

Alessandra Natali Queiroz
Eugenio Fernandes Queiroga
José Roberto Merlin

t

THE AGRO-ENVIRONMENTAL PARK AS A NEW CATEGORY OF SYSTEMS OF OPEN SPACES

ABSTRACT

This article studies systems of open spaces and the contemporary urbanization of the municipality of Limeira, which belongs to the Campinas Administrative Region, in the state of São Paulo. We devote our attention to “regional contemporary parks”, which have also been called “agro-environmental parks”. While they do not represent a simple solution, they are a new possibility of thinking and acting. Through these types of parks, we can adjust our focus in the direction of local needs, and search for coherent mechanisms to act locally. Differently than other areas, also endowed with important natural assets, such as the São Paulo Metropolitan Region, this concept of park focuses on areas that are economically and socially uniform and which have been almost stripped of their flora and fauna due to intensive farming activity. The challenge we faced here is to promote a political discussion on regional contemporary parks as a way to meet social and environmental needs. This could include leisure, sports or other cultural activities that brings a regional focus, farming or forestry activities, or the conservation of ecosystems, which would define different levels of intervention and accessibility to the places as a whole. The concept of “agro-environmental park” is proposed as a tool for regional and environmental planning.

KEYWORDS

Agro-environmental park. Landscape and environmental planning. Open spaces. Regional development.

EL PARQUE AGROAMBIENTAL COMO NUEVA CATEGORÍA DE SISTEMA DE ESPACIOS LIBRES

RESUMEN

El presente artículo tiene como tema el estudio de sistemas de espacios libres y la urbanización contemporánea en la región de Limeira, integrante de la Región Administrativa de Campinas- SP. Merece especial atención la configuración del territorio, como unidad de proyecto para un “parque regional contemporáneo”, o “parque agroambiental”, como se propuso llamarlo. El “parque agroambiental” no es una solución sencilla, sino una posibilidad de pensar y actuar. Se puede, por medio de él, ajustar el foco de la lectura de la realidad local, buscándose mecanismos más coherentes para en ella actuar. A diferencia de otras regiones de importantes recursos naturales, como la región metropolitana de São Paulo, el concepto de ese parque objetiva trabajar un área económica y socialmente uniforme, donde la flora y la fauna son casi inexistentes, ya que han sido sustituidas por la urbanización y por áreas destinadas a la producción agrícola para el mercado global. El reto que aquí se propone es volver al parque regional contemporáneo objeto de debate para políticas públicas de atención a las necesidades sociales y ambientales. Pueden ser prácticas de diversión, deportes y/o contemplativas, actividades culturales de identidad regional, de producción agrícola o forestal, de conservación de ecosistemas, por medio de las cuales se definen diferentes niveles y escalas de intervención y accesibilidad a los lugares. Se propone el concepto de “parque agroambiental” como instrumento de planificación regional y ambiental.

PALABRAS CLAVE

Parque agroambiental. Planificación paisajística y ambiental. Espacios libres. Desarrollo regional.

O PARQUE AGROAMBIENTAL COMO NOVA CATEGORIA DE SISTEMA DE ESPAÇOS LIVRES

RESUMO

O presente artigo tem como tema o estudo de sistemas de espaços livres e a urbanização contemporânea na região de Limeira, integrante da Região Administrativa de Campinas - SP. De especial atenção é a configuração do território, como unidade de projeto para um “parque regional contemporâneo” ou, como se propôs chamar, “parque agroambiental”. O “parque agroambiental” não é uma solução simples, mas uma possibilidade de pensar e agir. Pode-se, por meio dele, ajustar o foco de leitura da realidade local, buscando-se mecanismos mais coerentes para nela atuar. Diferentemente de outras regiões de importantes recursos naturais, como a região metropolitana de São Paulo, o conceito do parque objetiva trabalhar uma área econômica e socialmente uniforme, onde a fauna e a flora são quase inexistentes, visto terem sido substituídas pela urbanização e pelas áreas destinadas à produção agrícola para o mercado global. O desafio aqui proposto é tornar o parque regional contemporâneo objeto de debate para políticas públicas de atendimento às necessidades sociais e ambientais. Podem ser práticas de lazer, esportes e/ou contemplativas, atividades culturais de identidade regional, de produção agrícola ou florestal, de conservação de ecossistemas, por meio das quais se definem diferentes níveis e escalas de intervenção e de acessibilidade aos lugares. Propõe-se o conceito de “parque agroambiental” como instrumento de planejamento regional e ambiental.

PALAVRAS-CHAVE

Parque agroambiental. Planejamento paisagístico e ambiental. Espaços livres. Desenvolvimento regional.

INTRODUCTION

Agro-environmental parks is a way to designate new ways of thinking Brazilian systems of open spaces, particularly those located in the São Paulo state interior. The core of this proposal is the possibility of turning this new category of open spaces into a strategy for the regional development, seeking to overcome strictly municipal models of management, execution and financing, aiming at suggesting the implementation of a more complex park model, endowed with urban, agricultural and environmental assets, and in this case study, covering the municipalities of Americana, Araras, Cordeirópolis, Iracemápolis, Limeira, Rio Claro, Santa Bárbara d'Oeste, Santa Gertrudes and Piracicaba, which form a quadrilateral shape in the interior of the state of São Paulo (Figure 1).

It is thus essential to reflect upon the contemporary urban territory, in a way that enables us the conjecture of future scenarios, which, in their turn, may lead us back to reflections on the current moment.

This proposal seeks to enhance local regional peculiarities, making possible, at times, multifunctionality or multiplicity of uses, and harmony with the built environment, by means of, among other things, visual connections between the countryside and the city.

Leisure, sports, contemplation activities, cultural activities of regional identity, agricultural or forestry production, and ecosystems conservation are some of the highlighted practices, through which different levels and scales of intervention and visibility are defined.

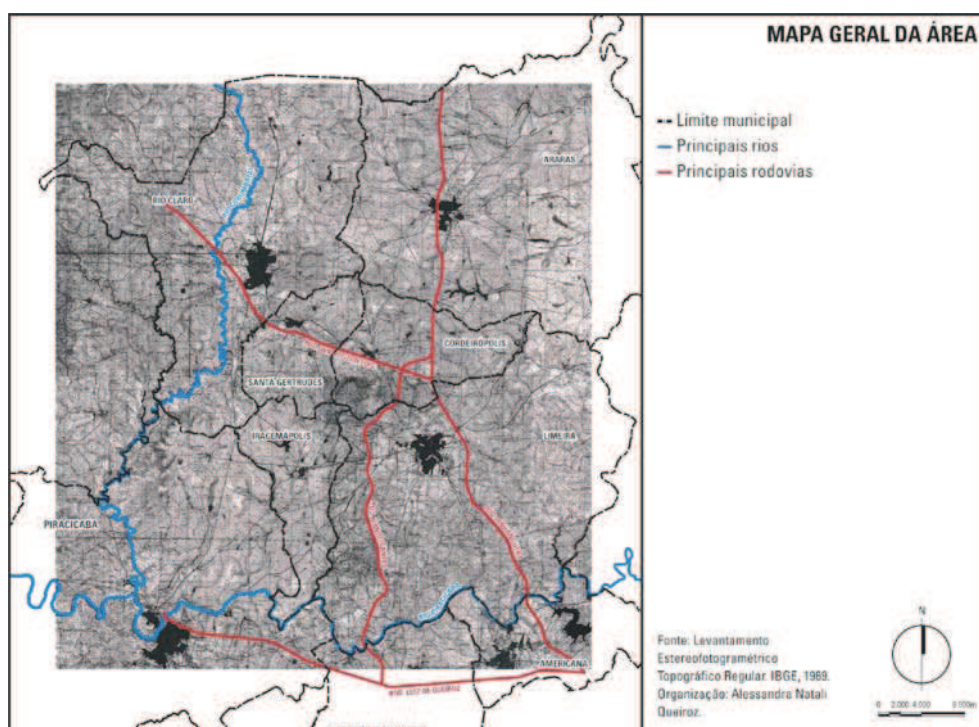


Figure 01: Map of the Region.
Source: QUEIROZ, 2012.

NEW WAYS OF THINKING PARKS AND OPEN SPACES

The concept of park, originally pointed to private properties created for the leisure of the wealthier classes. They were gradually acquired for the public use, and in this way, have opened up to less privileged social classes' members.

The Brazilian urban park, on the other hand, has always been characterized as public property and seen as leisure areas, in its various manifestations (BARCELOS, 2000, p. 51). More recently, especially since the 1988 Constitution, ecological and environmental aspects have been introduced as relevant in the conception of urban parks.

Current transformations in the social or physical-spatial spheres have been requiring an advance in the new propositions, in order to go beyond the counterpoint between green spaces and city. When pretending to bring nature into the city, from an urbanistic and scenic point of view, one quite often forgets the social and cultural demands of a human urban environment, usually trying to recreate the "untouched" nature.

Parks are part of systems of open spaces, and they are important when designing areas, whether urban or not, in order to properly meet man's needs and activities, as well as environmental issues.

Models vary according to periods, interests and social transformations in the fields of technology, science and culture. In a sense, despite neglectful governments and the dominant social classes, there has been evolution towards a more egalitarian use of space in parks. This is reflected on the possibility of finding places that provide, among other activities, the possibility of cultural expression. Here, it is important to point out the educational potential of public spaces, either through the creation of innovative programs that put the users into a more proactive role, or through the possibilities that the spatial perception per se opens up, this is when the space presents itself as a social instance (SANTOS, 1996).

In the Brazilian cities, historically, there hasn't been a uniform process of creation of parks, mainly due to the diversity of traditions, ways of life and interests. But parks and any other spaces destined to the public should, above all, represent the individuals and the communities of its locality. Mixing and confrontations between different cultures generate new knowledge, and even a new and more creative cultural process, promoting otherness. It is also a form of resistance against political and economic dominance, when they try to surpass culture.

Some public policies have been trying to acknowledge opinions and needs of different communities in order to design public spaces in a new and better way. It is an indispensable practice: trying to understand the wants of the community in relation to new places that would be created for their use, since quite often their values are different than those of the professionals responsible for the design.

According to Bernard Tschumi, as Serpa (2007, p. 187) notes, a park in our century should no longer imitate nature, but rather be a place that promotes cultural production, as we see in some Parisian parks, such as La Villette, which gathers a great mix of social classes, ethnicities and religions. Even though it presents a discreet majority of elite users, the appropriation by the low-income population has been growing, mainly because Paris offers quality public transport, and easy access to the park.

The QUAPÁ-SEL group proposes a *Critical Landscape Architecture* (CUSTÓDIO, 2010b, p. 1-12), in which concepts that have been trivialized by the practice of a *Constructivist Landscape Architecture* are discussed, one which is able to generate open spaces and landscapes in which there is conscious integration of socioenvironmental processes with aesthetic intentions, serving different social groups, and inserting them in active participation in the creation of these spaces, in an environment friendly manner.

Some of the researchers of the group (CUSTÓDIO et al., 2010a, p. -11) believe that negative impacts generated by human intervention (which vary according to scale and complexity) can be minimized through landscape design projects, emphasizing the formation of a system of open spaces, and integrating ecological dimension with social use. The constitution of these systems occur through diverse public and private spaces (streets, squares, parks, natural and rural areas), whereas

[...]green connections (corridors, urban areas of permanent protection) can many times present more complex structures; for example, compositions with elements of different natures, such as public transport routes, cycle paths, strategically located commercial activities, cultural references and water supply, which provide accessibility to the system of open spaces even to the poorest populations.
(CUSTÓDIO et al., 2010a, p. 3)

However, for the implementation of the project, there is a need of greater knowledge about projects and places that have already been produced, the ways they are used by the population, the way they were generated and the actors involved in the process (whether public authorities or private entities), once a critical comprehension of these factors allows a constant improvement in the design project in order for it to function as a transformative tool.

Pellegrino (2000) implements, in multidisciplinary open spaces design projects, what is called *green infrastructure*. It is a model that exerts various functions, such as: the protection of species diversity; management of rainwater; contribution to microclimate improvement, reduction of public health issues (water and soil contamination control), and offering of leisure spaces. The goal of this kind of intervention typology is to improve quality of life from a landscape ecology point of view.

Green infrastructure is an alternative to traditional rainwater harvesting systems. It is a draining system that catches rainwater, combining solutions such as greenways, constructed wetlands, reforestation of slopes, green streets, amongst other low-impact interventions, providing water management practices and thus bringing important contributions to an ecologically efficient city design (PELLEGRINO, et al., 2006, p. 59).

Souza (2006) proposes new approaches on urban and territorial planning, emphasizing *environmental units* for the analysis and definition of guidelines for planning policies. Watersheds are just one example related to water policies, as well as to socioeconomic, territorial, municipal, regional, state and national policies.

The methodological foundations at the base of these approaches to territorial planning comprise several areas and require structural understanding of their complexity for managing and the functioning of the territories themselves, hierarchizing needs and setting guidelines for investment and planning. Thus, a study that links humanity with environmental issues, based on the complexity inherent to the geographical space is key. This kind of procedure comes with a need to think the territory based on its social and spatial processes, and inherent conflicts and contradictions.

In the face of these perspectives, various aspects related to the agro-environmental park become relevant, particularly the connection between governments, professionals and the community in the creation of democratic spaces, and in search for their effective appropriation. This joint work of sharing of knowledge shall provide collective experiences in experimental attempts to overcome the archaic territorial mosaic, based on the political administrative division centered in the isolated municipality whose management policies almost always invalidate the demands that arise from the systemic of socio-environmental issues' resolution.

THE IMPLEMENTATION OF THE AGRO-ENVIRONMENTAL PARK

This study intends to discuss the implementation of a contemporary regional park as a proposal for open spaces where uses and appropriations are less dependent on real property or strictly municipal management.

Agro-environmental parks can be part of the management of large areas in order to recover links with cultural and natural landscapes, allowing for greater urban environmental quality in territories that involve both the public and private spheres.

Out of the reflections made on uses, interests, social, natural, cultural and political values that have led to the proposal for the park as a category of socioeconomic, territorial and conservational planning, one could highlight local singularities. Other criteria and complexity than those stated by SNUC, the National System of Conservation Units (BRASIL, 2000) were established.

In the laws concerning *Environmental Protection Areas* (BRASIL, 1998, 2000), for example, an encompassing idea is presented, which serves any area or region. However, in practice, the chosen areas are the most relevant for the state or the country, preferably based on their most significant natural features. These qualities are not seen in our area of study, particularly if we observe the maps below (Figures 02 and 03). There we can see that it has no strong vocation to constitute a conservation unit, exception made for Rio Claro, where the Environmental Protection Areas of

“Corumbataí, Botucatu, Tejuará” and “Piracicaba, Juqueri-Mirim” are located.

Thus, one may ask which category should be adopted in these cases. How shall we think about the development of this agglomeration? Our goal is to present new and different ways of territorial organization, equally respecting (as stated by SNUC) the socioeconomic, cultural, aesthetic and natural aspects.

This way of acting cannot remain on legal texts only, it must come with a reflection on the most adequate instruments (more decentralized and practical) that could bring actual benefits to the population, and the essential socio environmental conciliation – required but not legitimated. There is great discrepancy between the time for the approval of the laws and the timing of actions. Though needed, they lag behind and produce little progress in the way people think our current times and the proposed future.

The *agro-environmental park* is not a simple solution, but a possibility of thinking and acting, enabling one to set his focus on reading the local reality, seeking more coherent mechanisms to act on it.

In this suggested category, we have areas endowed with more features related to their recovery than their maintenance. It does not necessarily seek the protection of natural assets, but mainly their restoration, through the introduction of techniques to improve water and air qualities, as well as the revegetation of strategic areas; incentive to regional studies and research, allowing for controlled mineral extraction (to supply the ceramic and civil construction industries, for example); the implementation of systems of open spaces in various typologies, destined to social, cultural and ecological activities.

Differently from other regions with important natural resources, the concept of this park aims to work on an economically and socially similar area. Therefore, one goes about planning and managing the area, enabling dialogue between local public authorities, and associating projects for agricultural activities, for conservation and protection of natural resources, for economic flows, for mobility. It should allow for coherence in actions, encouraging the dialogue between the general plan, for adequate regional growth, and municipal master plans.

In the proposal and structure of the *agro-environmental park*, the role of public and private open spaces is emphasized - their role is to house multiple functions, among them the identification and representation of the local culture, agricultural production, and environmental conservation and recovery.

Figure 02: Map of Vegetation and Municipal Green Spaces.
Source: QUEIROZ, 2012.

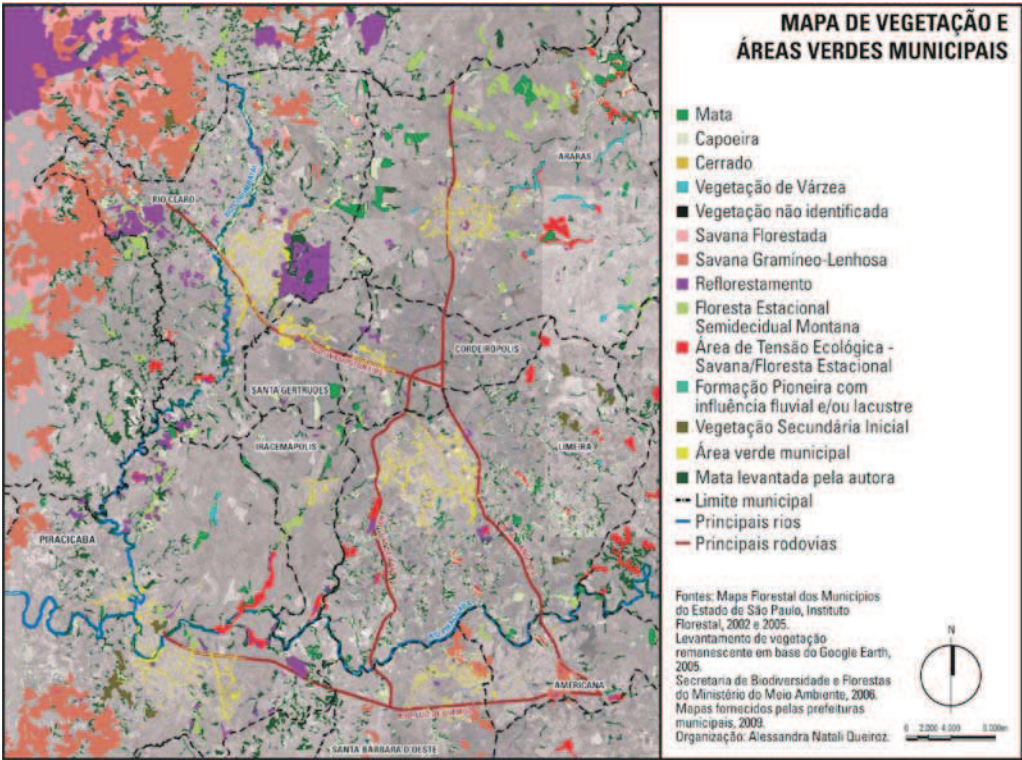


Figure 03: Map of Environmental Protection Areas and Conservation Units.
Source: QUEIROZ, 2012.

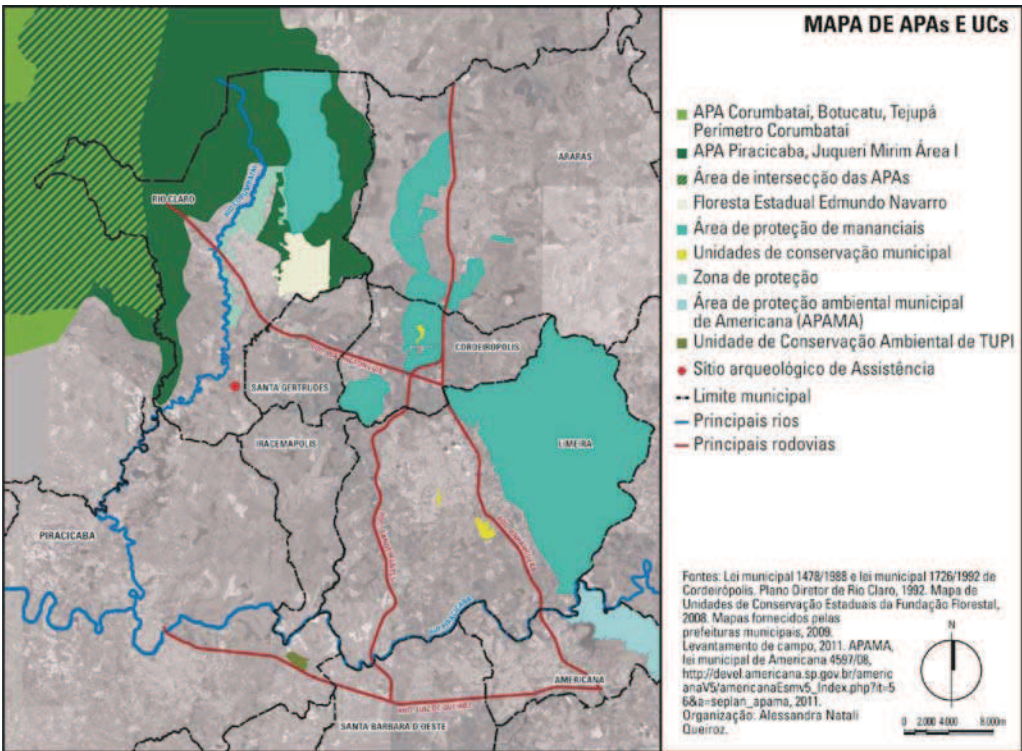
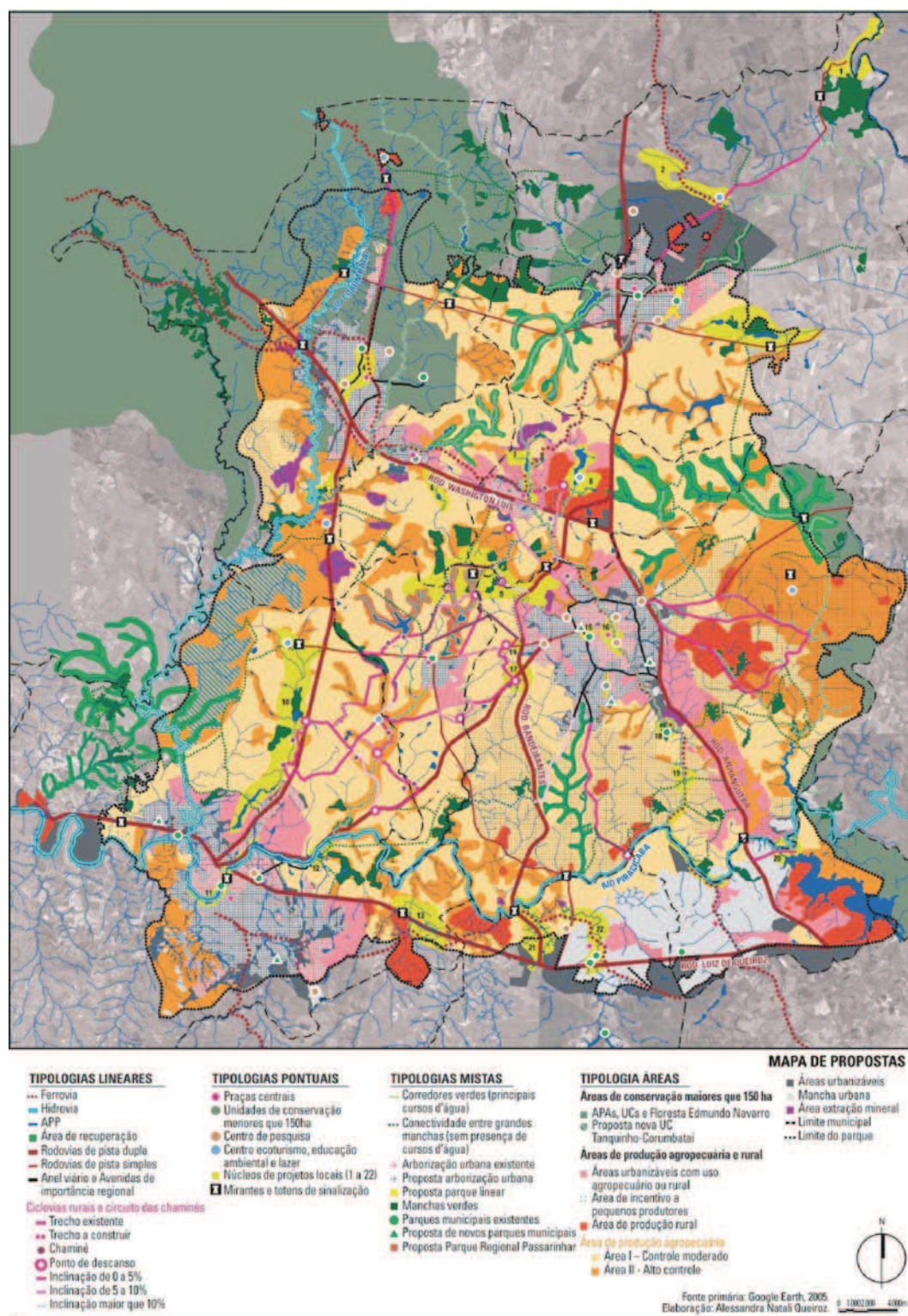


Figure 04: Map of
Proposals.
Source: QUEIROZ, 2012.



GENERAL PLAN

The general plan for the *Agro-environmental Park* gathers a system of open spaces of regional range, and will be presented here in the form of a document that unites potential ideas, as shown in Figure 4 below:

The proposal features the following main aspects: 1) interrelation between the spheres of planning, project and political; 2) it encompasses public and private properties; 3) the engagement of urban, rural and agricultural areas; 4) approaches the landscape and the environment as part of the public interest and dimension; 5) strategic recovery area; 6) flexible control of the territory.

The elaboration of plan and project are different, but complementary actions. The plan provides general aspects which guide the actions of the project, and then the project, in being more specific, reflects its intention back to the more generic plan, that aggregates the central ideas: the project provides the detailing, and can be altered according to the needs, as long as it keeps the coherence with the general plan, or else, shows the need for the revision of the plan. To achieve this interdependence, political action is essential, both in the creation of plans and projects (once it is needed the active participation of technicians, economic agents engaged in the space production, and the population), and in the process of their implementation and completion.

The method, which works in large scale, does not keep static processes and products, for it depends on continuous knowledge of the territory, defining project design principles to guide the activities, from the general plan to its execution, enabling to build with coherence and interaction with local administrations.

The idealized park presents itself as a category of proposal and intervention on areas that require a more complex treatment, demanding an ability to articulate different uses (urban, rural and agricultural areas), interests (social actors), and real property (public and private).

The degree of intervention and level of control on urban areas, areas environmental protection, agricultural and rural activities should be flexible, varying from a minimum to a maximum level. For example: when a private allotment replace an area of urban expansion, and if it has significant elements for the park (such as a passage of watercourse and remaining vegetation, or it is the headquarters of an historical farm) that belong to the allotment property, mechanisms and solutions should be created to allow the free passage and access to the mentioned elements.

Besides, it is essential to define the form or type of interventions (recovery, conservation, revitalization, or others), in order to offer a qualified landscape, and a more adequate environment, ensuring public use.

In the organization of the structure, some typological groups were established – linear, punctual, mixed, and formed by large areas – in which the possible interventions are emphasized. The richness and effectiveness of the state park, with an area of approximately 190.000 ha, could happen with the participation of the population and institutions that represent the public interest from the nine partaker municipalities.

Linear typologies encompass solutions related to regional connection through mobility. They propitiate the conduction of different activities of work, study, leisure, conviviality, sports and others, such as, for example, the reactivation of the railroad to be used not only as cargo transport (as it is today) but to open to the possibility of a ride in the region, connecting urban spots with local project areas, and links between other activity axes composed by the Piracicaba River, highways, roads and cycle paths. Besides the *railway*, we can also mention the typology of *waterways* involving the plan and project for the navigation in the viable sections of the two main rivers of the region: the Piracicaba River and the Corumbataí River; the plans for the recovery of native vegetation on water springs which serve for water supply; and the plans for the control and incentives for the conservation of the APP's (Permanent Preservation Areas) in all water courses and streams. The *road typologies* involve the creation of a hierarchy of roads, pathways and types of paving, besides landscape planning and design.

In *punctual typologies*, the actions are diverse, such as for example revitalization projects and construction design projects in different scales, like municipalities central squares, municipal conservation units, viewpoints, and signaling totem poles; research centers; ecotourism centers, environmental education and leisure; local projects centers.

In *mixed typologies* (linear and punctual), one works with the set of linear and punctual typologies, separated from the rest for exerting specific functions such as the green infrastructure project.

In the *area typology*, the highlight goes to large spots of land that can be urbanized for agriculture and cattle raising or rural area; Rural Production area; and agriculture and cattle raising production area.

THE GENERAL PLAN AS A CATALYTIC AGENT

The proposal of the “agro-environmental park” may contribute to change the process of economic growth, allied to socio environmental development and the improvement of the physical conditions of public life. It allows the potentiation of specific actions, endowed with systemic vision, preventing the isolation and lack of coordination of such measures; pointing at new ways of urban expansion; and encouraging new construction policies for the open spaces.

It could also become an entity of control of the level of degradation in its various forms, proposing alternatives that could generate improvements in all the surroundings, something which is already common in European cities, such as it is the case of the implementation of the IBA in the Emscher River basin, in Germany, where projects have also triggered transformative processes, fostering positive changes in the localities.

In a joint work with the local population, it is possible to list the most important projects that could boost the continuity of the plan throughout time.

This work, in the autonomist perspective, as M. Souza (2010) proposes, enables the exchange or the “creative fusion” between the people's

knowledge, the researchers and professionals' knowledge, and the knowledge of other social actors involved in the production of the space, allowing for the deconstruction and/or reformulation of a new plan; more aligned to the people's real needs. To work with participation means to listen to different arguments and allow for the free expression of the participants, seeking arrangements to meet their demands in the urbanistic programs.

More than planning or managing landscapes, the proposed interventions should improve and enhance social relations. Thus the plan presents itself as a catalyst for transformation, a facilitator for processes that encourage otherness, socio-spatial development and the evolution of citizenship, offering democratic activities, shedding light on conflicts that come from groups and social classes' different interests.

The plans, in Brazil, do not seem to meet, in concrete ways, the expression of content and purpose. They are of different kinds (sectoral plans, urbanization plans, master plans, among others), meeting demands of various scales, going from the ordinarily ones addressed by the traditional urban planning (municipality), to broader areas, such as the area of this study, which involves regional matters that surpass both physical and administrative limits.

The plans should not be necessarily rigid or extremely detailed documents, but rather, they should constitute strategies for urban and regional development, part of the *planning* activities, as they relate to a future action. Complementary to the planning activity, there is the concept of management as the execution of plans, remitting to present action, to resource management, and to immediate applications.

Therefore, whichever the scale, both means, *planning* and *management* should be both practical and collective tasks, providing the conjoint socio-spatial development of the locality or region.

From the particularity of this case study, it is possible to obtain guidelines for the creation of a method and of propositional general criteria, not as a "recipe" or "guide of good practices", since shaping the plan depends on social and environmental local particularities, but as parameters for proposals in other regions of similar socio economic and environmental situations.

The "agro-environmental park" is, therefore, a strategy for planning and urban and environmental management when:

1. New approaches emerge based on the complexity of the geographical space, and when a given group of municipalities with similar problems and interdependence relations are taken as a unit, and as physical and social structure that leads to new processes. This unique delimitation makes it possible to interlace punctual, linear or regional typological interventions which can house multiple functions of public interest (such as agriculture, conservation, leisure, communication, mobility, connection, income generation);
2. It allows for more active and participative policy, creating rules for hybrid regions, where both urban and agricultural activities coexist through controlled growth and production, adequate infrastructure, and environmental and landscape quality. This category of park seek forms of conducting territorial

exploration in a balanced way by types of economies (monoculture, mineral extraction, reforestation for economic purposes, etc.), through restoration, recovery, or even through new ways of harnessing resources without generating great impacts;

3. There is great offer of open spaces, either public or private, not yet in use, and lack of fulfillment of social demands and needs, such as offering of consistent leisure spaces, equipment and public spaces. These territories are developing economically, but can still evolve in the sense of ensuring better: quality of life ("*individual satisfaction in education, health, and housing*") and social justice ("*degree of social segregation, economic inequality and opportunity for direct citizen participation in relevant decision processes*"), as M. Souza (2010, p. 67) states.

4. There is extremely scarce native vegetation and significant or symbolic vegetated areas that need to receive adequate treatment, seeking recovery, revitalization and/or integration with human activities, hindering degradation completely;

5. There is the need for pollution control in its various levels, such as the control of the pollution produced by intense industrial activity (such as the chemical pollution thrown on waters from the jewelry industry located in the municipality of Limeira), and those produced by monoculture practices such as soil degradation and pollution from ashes resulting from the burning of sugar cane straw.

6. There is a will to formalize informal actions or boost the use of signs from past and present, such as those from so many historical buildings and sites, making them available to the public as reference and benchmarks of the construction of new stories and cultural identities, showing that isolated actions can gain life and strength when articulated with others of the same kind.

FINAL REMARKS: WAYS OF IMPLEMENTING THE AGRO-ENVIRONMENTAL PARK

One of the questions that rises, in the moment of elaborating proposals for the park is concerning measures and means needed for the cities to be motivated to accomplish large-scale projects, which involves more than one municipality.

We highlight, as a suggestion, some ideas in order to make the park viable, pointing out to four instruments. Our goal is to discuss matters of relevance in a regional scale. They are: public consortiums, the creation of councils for planning and management, the development of scenarios and the creation of laws related to the appreciation of natural and cultural heritage, such as the right to *cultural landscape*.

Public consortiums, also known as inter-municipal consortiums, can, as described in Article 2 of Federal Decree nº 6.017, from January 17th 2007, "establish relations of federal cooperation, including the accomplishment of goals of common interest". This decree propitiates the creation of an autonomous entity, capable of raising its own resources, with inter-municipal planning and management, auditing its activities and actions, and rules and regulations.

The Brazilian form of organization of its political and administrative structure has weakened the integration between cities, mainly in relation to the implementation of projects and public policies. The consortiums show a advancement and an alternate solution; they are more active than urban agglomerations and micro regions organized by the states (according to Article 25 of the 1988 Constitution, which gives the states, and not the federal government, the right to create these categories).

They happen through the initiative of the interested municipalities, and their main source of income is the contribution offered by municipal revenues, proportional to their socio economic conditions, or through funding and sponsorship. Supported by fundraising, they generate revenue, distributing it in a way to compensate for the social problems caused by the economic disparity between neighboring municipalities.

Such governmental organizations have had greater success in inter-municipal planning, since they work with proposals and projects, and therefore can attend to matters relevant to parks, as sections IX and XI of Article 3rd of the Federal Decree n° 6.017/2017 point to: “the management and protection of urban, landscape or common tourism heritage, and the providing of urban, rural and agricultural technical assistance, extension, training, and research and development.”

An experience such as this was the creation of the *Inter-municipal Consortium of the Great ABC*, in 1990, a strong organization which develops plans and projects for seven municipalities (Santo André, São Bernardo do Campo, São Caetano do Sul, Diadema, Mauá, Ribeirão Pires e Rio Grande da Serra). It divides its actions in eight axes (Infrastructure; Economic Development; Urban Development and Environmental Management; Health; Education, Culture and Sports; Assistance, Social Inclusion and Human Rights; Public Security), each team is formed by working groups composed by technicians of different areas. Among its accomplishments, according to the official website, there are: the construction of Health Care Facilities, the implementation of Federal University of the ABC, and the expansion of the Petrochemical Hub production capacity.

Another example, in the State of São Paulo, is the operation of inter-municipal consortiums of hydrographic basins, such as the *PCJ Consortium of Basins of Rivers Piracicaba, Capivari and Jundiaí*, founded in 1989. It is an association for a specific goal, which is the recovery of water sources and their adjacent areas, differently from the previous example. This entity is composed by companies and municipalities, and raises and applies resources for the planning and formulation of recovery actions.

The power of decision is up to the Consortium Board, composed by mayors and representatives of the consortium companies, it also counts on a Fiscal Council (composed by representatives of the city councils), an Entities' Plenary (representatives of entities from the civil society), and the Executive Secretary (technical and administrative teams).

The second chosen instrument relates to the organization of Boards for Planning and Management, in order to provide larger and more active citizen participation. In most Brazilian cities, popular participation happens through

consultation or co-optation, and the final decisions about intervention proposals are made by a small group, disregarding real local needs.

Since the Federal Constitution of 1988 and, more recently, the City Statute of 2001, through instruments of Democratic City Management, the State can (or at least should) provide greater opening to social movements and the civil society in the decision making process, valuing them as collaborators and partners. Despite this effort, such participation, clearly, does not occur everywhere, once the State is the result of a correlation of forces between different social agents.

One possible way of doing it could be to integrate, in a single committee, two kinds of activity: planning and management, because intervention proposals and the allocation of resources are linked and interdependent. These committees exert numerous functions, such as: the expression of opinions, critiques and choices regarding the proposed projects; prioritization of investments; control over budget allocation in certain urban projects, and monitoring the definitions and implementations of plans and public policies pertaining to the theme.

Thus it is essential to elaborate the methods and processes, through transdisciplinary knowledge which eases the dialogue and understanding of the proposals by the population. One of these facilitators and helpers in decision making, in the field of Architecture and Urbanism, is the concept of planning through scenario building. A scenario is an intermediate stage in planning, a moment before the final results, when possible futures are discussed.

Scenario Building is an important communication medium, developed by professionals such as Paulo Reyes, that implements and develops in workshops the application of the method “as a way of solving problems in time and space” (2011, p. 375) in territories, from the scale of the block up to the city’s scale. The scenario building method simulates future developments constructed collectively. This process, which he calls *meta-project*, is the stage in which images of possible realities are created, with projections and their consequent effects and impacts, positive or negative. After that, there is a stage of evaluations and debates about the best way to follow through, and what can be expected from the future, enabling one “to ‘design while planning or ‘plan while designing’” (REYES, 2011, p. 378).

Finally, we can add the importance of the appreciation of the *cultural landscape* (term adopted by UNESCO in 1992 in the Conference of the United Nations on Environment and Development in the city of Rio de Janeiro), in a broad sense, inserting debates on protection and conservation areas. It is increasingly common the elaboration of charters (Brazilian Landscape Charter, proposed by ABAP), conventions (Decree nº4/2005, in the European Landscape Convention) or legislation (SNUC), aiming at making the landscape dimension a right as important and relevant as others that are already established. In this perspective, the “agro-environmental park” is a way of achieving some of these goals, creating parameters to reflect on solutions based on different realities, one of the many that we find in Brazil.

REFERENCES

- BARCELOS, V. Q. Os parques: velhas ideias e novas experiências, *Paisagem e Ambiente: Ensaios*, São Paulo, n. 13, 2000, 49-71p.
- BRASIL. CONAMA. Resolução n. 10, de 14 de dezembro de 1988.
- BRASIL. Lei Federal nº 9.985, de 18 de julho de 2000. Regulamenta o art. 225, § 1º, incisos I, II, III e VII da Constituição Federal, institui o Sistema Nacional de Unidades de Conservação da Natureza e dá outras providências.
- BRASIL. Decreto Federal, nº 6.017, de 17 de janeiro de 2007. Regulamenta a Lei no 11.107, de 6 de abril de 2005, que dispõe sobre normas gerais de contratação de consórcios públicos.
- BRASIL. Decreto Federal, nº 4.340, de 22 de agosto de 2002. Regulamenta artigos da Lei no 9.985, de 18 de julho de 2000, que dispõe sobre o Sistema Nacional de Unidades de Conservação da Natureza - SNUC, e dá outras providências.
- CUSTODIO, V. et al. (2010a), O ensino de paisagismo na FAUUSP e as questões ambientais: a compreensão dos sistemas de espaços livres como fundamento didático. In: *10º Encontro Nacional de Ensino de Paisagismo em Escolas de Arquitetura e Urbanismo no Brasil*, Porto Alegre, RS, 15-17 de setembro, 10º ENEPEA, FAU/PUCRS. 2010.
- CUSTODIO, V. et al. (2010b), Da questão ambiental ao par ideológico desenvolvimento sustentável e sustentabilidade: contribuições para um paisagismo crítico. In: *10º Encontro Nacional de Ensino de Paisagismo em Escolas de Arquitetura e Urbanismo no Brasil*, Porto Alegre, RS, 15-17 de setembro, Anais do 10º ENEPEA, FAU/PUCRS. 2010.
- PELLEGRINO, P. R. M. Pode-se planejar a paisagem? *Paisagem e Ambiente: Ensaios*, São Paulo, n. 13, 2000, p. 159-179.
- PELLEGRINO, P. R. M. et al. Paisagem da borda: uma estratégia para a condução das águas, da biodiversidade e das pessoas. In: COSTA, L. M. S. (Org.). *Rios e paisagem urbana em cidades brasileiras*. Rio de Janeiro, RJ: Viana & Mosley/PROURB, 2006, 57-76p.
- QUEIROZ, A. N. *Parque agroambiental em quadrilátero do interior paulista: uma estratégia de planejamento paisagístico ambiental*. 343 fl. Tese (Doutorado) - Arquitetura e Urbanismo. Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo, São Paulo, SP. 2012.
- REYES, P. E. B. Processo de projeto em design: uma proposição crítica. In: MENEZES, M. S.; PASCHOARELLI, L. C.; MOURA, M. (Org.). *Metodologias em design: inter-relações*. São Paulo: Estação das Letras e Cores, 2011, p. 375-391.
- SERPA, A. *O espaço público na cidade contemporânea*. São Paulo: Contexto, 2007. 208 p.
- SOUZA, M. A. *Meio ambiente e desenvolvimento sustentável: as metáforas do capitalismo*. 2006. Disponível em: <www.territorial.org.br/material/meioambiente.pdf>. Acesso em: 20 jun. 2011.
- SOUZA, M. L. *Mudar a cidade: uma introdução crítica ao planejamento e à gestão urbanos*. Rio de Janeiro: Bertrand Brasil, 2010. 556 p.

Author Note

The article is derived from the thesis *Agro-Environmental Park in the Quadrilateral of the Countryside of São Paulo: An Strategy of Landscape and Environmental Planning*, developed in the field of Landscape and Environment in the Post-Graduation Program from the Faculty of Architecture and Urbanism of the University of São Paulo, under guidance of Eugênio Queiroga, who is also a coauthor of this article.

Editor's note

Submitted: May 2014

Approval: January 2015

Translated: *Giulia Calistro***Alessandra Natali Queiroz**

Architect and urban planner graduated at Methodist University of Piracicaba (Unimep); Full Degree from the Faculty of Education at Unimep; Masters in Architecture and Urbanism at FAUUSP; Doctorate in Landscape and Environment at FAUUSP, sandwich doctorate at the IUAV University of Venice. Currently develops projects in the field of Architecture, Landscape and Citizenship.

Rua Major Antonio Augusto Botelho, 122, Vila Paraíso

13480-753 – Limeira, SP, Brasil

+55 (19) 3704-0083, +55 (19) 98101-3871

atelier21@gmail.com

Eugenio Fernandes Queiroga

Has graduation, masters, doctorate and habilitation in Architecture and Urbanism at the Faculty of Architecture and Urbanism of the University of São Paulo (FAUUSP). Associate Professor of Undergraduate Studies, and permanent professor in the Graduation Program at FAUUSP. Vice-coordinator of LAB-Quapá at FAUUSP, and vice-coordinator of the research group: Landscape Scene in Brazil. Integrates the Coordination of National Research Network Quapá-SEL. Vice-coordinator of the Thematic Research Project "Systems of Open Spaces in the Constitution of Contemporary Urban Form in Brazil: Production and Appropriation - Quapá-SEL II", funded by Fapesp and CNPq. Scholarship in Productivity in Research 2 at CNPq. Member of editorial councils of magazines: *Ócolum Ensaios* (PUC-Campinas), *PARC* (Unicamp) e *Paisagem e Ambiente* (USP). Ad hoc advisor at CNPq and Fapesp

Rua Desembargador Antônio Moraes 784, Cidade Universitária,

13083-310 - Campinas, SP, Brasil

+55 (19) 99110-8812

queiroga@usp.br

José Roberto Merlin

Graduated in Architecture and Urbanism at the University of São Paulo (USP); Masters in Technology of the Built Environment at São Carlos-USP; Doctorate in Urban Environmental Structures at FAUUSP. Professor at the Faculty of Architecture and Urbanism, and researcher in the Urban Requalification Group at PUC-Campinas.

Rua Topázio, 104, Jardim Sontag

13322-155 – Salto, SP, Brasil

+55 (11) 99643-8294

jrmerlin@puc-campinas.edu.br