speed to change residents' practices. Sustainable urban development thus oscillates between the diversity of localized operations and the strength of the model which conditions good practices. These must meet the key principles of the sustainable city: a city that is part of the long-term work for a fair quality of life for all its inhabitants, initiates a local policy and actions in compliance with the principles of Agenda 21. The risk is that of the "single recipe" underlying the model of the compact city, the eco-district, the family garden, etc. (Ascher 2009). Sustainable development cannot be reduced to a sum of technical recipes for "greening" the city. Sustainable development opens a new path for urban ecology, it is a favorable context on condition that the sciences participate in the orientations of the development of the complex city (Mathieu 2006) and that interdisciplinarity finds the means to be realized; city dwellers appeal to nature to better experience their urbanity. Several elements contribute to strengthening this social demand of city dwellers. First, the awareness, under the pressure of environmental concerns, to live in a world where high-value natural spaces

are scarce and threatened by human activities. Then, the rejection of the city and the promotion of the countryside and nature as a form of compensation, but also as an identity referent. This idealization of Elsewhere is responsible for the movement of peri-urbanization but also for the investment in natural spaces that are increasingly accessible for recreational purposes. Finally, the desire to reconnect with nature through knowledge and experience. The practice of gardening, for example, makes it possible to combine the two: observation of the mechanisms and contact with the natural elements, the earth, the sun, the rain. It is increasingly popular with public policies as a tool for sustainable development and as a creator of social ties (Baudelet 2005; Consoles 2008). The nature to which we are referring here is above all spatial, we are dealing with natural spaces. We consider two types of nature as envisioned by the city dweller: the nature of the "Big Outside" which goes beyond the control of man, and is the result of an extension due to a formal absence of border between space of the city and the vast immediate environment, the distant one, which more favorably resembles the companion (Younès 2000, p. 69); the nature of the experience, more or less close to it. The nature of the Outside is wild nature. The forest, the mountain, the sea, the desert are the elements of this nature. Threatened by human work and the evolution of lifestyles, it must be protected as a guarantor of ecological balances and as a heritage of humanity. It is a distant nature in the imagination of an absolute wilderness. Contact with this nature

can only be exceptional, that of an explorer approaching an unknown world. It is not within everyone's reach, in any case that is what the discourse of adventure tourism suggests or the great reports with images evoking sublime landscapes. Certain sites and city situations make it possible for city dwellers to be closer to these elements of nature. The mountains, the coast, the forest are taken over on weekends or vacation time by the recreational practices of city dwellers. Whether distant or close, "Urban here lends to the natural Elsewhere an almost infinite range of representations and virtues antithetical to the city condition and to the constraints of all kinds that may be associated with it" (Bourdeau 2008, p. 27). The accessibility of these spaces can then transform the nature of the outdoors into the nature of lived experience. The nature of the lived experience is that which surrounds the everyday space of the city dweller. A cultivated or landscaped nature, reassuring and familiar. Nature spaces are accessible to city dwellers, which may or may not be regular, frequent or not, regulated or transgressive, depending on the individual. We can distinguish the practices of the inhabitants of the traditional city from the inhabitants of the peri-urban area. In the traditional city, where the private garden is the rarest, the nature practiced is that of public squares and gardens, or urban parks with less ornamental forms. As soon as possible it is towards natural and rural areas outside the city that city dwellers go. In a study carried out on the social demand for nature in Lyon, Emmanuel Boutefeu shows that the most frequent-

ed space is the closest space, the square generally located in the neighborhood. It is a space for relaxation and meeting. For the weekends, city dwellers look for peace and greenery in city parks and if they can in "outside" spaces. The urban park is all the more attractive as it gives access to a "soothing, friendly and pleasant" nature that makes you forget that you are in the city.

Is the nature that city dwellers are looking for just a landscaped nature, a nature of scenery that makes the living environment pleasant? Y. Chalas defends the idea that the city-nature is no longer only the ornamental nature of the baroque city, or the hygienist nature of the functionalist city, but increasingly becomes a "sensitive nature" which is the one that has been invented in the peri-urban «that is to say the sensory nature where hearing, sight, touch, olfaction are all equally involved» (Chalas 2005, p. 20).

Conclusion

The open space offers a stimulating field of reflection which must associate the world of knowledge, action, uses and representations combining at the same time the fields of the countryside, agriculture, the urban, the landscape, nature, environment. Worlds that have been built separately for so long. The contemporary city affirms the place of open space by integrating increasingly large undeveloped areas into its operating area. This means that open space participates in the urban form and becomes a component of the urban system. At the same time, the dynamic

of publicity affecting the countryside favors the assimilation of the countryside to an open space intended for the well-being of city dwellers, whether they inhabit the city or rural areas. The establishment of physical borders tends to be less and less topical in the process of characterizing cities. Nourished by the discourse on nature, open space fully participates in its incorporation into the city. It thus becomes a component of the territorial project at all scales, from the architectural project to the urban project. Open space benefits from the entry of nature into the city, in different ways: – Inhabitant demand for nature justifies the protest movements that are developing to demand the maintenance of unbuilt areas in the city. – The new relationships with nature of city dwellers, a practiced nature, participate in the appropriation of the open space by the inhabitants. Preserving and connecting open spaces improves the living environment of city dwellers but “above all” helps maintain the balance of ecosystems. By facilitating the circulation of cash, the ecological network avoids too strong a rupture between the outside world and the urban world. Open space thus acquires an environmental function. – Nature, under the influence of the discourse of science, action and art, legitimizes open space. Suddenly, it is no longer just a land reserve but lends itself to city redevelopment projects. These take different forms: the naturalization of industrial wastelands and marginal spaces, the treatment of built / non – built interfaces, the landscaping of public spaces are the most frequent

operations. The physical borders for the delimitation of spaces in an urban environment are struggling to consolidate their place in the contemporary city.

Nature here particularly refers to that in relation to which no boundary is established; one to which no physical barrier prevents voluntary access.

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