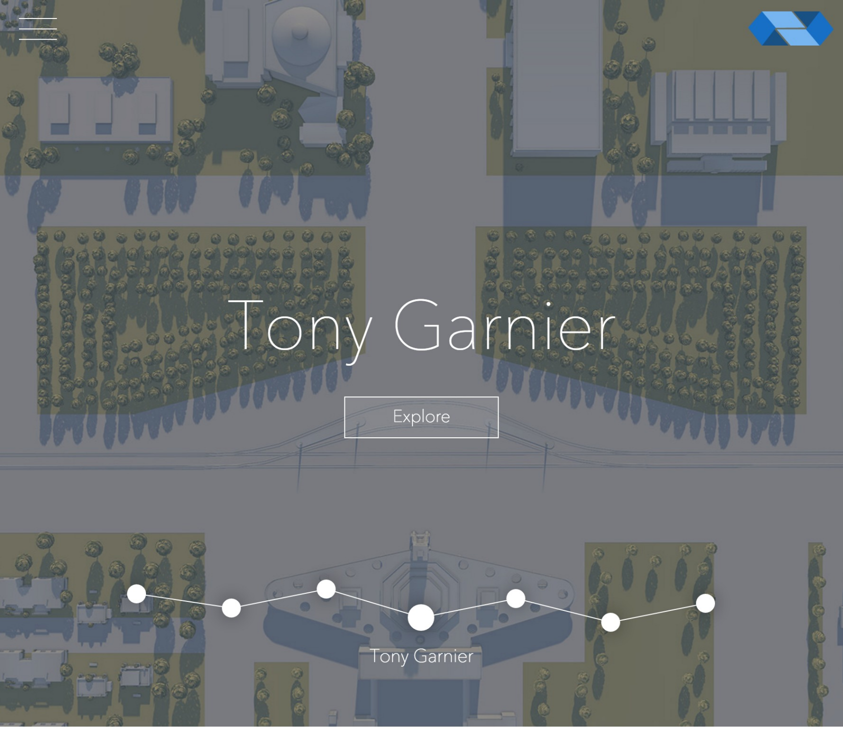


Tony Garnier

The Industrial City

Tony Garnier

Architecture, said Oscar Niemeyer, co-architect of Brazil's modern capital city, should have the aim of improving society. Normally, he says, the architect works for the rich, for governments and enterprises; in the very same way as in former times he did for kings and dukes. He did, and he does so despite the fact that the poor are living under absurd conditions, in miserable spaces and compressed into favelas or comparable structures. Under these circumstances, architecture is nothing but an excuse. Instead, the architect is fulfilling its task only if he comprehends his profession as a political deed.

Basic Conditions

Finally, such an architecture must be concerned with cities. For an occidental self-understanding about a general human condition or conditio humana (to express it in classical terms), living in urban contexts makes up what McLuhan called us, namely to be cultural animals. Since Aristotle, the human being is a zoon politikon, a being that lives in the polis, the city. Although the basic conditions of city life have changed drastically since Aristotle's times, urbanity and being human belong together. In particular today when, for the first time in human history, the major fraction of the world population does live in cities, and not on the countryside any longer: a situation that reveals its full acuteness when the favela is regarded. City life and being human seem to belong together, and it is not without reason that all the ideal spaces we are showing are the ideal spaces about cities, and not of idyllic landscapes, natural panoramas, beautiful parks or the like.

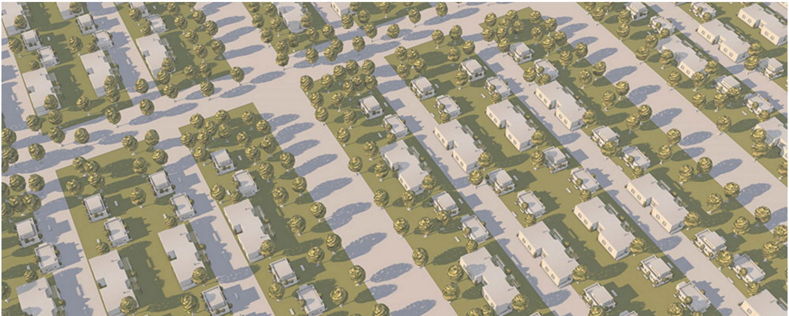
Although right from its start, living in cities seemed to have been an ambivalent venture. On the one hand, it was a precondition for generating surpluses, growth and security; on the other, it was accompanied by the effects Niemeyer wants to change. It is reflected in old images embedded in our cultural memory, condensed into their respective mythical settings: Kain was the founder of the first city, and Gilgamesh – founder of the first city in Sumer, one homeland of the origins of civilization in the Old World – had a friend Enkidu, a being still bound to nature; but Enkidu died – the bonds to nature vanished. And Gilgamesh remained, bound to the city. As regards those images and the basic mythological figure underlying, also for the construction of ideal spaces we show here in our exhibition, city and culture seem to belong together, ever since. According to those images of our cultural memory, there is nature and culture; which became nature or culture, also as regards the nature of humans. The human nature is to live in culture, and not in nature; an image that will recur, as a topic, again and again in the ideal spaces we show, either overtly or hidden. So, is the city really an ideal space? According to recent findings, too, a 'natural' state of living might have been the better one. But this first paradise is lost, we are living as civilized beings, after Kain the latest. Civilization, epitomized in the classical works of Lewis Mumford (who was also a member of a committee for city planning), is equivalent to some kind of machine; and this machine is bound to cities, with all its positive and negative effects for a human condition.

This is the general background tale for all utopian attempts of creating ideal cities, as ideal spaces, also for the one to come, Tony Garnier's ideal city. In his times of city life, the second half of a 19th century characterized by capitalist cities with smog, poverty, extensive urban growth, slums and mass production, to live in cities really became a problematic issue, except for some privileged people at the top of social hierarchy. In other words, the old mythic image recurred with all the impact of quite concrete belongings. As an investigator states, since 1850, an urban transformation of unprecedented scale took place, changing "both the prince's capital and the merchant's town of the seventeenth and eighteenth centuries into the modern metropolis."

The Context

Garnier was born 1869 in Lyon, an industrial center in those times, as son of a designer working in the local silk industry. He studied at schools of art at Lyon and Paris, won several prices in architectural design and held a scholarship in Rome where he started to develop the idea of his ideal city. His mind was about a modern city, one of industrialization. Of course, this was not a new idea. Before him, Fourier, Owen and others were concerned about the situation the majority of a capitalist urban population had to live in. And even before the full onset of the capitalist era, at the end of the epoch preceding it, Ledoux elaborated an ideal city, devoted to the primary aim of production, with his concepts for the Royal Saline in Chaux, France (at the turn of 18th to 19th century). But Ledoux' city was one of total control, a machine perfected according to the ideal of a centralized management: the ideal space of an encompassing actual as well as symbolic regulation, realized by means of its aligned symbolical architecture. Strictly seen, it was not a city at all but a production site with attached dwellings, an ideal cosmos of centralized production. As for Garnier, also for Ledoux it was about architecture, management, and morals, as Vidler says. But in Ledoux' case, this was confined to an economic system of manufacture (before capitalist production), planned and executed for a relatively small ideal factory community.

Garnier had other intentions. Convinced that the cities of the future have to follow the pressures of industrial development and, opposed to his forerunners, influenced by Socialist ideas, he investigated the needs of the city's functions in much detail. In other words, in a way that it could really function, in its daily terms of practical operation. His project was very concretely modeled, planned as a real city and not just as a production site with attachments, for an estimated population of 35.000 people. It had a destined location in the vicinity of Lyon – was a "concrete" utopia, as later Socialists said – ,should be built up exclusively with the modern materials of that time, namely with cement and concrete, allowing for new forms and shapes; and, last but not least, should have a clear separation in functional zones. It was one of the first "functional" cities, a typically modern concept of an ideal urban space that held sway then in different concepts, amongst others in those of Le Corbusier. Garnier's conception of a Cité industrielle or Industrial City, in large parts ready in 1904 yet but published 1917, can be regarded as a milestone in architecture, according to experts – in its overall conception as well as in the language of its architectural forms. It is one of the first truly 'modern' cities, both in terms of functioning and as an ideal.

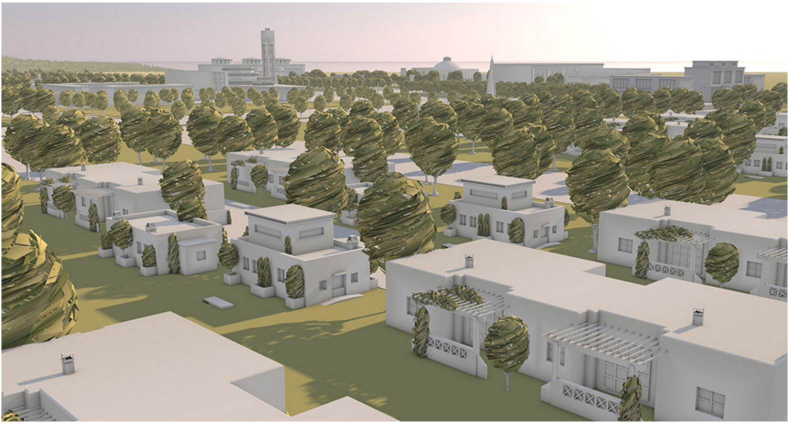


The Cité industrielle, something completely new at its time in both architectural and conceptual terms, is the space for a socialist society. Recalling the old ideal of the polis, it is a state- or city-socialism that gets expressed here, but adapted to radically new conditions. Formulated by Zola whose novel Travail (Work) was one of Garnier's guidelines, the realization of the socialist world order would be in collaboration with the arts, and referring to old images, mythically coining is his sentence about the achievements of such a collaboration: "The earth must become, through cultivation, like an immense garden, and labor, through its organization, a vast concert." Nature and culture are united again in a genuine second paradise, for all humans willing. Before it has been left over to individual progresses of technologically perfected spaces for individual consumption, spaces to unfold during and after modernity, this could be an aim worth to be pursued. First and foremost when looking at its principal alternative, the capitalism-molded cities of those days; and when looking at the favela, not just of those days alone.

Garnier was not only 'modern' in a way a modernist movement wants to have him, says Vidler. He also incorporated classical forms into his city, next to his innovations: A city of which Le Corbusier said that it was "an attempt to establish order, in conjunction of utilitarian and plastic solutions."

It was the search for a new, ordered unity the main protagonist of Travail, an engineer, had in mind when looking at the forges of the old city of production: to purify that sink, that ancient prison with its iniquities and cruelties, "finally to heal mankind from its age-old corruption." To overcome the civilization machine as it went so far, in particular in its recent capitalist shape. And the engineer, etymologically the person with ingenium, mindful inventiveness, "would rebuild on that very spot the City of Truth, Justice and Happiness, whose white houses he already saw." Besides its strong resemblance with the City of God, in Garnier's plans, this new future city is placed next to the old one; which surely is more than just a matter of plain topography. The new city was a white purist utopia, Vidler resumes, a modern Acropolis. Even the old town was equally transformed, its general aspect "was that of an immense garden, where the houses had been naturally spaced amidst the verdure, from a need of fresh air and free life", Zola denotes in his blueprint for a Cité industrielle. Private property does not exist, nor do prisons, police stations, or churches. All remnants of a dreadful past are eradicated, so that the new world can start to begin, in all its splendor and magnificence; a real ideal space for an ideal, since really liberated, human condition.

The new city itself appears as a kind of carefully planned artificial organism, each sphere of life being separated from the others and yet connected with each other, to achieve a consistent structuring of different functions; for instance, by the combination of housing areas with schools, or by the separation of different forms of transportation. As such an organism, the whole looked as if embodying a cosmos, and, at the same time, each part of the city was designed in such a way that it retained the potential for further growth; each part could develop independently from the others. It was a cosmos, although not a rigid one as the ideal space-cosmoses of Garnier's forerunners still were (with the remarkable exception of da Vinci's world), including all those Phalansteres and ideal production sites since Ledoux. The new ideal world, expressed in Garnier's city, is still of an ordered coherent unity, in that sense still a cosmos: of an ideal space as home for real, i.e. really liberated human beings. But it is one that came to life, allowed to modify, and to develop. As in case of da Vinci, the idea of a modern system shines up, an order of functionally closed circuits; but which are flexible, also in spatial terms.



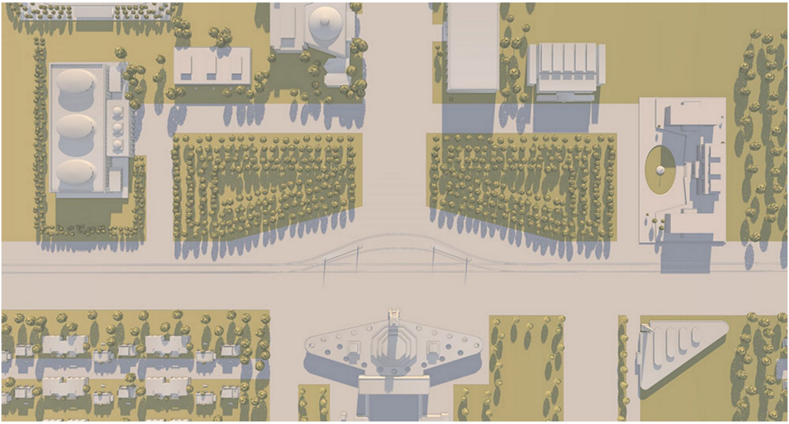
What has been the mere "aesthetics of the microcosm" as Vercelloni characterized the Garden City-approach – which always, and inevitably, is also the aesthetics of retreat – now became enlarged into a functional whole: the Cité industrielle, he says, is the first in European history that has been planned as a rational as well as (still) human unity, a "real ideal city of the age of mechanization."

Garnier's Ideal City

Both rationality and considering the human are reflected in the city's overall structuring, a zone for industry, housing, and a sanatorium-area. Industrial plants, having their focal point in metallurgy, are located in the periphery, in a plain in close vicinity to a river nearby, as well as the harbor and a railway station. The industrial complexes are designed in such a way that they can be extended spatially if needed, as are the other areas of the city. Also in the periphery are agricultural areas and the electricity plant, the city's energy supplier, also for the tramway which connects all areas of the city.

The housing area is elevated, as is the sanatorium-area which is located slightly above it. There are different types of houses, mainly single or double-houses, and collective houses 4 floors high. The principle of their spatial arrangement is based on formats: on areas of 150 x 30 meters, whereby each of these areas can be divided into squared parcels with a side length of 15 meters. It is an arrangement of consequent rationality, based on formats, which nevertheless allows for a high degree of variation – a hints to the next world to come, Motopia, where this became fully elaborated. The space between the houses is accessible to everybody, because Garnier wants the people of his city living as if they were in an extended park, without any barriers of privately owned ground. No patios are allowed (in order to avoid social separation), and each house has enough light and air. In addition, such a structure allows a pedestrian to walk through the entire city, independent from the formal system of streets. It is a grid with streets of 20 meters width in the North/South direction, and of 13 to 19 meters in the East/West direction. One can only imagine how inspiring it must be to walk through a gigantic garden spotted with houses, to see the people there in front of their housings, chatting with each other, the children playing, the sight and smell of the flowers.

The city has a large axial street in the East/West direction, heading towards the city center where the public buildings are. Following a consequently functional logic, Garnier divides them into 3 categories: places for administration, archives (incl. publicly accessible libraries), and places for sportive or cultural events including museums, and theaters. The central building is the maison commune or assembly hall, having a kind of modern arcaded Stoa and a clock tower.



What Garnier intends is a moral issue, finally (explicitly stated by him), and not primarily a mere architectural one: the creation of a new society by means of a new architecture. As one author said, it is a humanism modernized. In the old ideals of the Greek polis and the Renaissance, the human was the measure of all things; and this was revived again, but now adapted to the conditions of an industrialized society. It is the conception of a harmonious city, also adapted to the surrounding landscape, which has been conceptualized for human happiness, a city of reason inside which "every functional aspect is, at the same time, an expression of a humanist mind-set." At least in social terms, it is the closed cosmos of a new, socialist human being. According to the motto of the Biennale 2016, to create an urban universe that is in accordance with the human (Delfante).

Garnier's ideal space is that of a new society based on community, work, and respect, of a socialist society deserving the name. He push the program of his city into one sentence, posed on the wall of its central building, the maison commune: the human law is to work; but also, the cult of the beautiful and mutual benevolence is sufficient to make life splendid. Land is in public property, alimentation and health care services are provided by the state, and prisons, police and courts of justice are not needed because there is no place for them, due to the peaceful and just societal conditions. In fact, it is a closed and harmonized social cosmos unfolding here, located in an ideal city for an ideal society. When living here, a Heavenly Jerusalem indeed becomes obsolete. Instead, it became a modern Acropolis without gods, wars, or social injustice. Anatole France, living in the same epoch as Garnier did, proposed to revitalize Antiquity for a modern world, in order to renew the latter. Despite all way-breaking modernity that is expressed in his city, says Ruth Eaton, it is the very combination of classical with social harmony which is present in all of his works.

It is a “new aesthetic for the society regenerated by labor”, and the close resemblance to Zola, Vidler states, already appears in the central location of the maison commune, the communal house. On the outer walls of which sentences from the novel had been placed, according to concept, to be visible for all the city’s inhabitants: For epochs of peace, one reads here, “rails are needed, rails and yet more rails, so that all frontiers might be passed over and so that all people united, might form a single people, on an earth entirely furrowed by routes”. These were the steel ships of the future, one reads, bringing richness and abundance to all; not the present steel ships of war, but those of solidarity and fraternity.

And there will be a big feast, in the rural surrounding outside the city but near to it. It is held in a vast field “where the high corn sheaves stood, like the symmetrical columns of a giant temple, the color of gold under the clear sun. The colonnade stretched to infinity, to the far horizon…”

There is a problem lurking, in the midst of such a peaceful, and final society in its cosmic closure. What it shall have to do with progress, that colonnade stretching to infinity? For a self-sustaining society, progress can become very dangerous. And this society is self-sustaining because it has everything it needs – seemingly. But: the routes earth has to be entirely furrowed with have not been those of fraternity in progress, but of networks for the use of individuals consuming in progress. So, what happened?