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Alberto Sartoris: transitions to a possible urban utopia (1922-1989)

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VENICE

AESOP ANNUAL CONGRESS

9-13
JULY
2019



PLANNING FOR TRANSITION

Book of Papers

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Università Iuav
di Venezia



Planning for Transition

Contemporary cities and territories face significant challenges – natural disasters due to climate change impacts, ecological crises, growing socio-economic unrest, global migration, political rifts including a rise of right wing factions, ambitious public works and mega-projects – all of which require new capacities in dealing with such individual and multiple groupings of such challenging and profound changes.

It is a matter of fact that at international level a discourse if not a condition of transition is pervading sectors and societies. This discourse points to alternative patterns and solutions to many of the challenges faced. A quickly changing scenario requires forms of planning, both locally and globally, which bear the capacity to support and manage mutable urban and environmental conditions. In fact, although cities do incessantly change, policy-makers and institutions are never fully prepared to respond to complex and risky situations, as well as relying on planning and policy tools which are often outdated; in addition, also existing theoretical frameworks, concepts, cognitive abilities and approaches become ineffective or outmoded.

Each unintended or unanticipated change comes as a break to existing social, political, and administrative routines and yet it may be anticipated that mechanisms of collective reflection and action will be generated. The congress invites scholars and practitioners to present and discuss case-studies of cities and projects that have engaged in meeting challenging situations – supporting transitions in urban contexts.

Specifically, it is aimed at offering an understanding of the forms of knowledge, concepts, tools, and skills needed to plan and address transition. Furthermore, it seeks to explore whether (and how) managing such changes has brought any overall reconsideration of the city design model and towards more general institutional reconfigurations.

The book collects all the papers presented at the Aesop Venice 2019 conference. It is articulated in chapters that correspond to the tracks (16) and special sessions proposed (23).

Tracks

1. Transforming built heritage and landscapes
2. Urban design for multilevel planning
3. Teaching planning for the transition
4. Institutional change and regional transition
5. Methods and technologies for transformative planning
6. Community-based planning and social innovation
7. Theorizing urban change: complexity and ethics
8. Transition paths and urban futures
9. Climate proof cities and resilient societies
10. Urban metabolism and circular economy
11. Housing, gentrification and socio-spatial dynamics
12. Food, planning and healthy cities
13. Planning for accessibility and sustainable mobility
14. Planning, Law and Property Right: facing urban transitions
15. Tourism, spaces and urban cultures
16. Urban and Regional economics for transition

Special Session

1. Transition Histories
2. Urban Tourism, Neighborhood Change and Social Conflicts
3. Innovative Agriculture for Healthy Cities
4. Towards Post-Growth Planning Theory and Practice
5. Planning and Designing Green Infrastructures
6. Land Development and Management in Post-Socialist Countries
7. Home Sharing. Short-Term Rentals Affecting Local Housing Markets
8. Dynamic Change, Uncertainty and Planning for Adaptivity
9. Space, Citizenship and Identity: The Eu-Mena Region
10. The Role of The Local in Improving Cohesion and Spatial Justice
11. Friendly Spaces and Mobility for Ageing
12. Emerging Spatialities and Eu Policy Instruments: Cases and Perspectives
13. Facing Migrants Exclusionary Urban Policies
14. Learning Loops in The Public Realm. Enabling Social Learning in Communities to Tackle the Challenges of Cities in Transition
15. Planning and Biodiversity
16. Acsp-Aesop Special Session: Morsels of Hope: Migration and Urban Planning
17. Spatial Tensions: Urban Microgeographies for Changing Cities
18. Affordable Housing in Developing Countries: a Comparative Perspective
19. Acsp-Aesop Special Session: Learning from Arnstein's Ladder: from Citizen Participation to Public Engagement
20. Smart Cities and Regions Informing the Energy Transition
21. Maritime Spatial Planning (MSP) In Europe: Challenges in Transition
22. Shrinking Cities and Sustainability
23. Regional Design: Impacts on Territorial Governance and Planning Practice



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Transition Histories

Alberto Sartoris: transitions to a possible urban utopia (1922-1989)

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Abstract: The events related to the development of urban agglomerations started by Alberto Sartoris in 1922 highlight his uncommon attention to the themes of a transition to a possible utopia, whose structure is constituted by collective solidarity and rational subdivision, aimed at a rigorous use of strict design principles that aim to concentrate the population in specific parts of the city, such as in large buildings or neighborhoods duly sized, in the normalization of housing and traffic regulations. This approach to urban planning is evident observing the first so-called “urban compositions” conceived by Sartoris, such as the project for the Stadium or the University City of Turin, the project for the Satellite city of Rebbio in 1939, with Giuseppe Terragni, reaching the most recent urban plans of Punta Aspera in Varazze and Mont-Fleuri in Montreux in 1963, or the project for a “bridge city” in Barcelona in 1989, within which the unmistakable metaphysical matrix of rationalism is clearly recognizable. The aim of the proposal is to explore the challenges faced by Sartoris in the debate of the 1930s related to the development new urban scenarios and the exact role of the creative and humanist architect in the face of the interpretative change of that time.

Keywords: Alberto Sartoris; modern urbanism; Turin University City; bridge city.

Introduction

Alberto Sartoris (Turin, Italy, 1901-Cossonay Ville, Switzerland, 1998), Italian-Swiss architect and critic, was one of the most important figure in the birth of rational architecture and urbanism. The events related to the development of urban agglomerations, initiated by Sartoris, in 1922 highlighted his uncommon attention to the themes of a transition to a possible utopia, whose structure was constituted by collective solidarity and rational subdivision, aimed at a rigorous application of strict design principles that aim to concentrate the population in certain parts of the city, such as in large buildings or neighbourhoods duly sized, in the normalization of housing and a particular traffic regulations (Sartoris, 1930b). A founding member of Congrès Internationaux d'Architecture Moderne (CIAM) and a signer of the La Sarraz declaration with Le Corbusier in 1928, a “messenger of intelligence” (Belli, 1936) destined to export real examples of Italian architectural culture to South America in 1935 and chairman of the Swiss Permanent Committee on World Town Planning Day in 1949, Sartoris himself was considered a transitional figure respect to the Italian architectural *panorama*. His significant role in the development of European modernism and his lifelong activity have earned him a secure place in the history of twenty century architecture.

Despite the fact that his main books have been published by the Milanese publishing house Ulrico Hoepli¹, and notwithstanding being repeatedly defined as the “father of rationalism Italian” and the “founder of the new architectural culture” (Mariani, 1987), curiously in Italy Sartoris seemed to have never enjoyed the great fortune and recognition due to the spectacularity of his projects (Pozzetto, 1986). After an initial period of training in Turin, judged to be a Fascist in the 1930s, Sartoris was therefore able to conduct his professional activity in Switzerland, with works that included especially residential and religious constructions: with these projects, in the following years, Sartoris has successfully and stubbornly brought to light a so-called “project radicalism” (Pozzetto, 1986), with a stainless faith in rational architectural. Such obstinacy sounded like an offense to the Italian innovators of the time that was certainly difficult to tolerate. Considered as “transalpine” by the Italians and as a “transgressor of the Swiss order by the Swiss” (Gubler and Abriani, 1990), he has earned since the early years of his career a position of transit, even if not of isolation. He, in fact, didn’t remain on the sidelines, as he staying very active in the debates and controversies that have stirred up European architecture since 1928. This transit position has perhaps enabled him to question some of the theories of the great masters of modern architecture in the early thirties of the twentieth century.

The study of issues related to the design development of imposing urban agglomerations is made possible thanks to the analysis of the relationships that Sartoris has been able to establish with the main protagonists of art, architecture and urban planning of the twentieth century, such as, for example, Raimondo D’Aronco, Annibale Rigotti and Giuseppe Terragni. Sartoris’ approach to urban planning is evident observing the first so-called “urban compositions” (Sartoris, 1934a), such as the project for the Stadium or the University City of Turin in 1922, the *Cité-Crémaillère* for Geneva in 1931, the project for the satellite city of Rebbio in Como in 1939, in collaboration with Giuseppe Terragni, reaching the most recent urban plans of Punta Aspera in Varazze and Mont-Fleuri in Montreux in 1963, or the project for a “bridge city” for Barcelona, in 1989, within which the unmistakable “metaphysical matrix of rationalism” (Fagiolo, 1974) is clearly recognizable. His projects were therefore in a transitional phase in which the urban crisis occurred in the presence of an irreversible change in the state of the habitat and social practices. The figurative structure of entire parts of the city represented, according to Sartoris, the synthesis of those expressions considered fundamental for a rational planning, such as traffic, functions and their hierarchy and housing types. Within these interpretations, the search for synthesis, which in Italy can be largely pursued between technical and aesthetic needs in the modernization of cities, sees a deepening in the work of Sartoris and in his constant faith in the application of the principles of architectural rationalism and from which descend reflections on the city and on building in the built.

The focus on issues related to modern urbanism was a real chapter in Sartoris’ career and, at the same time, remained closely related to his reflections on the architectural and urban organism throughout his long professional and academic activity. In particular, during his long career and in his numerous writings, Sartoris tried to highlight the deployment of the design forces that could be activated on all

¹ See the three editions of *Gli elementi dell’architettura funzionale. Sintesi panoramica dell’architettura moderna* (1932, 1935, 1936), the three editions of *Introduzione alla architettura moderna* (1943, 1944, 1949) and the three tomes of the *Encyclopédie de l’architecture nouvelle* (*Ordre et climat méditerranéens*, 1948, *Ordre et climat américains*, 1954, *Ordre et climat nordiques*, 1957).

the transition nodes, between the building aggregate and the territorial network, which was considered his challenge to move towards new and significant images and urban scenarios. According to Sartoris, “We absolutely must resolve the problems soon in order to arrive at unsuspected visions of the city. It’s therefore necessary to realize, in the great urban agglomerations, almost superimposed cities, stratified cities, cities with bridges [...] to elaborate projects of penetration in the apparently abandoned city centres, to insert raised streets and squares, like the bent city, to create spaces and systems of vertical and horizontal circulation at every level [...] Innovation cannot spread if it does not take the road of its conquests that will flourish again under the injunction of the discoveries of the present in a sort of simultaneous emergency of the dimensions and values, past and present, of an urbanism that creates resources and new constructive orientations” (Fabbri and Pastore, 1991). Sartoris has been able to go beyond contingencies and has marked the future ways of becoming of architecture and urbanism, proclaiming the importance of spiritual and lyrical values.

Futurist debut and rationalist ascent

Sartoris’ most important works were not only the built buildings or unrealized projects, but also publications, “because it’s possible to build with words as with reinforced concrete” (Abriani, 1972). Sartoris’ study and publications reflected his theories on architecture and urbanism in a decisive way: his numerous writings revealed a certain vision of the city that was intimately linked to the methods of organisation of collective life and work, new systems of communication and circulation and innovative building materials. Sartoris’ interest in urban issues has been consolidated in the second half of 1929, when he began his collaboration with *La Casa bella*, directed by Guido Marangoni, and *La Città Futurista*, directed by Luigi Colombo, better known as *Fillia*. With the prestigious collaboration of Sartoris, these magazines began to publish articles aimed at disseminating the most current European experiences in the field of so-called “new architecture” (Sartoris, 1929b). Behind titles that summarized concepts, typologies or quality of materials – *Gli elementi della nuova architettura*, *Architettura standard*, *Introduzione all’urbanismo* – between the end of 1930 and 1936, Sartoris introduced readers to the most innovative architecture produced in Europe, presenting works and architects such as, for example, Le Corbusier, Jacobus Johannes Pieter Oud, Richard Neutra and Walter Gropius. A *panorama* aimed at confirming the transnational nature of rational architecture, later merged also into *Gli elementi dell’architettura funzionale. Sintesi panoramica dell’architettura moderna*, published in 1932 by Ulrico Hoepli publishing house (Sartoris, 1932a). The importance of this contribution lied in having identified the roots of functionalism in a broad panorama of avant-garde experiences in the artistic and architectural field, including the futurism and dynamism of Antonio Sant’Elia, from which Sartoris derived the supreme function of modern architecture, namely *urbanism*.

At the root of Sartoris’ work lied undoubtedly the futuristic matrix of Sant’Elia and his futuristic urban and architectural conceptions to which he seemed to have given an unprecedented rationality. First Sartoris’ projects took on a maximum concreteness in the exact geometry of the forms of the blocks of buildings. Since 1920 Sartoris in fact has contributed to the development, and subsequent dissemination, of rational architecture demonstrating that there was a precise and concrete method behind the “crazy” futurism of Sant’Elia:

“Without Antonio Sant’Elia – this heroic unknown – urbanism would not be what it is today. He dreamt of the new city before Le Corbusier and was, before him, the poet who prophetically presented the present and tomorrow’s hours” (Sartoris, 1990).

According to Sant’Elia’s prophecy, “the supreme function of architecture will be fully and totally realized: European urbanism in all its deepest functionality, to reach the building structures in their pure state” (Sartoris, 1990). The dissemination work initiated by Sartoris through his numerous publications focuses mainly on the issue of the so-called “modern urbanism” (Sartoris 1932b). In relation to the intense exchange of images and photographs that Sartoris undertook from 1928, the space reserved for the project of urban planning in the main specialized magazines and newspapers of the period is a fundamental tool to retrace the main stages that testify to the relationships established with the most important protagonists of architecture of the time (Sartoris, 1928). In this context Sartoris also mentioned as worthy of attention some of the most famous experiments conducted by the pioneers of the thirties, such as the *Cité-bloc intégrale* for La Pampa of Wladimiro Acosta, the *Cité verticale* of André Lurçat, the *Cité-ruche* of Richard Neutra, the *Cité-repère* of El Lissitzky, the *Cité en acier* of Szymon Syrcus, the *Cité volante* by Adolf Rading and the *Cité en Tensistrukture* by Guido Fiorini, projects saturated with inventive and functional power in the wide composition of the structural elements, in the geometric course of the masses that create an ascending rhythm of clear and monumental evidence. Despite Sartoris’ strong adherence to the Italian Futurist Movement, whose *Manifesto* was promoted by Filippo Tommaso Marinetti in 1909, the drawings he produced during his long career as a theorist and designer showed a marked detachment from the representations of the utopian architecture of Sant’Elia or Mario Chiattone and from those produced by the artistic avant-gardes in the early 1920s. The essentiality of Sartoris’ urban projects is to be found not so much in the futurist works of Sant’Elia or Chiattone, but in the relations that he has skilfully established with the most important architects of that time².

Sartoris’ attempt to combine the originality of the Italian Futurist Movement with the themes of European Rationalism is evident when one looks at his famous axonometries (Bardi, 1932). From the very first projects illustrated with this technique of representation, a strong proactive search for that so-called new architecture could be traced. The result was a careful Sartoris’ study of the colour and proportions of the architectural composition. However, his best-known drawings remained the utopian axonometries of buildings suspended in space in which the elements that make up the external context are never represented: Sartoris in fact omitted to include trees, man and all those elements of the urban sphere that strongly characterize even the avant-garde painting. Only in some axonometries the context was represented through a simple line of land, an illusory trait that identifies an ideal imaginary plane, almost as if he wanted to let the viewer imagine a utopian contextualization. Sartoris’ rigorous use of axonometry was understood not so much as a reference to a corresponding built reality but, for its coherent abstractness, as an indicator of the rules of architectural space (Cattaneo, 1993). Therefore, spaces that were not always referable to geometrical or formal factors, but rather to practices of use, changing in time and space. The axonometry used by Sartoris starting from the urban compositions of 1922, reduced to essential traits and well-defined volumes of

² Sartoris was a tenacious supporter of the exponents of the artistic avant-gardes of the early 1920s and the relations with the Italian Futurist movement are documented and well known. See, for example, Sartoris, 1930, Sartoris, 1944, and Sommella Grossi, 1993.

immediate figurative perception, can be considered as the purified and geometrical variant of the one already used during Futurism that was utopian and imaginative. For Sartoris, the theme of axonometric drawing therefore fulfilled the function of a true *manifesto* of Rational Architecture and was highlighted by the numerous publications of the author himself and by his continuous presence and participation in international conferences and exhibitions (Abriani, 1972).

For example, the first axonometric project of the University City for Turin in 1922 can be considered as a sort of evolution of the project of the Stadium Square, area for which Sartoris will draw, in fact a few months later, the two design solutions of the University City. According to Sartoris, the Stadium, in fact, emblem of modern mass society, could quickly become a village, a neighbourhood or a center for university studies. The drawings of the two urban solutions of the University City represent the first project in which Sartoris uses the orthogonal isometric axonometry for the first time. The only two isometric solutions of the project mentioned, as well as the project for the district of Geneva and Orbassano and subsequent urban projects represent, according to Bruno Reichlin, an authentic “figurative statement” (Reichlin, 1979) on the concepts and methods of Sartoris related to architectural design. This project can therefore be defined as a “constructive diagram”, defined by Christopher Alexander as a sort of “bridge” between the requirements and the shape of the building (Graziano, 2016).

According to the critics of that period, with the project of the University City, Sartoris was able to use the means of his art, adapting them to the taste and practical needs of his time. Sartoris chose to ignore the traditional building and administrative procedures and followed the path of the so-called “utopia for optimization” (Sartoris, Angeletti and Carloni, 1979). The axonometries of this project were, in fact, part of a fantastic and unrecognizable territory. Looking at the project drawings fifty years after their execution, the urban layout of the University City still today retains all its attractiveness: the strictly symmetrical blocks are surrounded by a continuous grid absolutely undifferentiated, there are no elements susceptible to scale, there is no stylistic reference (Abriani, 1972). This type of representation is probably the result of the conviction of the theoretical priority of design, understood as an essential and not casual tool of architectural representation. The need to present architectural functionalism as a cultural and educational necessity was evident not only through its famous publications, but in all of *Sartorisian* production, so much so that his urban projects take on the character of a real *manifesto*. According to Sartoris himself: “only the architectural elements reduced to their simplest expression allow a current form, therefore always variable. Architecture is therefore no longer a definitive, perennial composition; it is no longer a closed whole since its dimensions and its plastic and utilitarian elements dynamically undergo radical essential transformations” (Sartoris 1932a).

Also the major innovating architects have insisted that man be led to know the most modern inventions of the new building art. The public, especially the young people, had to be brought intimately into contact with the wide range of architectural discoveries, because a fervent imagination also characterized certain minutiae and certain intimate details of functionalism for the construction of the future city. Already in June 1928, on the occasion of the first CIAM, as Italian delegate, Sartoris claimed that the preliminary examination of the problems related to standardization allowed the novice architect to learn not only the knowledge of the quality of special products but also the ability to find new materials that would allow him to build the future city. Sartoris has also been able to speak of a “metaphysics of architecture”: a trend characterized by a figurative *attitude*, “endowed with

a strong introspective tension, based on the wise dialogue between function and ornament” (Sartoris 1998): he identified, as a field of action, the fantasy, intended as a work of imagination, of the reasoned construction that is based, at the same time, on intuition (Sartoris, 1986). According to Sartoris, Rationalism must also be imaginary and vision architecture which may appear utopian but which are scientifically and plastically realizable (Fronzoni *et al.*, 1998). The international group of architects of rationalism (often solitary interpreters of a universe in full transformation, in full transfiguration) with their inventions for a functional urbanism imagined models of cities according to appropriate and fascinating hypotheses³.

Sartoris’ utopian urban approaches

From 1930 to the 1950s, Sartoris stated that urban planning studies developed on a massive scientific and social basis. Although he didn’t take an active part in the reconstruction activities in Italy with his projects, he affirmed that in order to remedy the damage caused by the Second World War, “regulatory, regional and national plans were drawn up, with heavy reconstruction interventions with the aim of rational remodelling of the cities. Urbanism was becoming the centre of attraction for all architecture” (Sartoris, 1943). In order to heal them, it must be revealed the true face of every city. From this scientific point of view, it will be possible to predict changes, avoid illogical extensions and present the future development of agglomerations with an exact sense of reality (Sartoris 1990).

“Now we find ourselves in the need to delineate precisely the new urban scenes and the exact role of the architect, creator and humanist in the face of the interpretative change of our time. We absolutely must solve the problems soon and this will lead us to unsuspected visions of the city. For example, one of these problems we face today, whether we like it or not, is that of the house that often develops in height, but that must necessarily be linked to the surrounding urban structure, through its characterization not only vertically, but also horizontally. It is therefore necessary to create, in large urban assemblies, almost superimposed cities, stratified cities, cities with bridges. In short, let’s think of a dynamic architecture and urbanism: capable of implementing the city within the city” (Sartoris 1991).

The end of the 1980s and the beginning of the 1990s brought Sartoris’ utopian visions to completion and, among other things, coincided with his latest writings, the most mature in which he identified and clarified his idea of architecture and his stainless faith in architectural Rationalism. Particularly worthy of attention are the studies conducted by Sartoris on the architecture of commerce and the so-called “integrated urbanism” (Sartoris, 1983), destined to the flourishing of buildings aimed at the development of merchants and able to play a capital role in economy’s field in general. According to Sartoris, another need was to develop projects to penetrate apparently abandoned city centres, to insert elevated streets and squares, to create spaces and systems of vertical and horizontal circulation at every level, to make room for new blocks with areas destined for commercial activities. On the other hand, in order to reintegrate the historical centres into vital urban agglomerations, he proposed a model, a system defined as a “dented city”, where, in order to respect the buildings of the past, leaving their stylistic characteristics to the perspective of the street, modern constructions should be backward compared to the pre-existing ones so as to enhance them at a glance. This could be the way

³ “I believe in mystery, I believe in miracles, and therefore I believe in the utopia realized” (Cometa, 1987, p. 20).

to discover the plastic surprises of the new architecture while walking. This idea can also be realized in the labyrinth city without widening the paths, but by creating porticos of disengagement, the new city would thus enter the old one without useless or excessive changes.

Even his latest works bear witness to how his faith in modernity has not resulted in sterile repetitions of stereotypes of his axonometries (Sartoris, 1999), but in a search for the evolution of language, which, while falling within the rationalist tradition, denounce how forms are linked to the epochs of production and linked to specific needs, as in the case of the project for the “bridge city” for Barcelona in 1989 and the recovery of the former woollen mill Bona in the city center of Carignano, in Italy, in 1995. This last project, in particular, is the emblem of how Sartoris was able to interpret the modern in absolute coherence and linguistic correctness, where the careful use of colour and materials indicate that it is still possible to evolve in rationalism. Since 1984, in the numerous opportunities for debate and confrontation relating to the future of the city center of Carignano, Sartoris proposed an interesting vision of the integrated city, in which the question of the adaptation of the cities of ancient formation is brought back, according to Sartoris to the examination of similar “models of transformation” in order to create new urban forms and formulas. In Carignano, in particular, the project of Sartoris was the result of the involvement of the political, cultural and economic forces that have engaged in study days, exhibitions and conferences in search of a suitable redevelopment of the entire industrial complex: from the eighties, on the future of the industrial complex is in fact triggered by a lively debate that, for the historical, cultural and social implications that sees involved also the citizens, transcends the limits of a simple intervention of building recovery. According to Sartoris, the recovery project should not consist in a mere demolition, restoration or simple replacement of the existing building, but in a real “organic metamorphosis” of the architectural and urban complex. The existing structures of industrial building were thus converted on the basis of new functional requirements and would have acquired the role, according to Sartoris, of “a city within a city” (Sartoris, 1994). The new building included new and more current functions, such as horizontal and vertical squares, municipal offices and a multipurpose hall with a stage and 400 seats. The former wool mill thus becomes a gigantic “public equipment” at the service of the citizen, a real “social agent” (Abriani, 1991). The aim of the metamorphosis of the city center of Carignano was to draw from it a renewed architectural and urban centre, destined to become, in the intentions of Sartoris, the revitalised heart of the entire city. According to Sartoris, in fact, recovering the architectural and urban heritage to rehabilitate it, means making the “built state” another “buildable state”: “It is therefore necessary to ‘reinforce’ and ‘refresh’ the existing heritage to make it survive in the functions of the so-called new architecture” (Sartoris, 1994). Before being a recovery plan, the study proposed by Sartoris was a “perceptual design” born from the experience of the transition that have produced a series of relationships and dense relationships that have crossed the area concerned since 1980s (Gavello, 2017).

The 1989 unrealized project of the “bridge city” for Barcelona carried out in collaboration with Daniela Pastore for the international competition *Vivienda y Ciudad* and which won the prize of honour, was also defined as a morphological archetype of elementary structures that can be harmoniously combined with each other. It was a project for a district of 250 residential units located on the *Avinguda Diagonal* of Barcelona, defined by critics as a stimulating “collective dream” (Forte, 1990). This plan showed efficient and impeccable structures with a predilection for the functionality of the spaces and the architectural solutions adopted. Sartoris has in fact identified solutions for

interior spaces that can be extended and rhythmically modulated, where light and air intervene in progressive structural divergence. In Sartoris' projects, his primary objective was very clear: to create transition spaces and new spaces that consist of absolutely essential operations. The proposal, never realized, was part of the utopian dream of reconciling the inexorable advance of technology, machines and progress, with a need for life based on a more human dimension. And also in this case, in order to be able to express the sense of evidence of its vocation with perpetually renewed and renewable acts, the site and the urban fabric must be in close correlation with experience, accomplishment, the present and the future. The phenomenon of architecture integration with life was linked to the idea of movement, dynamism and creativity. Around these reflections he affirmed that the heritage to be saved, to be safeguarded by updating and rereading it, was implanted on the research and on the organization of a new space that can project itself in the metamorphoses of the lived experience continuing the permanence of the invention⁴.

According to Sartoris, Rationalism and functional architecture were neither mechanistic nor formed according to dogmatic canons, but rather it was a dynamic and constantly evolving architecture which addressed contemporary problems with the newest technologies enriched by a "poetic and spatial sensibility". Modern architecture was not an imitation of old or new styles: instead it had to be characterized by the compulsion to give architectural expression to social forces which themselves were in continuous transformation. Change and evolution in architecture would mirror, Sartoris hoped, changes in society and social conditions. Some fundamental principles, some universal systems of art remained immutable because they contribute to the vital process of intellectual evolution (Holl, 1983). Those "eternal principles" of architecture that have become a sort of codes for almost all new European architecture.

For a long time Sartoris wondered about the fate of the metropolis of the future. Trying to imagine, among concrete examples, comparisons and projects that do not fear utopia, the cities of tomorrow that look so much like the cities described by Calvino. Of course, it will be a materially and spiritually new plastic universe, because in these cities the usual roads will be abolished. Heavy traffic (underground and various transports) will take place underground; medium traffic (small cars, motorcycles and motor bicycles) on the ground; light traffic (pedestrian traffic) on roads on piles placed a few meters above ground level and on flat roofs (linked together by the system of vertical lifts outside the New City of Sant'Elia, which will disengage all floors of the houses). These utopian cities will be linked to each other by elevated highways on piles and by aerial runways. The analysis of the documentation in Sartoris' vast archive at the Archives de la Construction moderne of the École Polytechnique Fédérale de Lausanne testifies his long and careful study of American urban planning, especially on solutions to reduce traffic congestion at crossroads in New York, the so-called "spiral roads", where the great arteries bypass each other by means of large radius spiral fittings. He treated also of a creative and humanist architect capable of creating large urban ensembles, overlapping cities, stratified cities, cities with bridges, cities that were penetrated between the ancient and the modern, where even the suburbs are given a persuasive structure (Sartoris, 1982).

⁴ "Architecture, like nature, is metamorphosis; in the history of architecture there is no evolution, only metamorphosis. The avant-garde is only the beginning of a metamorphosis" (Cometa, 1987).

With his latest projects and writings Sartoris considered that the serious social, architectural and urban problems to be solved could not be reduced to those of a reckless or simple adaptation, but gravitate around the categorical reminders of the invention. It is therefore possible to observe that Sartoris associated his figure as an experimenter with prospects of dreams that were strictly achievable. His futurism was however dedicated to the ideas that shake the present (Sartoris 1984).

Today, Sartoris' theories and practice of mechanical development contemporary civilization have given a new metaphysical and intellectual expressiveness to the nature of construction, the so called "building art" (Holl 1983, p. 33). Studies and research carried out by Sartoris, in a certain sense, are the forerunners of a "happy city", always announced through the use of axonometry, in which its architectures are the protagonists of a well-defined urban fabric but still in transition. In recent years before his death, he has been attributed many values: the forerunner of rational architecture, the interpreter of a cultural and operational line capable of maintaining the continuity of thought of the ideas of the great masters of the modern movement, the creator of a new stylistic unity to the cities as a complex of buildings, and a new distributive and typological concept expressed since 1922 with the project of the University City. Even today, the numerous exhibitions of his axonometries set up following his death on March 8, 1998, represent further opportunities to celebrate the activity of the Sartoris-urbanist through an exaltation of his many projects, mostly remained on paper, developed with the aim of defining "an inhabitable art" (Sartoris 1982). Twenty-one years after the death of the so-called "witness of a century" (Dell'Oro, 1995) these celebrations allow us to glimpse, even today, new horizons of research within its vast production.

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