

Review of "The Radiant City by Le Corbusier: Paradoxes of A Utopia of the Machinist City" (La Ville Radieuse)

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Abstract— Le Corbusier's Radiant City (1930) was often perceived as a futuristic utopia. If this is the case, however, it is obvious that The Radiant City is not the perfect standard model of exclusivity. The Other town plans developed by Le Corbusier over that same period, in which the generating framework is different, promote a broad territorial and landscaping approach. Also notable is the gradual appearance, after World War II, of the predominance of plastic design, with the toning down of utopian ideology opening the door for prototype copying, in the manner of the de-centralized APAURBAL plan for Expo 64 in Lausanne. Also, this Modern City of Three Million Inhabitants' for central Paris is a myth in modern urban planning literature. According to Le Corbusier, the plan would improve urban ability while improving the urban environment and the city's performance. Ville Radieuse (The Radiant City) is an unrealized urban masterplan by Le Corbusier, first presented in 1924 and published in a book of the same name in 1933. Designed to contain effective means of transportation, as well as an abundance of green space and sunlight, Le Corbusier's city of the future would not only provide residents with a better lifestyle, but would contribute to creating a better society. Though radical, strict and nearly totalitarian in its order, symmetry and standardization, Le Corbusier's proposed principles had an extensive influence on modern urban planning and led to the development of new high-density housing typologies.

Keywords— Utopian City, Radiant City, De-centralized APAURBAL plan, Totalitarian, Typologies

I. INTRODUCTION

Charles-Édouard Jeannerette-Grise is regarded as one of the most significant architects of the last century, born on October 6, 1887 [1]. Otherwise, his artistic community also sees him as extremely controversial. He also experimented with architectural philosophy, urban planning, sculpture and furniture design, according to his point of view of architecture as a dynamic art of building. The so-called "Five Points of a New Architecture" by Le Corbusier is very significant due to architecture. In order to respond to the growing development of mechanization and its impact on social change, these concepts point to a radical architectural change. As a result, Le Corbusier was particularly concerned with constructing housing in order to reliably enforce his dynamic theory. Designed by Pierre Jeanneret and Le Corbusier, the so-called "Doppelhaus in der Weißenhofsiedlung in Stuttgart" seems to be an example [4].

Le Corbusier academically worked in architectural societies such as "Congrès Internationaux d'Architecture Moderne" (CIAM) to provide a fitting environment for his

ideas and visions. The architect was, however, one of the co-founders of CIAM. Le Corbusier was a social as well as an artistic supporter of capitalism until the mid-1920s. "Ville Contemporaines" (1922) is an important proof of his ideal with its imposed authority, simple structure and geometry [13]. Le Corbusier has changed his point of view in a more radical way since the end of the global economic crisis in 1929. *Ville Radieuse (The Radiant City) is Le Corbusier's unrealized urban masterplan, first presented in 1924 and then published in 1933. Designed to provide efficient means of transportation, as well as an abundance of green space and sunshine, the future city of Le Corbusier would not only provide a better lifestyle for people but would also contribute to the development of a better society.* Although in their order, symmetry and standardization, Le Corbusier's proposed ideals were revolutionary, rigid and almost totalitarian, they had considerable influence on modern urban planning and led to the development of new typologies of high density housing [5].

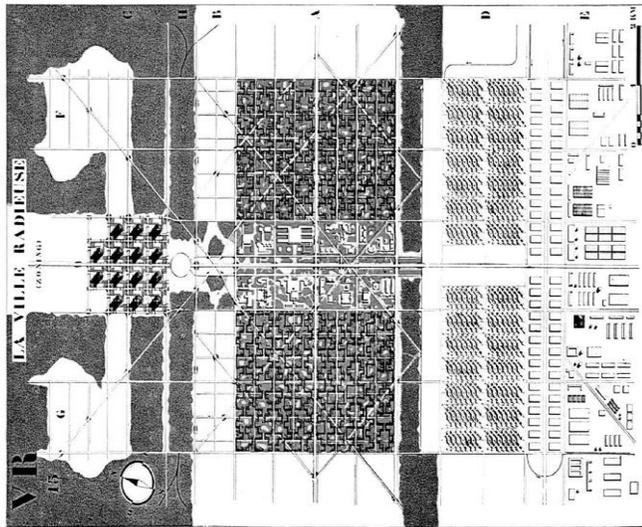


FIGURE 1- la Ville Radieuse, plan. (source: Le Corbusier, 1922)

The Radiant City was to emerge from a tabula rasa in keeping with modernist principles of development (which promoted the annihilation of tradition): *it was to be constructed on nothing less than the grounds of demolished European vernacular cities. The new city will include prefabricated and identical high-density skyscrapers, spread over a large green area and organized in a Cartesian grid, making it possible for the city to act as a "living device."* Today's city is a dying thing as its planning is not in the proper geometric ratio. Repetition is the result of a true geometric format; a norm is the product of repetition. The perfect shape [7].

II. LITERATURE REVIEW: DIFFERENT THEORIES ON CITY DESIGN BY LE CORBUSIER

Through presenting his blueprints, Le Corbusier responded to the population explosion in the central cities, the growing motorization and, in general, the acceleration of the means of transportation. The architect, therefore, defined a structured definition of modern city building.

2.1 Theory of "Ville Contemporaries" (Contemporary City):

"Ville Contemporaries" describes the three-million-inhabitant definition of a city. The urban population is categorized as "city resident" (employment and accommodation in the "metropolitan area"), "suburbanite" (employment in the "industrial area," accommodation in the "garden town") and "half-city resident" (employment in the "country" and accommodation in the "garden town").

Depending on this division, Le Corbusier divided the "metropolitan area," "industrial zone" and "garden city" functions of several districts. The transfers are labeled "self-conscious districts" from one section to another. Such intersections are used to create green corridors that could later be used to extend the surface of the city. By this way, organization and rigid centralization govern the city-building designs of Le Corbusier. Bilateral symmetrically performed axes dissect the metropolitan area. "Ville Contemporaries" has a decisive proportion of 400 meters. For example, this pattern is inspired by the concept of tube stations by Le Corbusier. As a consequence, the strict geometry system culminates in a stringent selection of residents of the city.

2.2 Theory of "Ville Radieuse" (Radiant City):

In general, the definition of "Ville Radieuse" refers to Le Corbusier's philosophy of residential buildings. As a kind of cubicle, the architect studied one's occupant. It should be multifunctional and reclaimable in a versatile manner. Therefore, Le Corbusier again expressed human biological unity. His cubicles' blueprints were based on the low-cost housing plan from CIAM published in Brussels in 1930. Le Corbusier and Charlotte Perriand planned a fourteen-square-meter residential building layout according to this concept. Broad and Opened surfaces are paired with smaller, more condensed definitions of space. Therefore, the residents' dimensions ranged from the habitable surfaces of the bachelor to living spaces shared by extended families. Some of this theory was published in 1935 in "Ville Radieuse". It unifies Le Corbusier's dreams of new city planning and residential building features. The architect therefore worked with both architectural and residential design, as well as the city's public pictures. *"If the city became a human city, it would be a classless city."*[9]. Le Corbusier identified a hierarchy of natural hierarchies in order to follow this hypothesis. The architectural form is associated with French syndicalism theories. The pyramid pretends the nature of the community and its organization. The city's elegance is finally created by the optimal coordination of all aspects of the hierarchy. As a result, the industrial area becomes the city's most important place for expression [12] and [5].

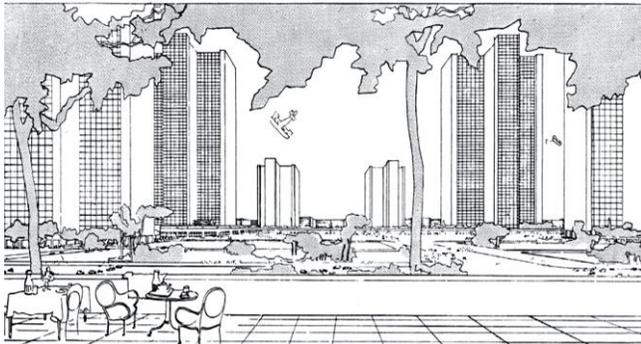


FIGURE 2- Contemporary City for Three Million People, Business Center Perspective (source: Le Corbusier, 1922)

Le Corbusier called for the abolition of existing cities in order to move the new ideas for urban development. "Ville Radieuse" updates *"the city-as-body concept."* Hence, *the town map always consists of a traditional body with its head (business center) and its heart (cultural center).* Nevertheless, the central axes are not implemented symmetrically on a bilateral basis. *The complex's plainness is regarded as a biological development-like a tree's roots* [5], [2] and [3]. As a consequence, there is only one central axis in the town. The chart is basically versatile and less creative in this way. The residential developments that have been listed above are the epicenter of urban life. These are open to all residents; these are no longer subject to the elite. Community equability also becomes visible by equal approach times between both the suburban and business districts as well as the tower complex and the commercial districts.

Between the residential districts are the railway station and the airport. Settlement of social-service organizations is expected for its borderland. Industrial zones of "Ville Radieuse" are not essentially different from the industrialization regions of "Ville Contemporaries." The freight terminal is isolated from each other and the railway station. Different industry divisions receive different Lands. In fact, many sections of the industrial district were built with uniform assembly units to respond to the various trade agreements.

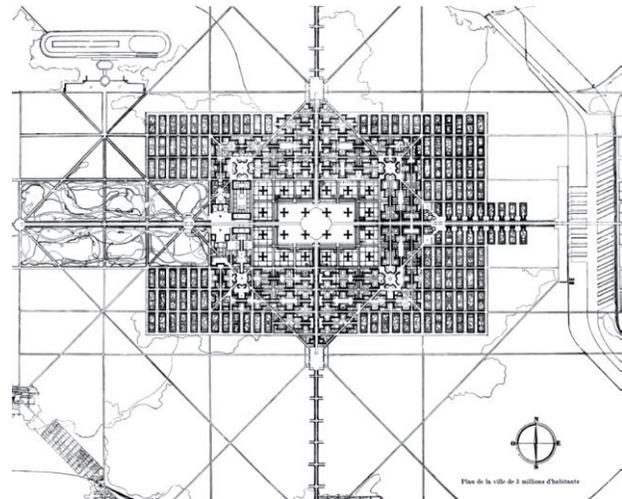


FIGURE 3- la Ville radieuses, plan. (Source: Le Corbusier, 1922)

Le Corbusier felt that by writing "Ville Contemporaries" the challenges in traditional business centers were fixed. Thus, the building centered on new town residential districts. *The business center is still in the suburban quarter's north. This comprises of fourteen 400-meter-high Cartesian skyscrapers. These tower blocks offer about 3200 places of employment.* As mentioned earlier, "Ville Radieuse" has the right to offer any dweller a standardized surface of 14 square meters. *One apartment building, which is also built in a standardized manner and reaches a height of 50 meters, shelters 2700 inhabitants.* While compact and efficient buildings, one-story residential units are located here.

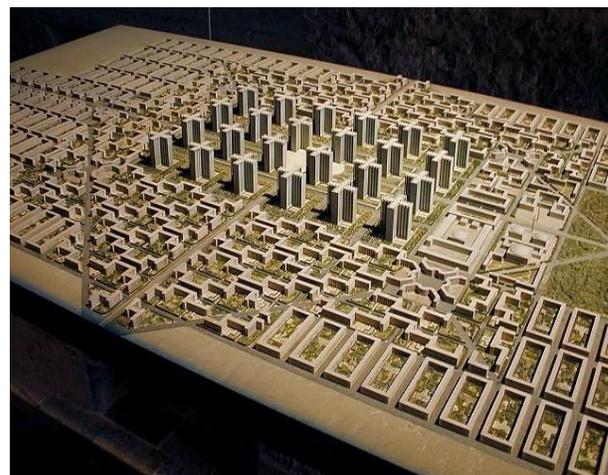


FIGURE 4 -la Ville radieuse, Model. (source : Le Corbusier, 1922)

Within the apartment building, many utilities, recreational facilities and shops were built. In fact, each apartment building provides a cleaning facility in which meals are served and processed. As a consequence, the tenants can allow more productive use of their leisure time, including wandering through the wide-open gardens and sitting on top of the apartment blocks. **In the apartment buildings, academic institutions are combined. The kids are taught here by the appropriate staff.** The average time for productive work is only five hours in order to avoid superferation. Such constructions are therefore almost autarkic. In particular, we create an image of the idea of social collectivization by Le Corbusier.

Le Corbusier was influenced by both his dreams of apartment buildings, many perambulations of Moscow social housing programs between 1928 and 1930 and coeval luxury liners ' models. The thought of concentrating and feeding thousands of travelers influenced his blocks of flats. Le Corbusier also used the cross-section of luxury liners to examine his apartment building's lateral break. Le Corbusier was a penalty for the definition of modern travel. The designer was particularly unhappy with the so-called "hallway highways." *The apartment buildings are linked to each other in a very complicated way to solve this issue and provide a certain diversification within the residential district. So-called "tooth-cut designs" have been built here. Such characteristics have already been used in the "Ville Contemporaries" by Le Corbusier.*

The houses on top of the stilts were built. *These were founded on columns from the basement floor to the middle floor, which harbors public services.* The above structure is a heavy steel frame. As a consequence, the building's head becomes an architectural form with no intrinsic meaning. The house should be covered like a shell by the façade. Because it does not rely on climatic conditions, its benefit seems to be its international application. The façade may finalize the glass face. Otherwise, a bulge from one meter to two and a half meters can be placed behind balconies. Gardens obtain a more creative sense relative with Le Corbusier's prior publications. *The designer illustrates the difference between his conception of urban design and the maps of modern metropolises such as New York City and Buenos Aires by means of several schemes attributable to the green city theory.* So, it seems that the so-called "stilt homes" are a construction benefit. As a result, the super struct surface of the area is rising to twelve million, while pedestrians are allocated for 88 percent of the usable square. There are plenty of plazas and pulsating pathways to create gardens.

Educational establishments, sports facilities and parking areas are important parts of the environment because they are located right next to the apartment buildings. Therefore, as analyzed in "Ville Contemporaries," the town becomes a garden city. "Ville Radieuse" reflects the idea of the "Natural Zone. "In turn, the total traffic is offside driven. Le Corbusier intended to build large guide ways, at least five meters above ground level. So, next to the apartment buildings there are no roads. Accursed "streets of the corridor" were refused. The architect planned basement garages to park the vehicles, which are arranged directly below the flat blocks. The transport system blueprints are also recent. The underground railway and buses were operating on different motorways from the normal elevated path ways. Such new transportation networks are cheaper, more affordable and more efficient than conventional traffic structures thanks to the multi-functional integration of the several districts. (Theory is reviewed on the basis of [5], [8] , [7] , [10] and [11].

III. DISCUSSION

- Such radical ideas were further developed for cities such as Paris, Antwerp, Moscow, Algiers and Morocco by Le Corbusier in his sketches. Eventually, he approached a state authority in 1949 which offered him a "free hand"- Punjab's capital. In Chandigarh, India's first town to be liberated. Le Corbusier applied his strict zoning system and designed the central Capitol Complex, comprising the High Court, the Legislative Assembly, and the Secretariat.
- Perhaps the strongest manifestation of the theories of Le Corbusier can be seen in the creation of the capital of Brazil, Brasilia, founded on a barren site given by the President of Brazil. Lúcio Costa and Oscar Niemeyer built a beautifully geometrically organized town on this tabula rasa (which Le Corbusier would have coveted), dividing the colossal administration areas and the equivalent residential districts entirely owned by the government. Through applying the principles of Le Corbusier, Costa and Niemeyer wanted to build a city that would bring about equality and justice.
- The presence of the Radiant City was not exclusive to the urban planning environment. Le Corbusier built the Unité d'Habitation in Marseille in 1947, which, influenced by The Radiant City's Unités, featured 337 residences in a single building, as well as public roof and ground floor facilities.
- The Unité d'Habitation was made from raw concrete due to the costs of steel production in the post-war economy

and proclaimed the advent of utilitarian design. Four identical buildings were built in France and Germany in the years that followed. This typology, which was answer to the shortage of housing in the post-war period, has been further adapted in countless housings around the world.

- Today, the cities built by Le Corbusier are hardly ever described as utopias after Modernism. For example, Brasilia has been harshly criticized for ignoring the habits or desires of residents and for failing to provide urban encounters with public spaces. In contrast, the Unité-inspired apartment blocks, which are now nearly every major city's suburbs, have become incubators for poverty and crime; most of them have been extensively remodeled and demolished.
- Nonetheless, now as when Le Corbusier first published *The Radiant Town*, the concept of offering order by careful planning is as important. Issues of healthy living, congestion, sound, public space and transit, tackled holistically by Le Corbusier—unlike any designer before him—appear to be a major concern for urban planners today.

IV. CONCLUSIONS

"Ville Radieuse" updates the "city-as-body" concept. Henceforth, multicellular were designed for their districts. This requires more progress from a static viewpoint panorama, quasi-academically, to an accessible, process-oriented theory of urban design. Without a question, the ideas made by Le Corbusier attract the attention of modern urban planners, but also culture theorists. De facto, Le Corbusier gathered a notion of urban development rather than a utopia. The artist sought to create a combination of an ideal society's vision in design, fashion, and syndicalism. Against the context of this notion, the common form of resolution should be "Ville Radieuse." Nonetheless, the philosophy of Le Corbusier has three major shortcomings:

First: The developer overvalued the town building's successful impact. Academics today accept that neither flat geometry nor structural district division influences so-called "social hierarchies"—the classless society. Therefore, there is no promise of a harmonious existence.

Second: The theory of Le Corbusier is called open to a cultural problem. Nevertheless, in incongruous contrast to totalitarian and anti-democratic traits are the progressive and individual elements. Therefore, the ideas of the architect were also explored in a boisterous way.

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