SUSTAINABILITY AND THE CITY PUBLIC SPACE
Design contests as an opportunity

Roibon, Maria J. – Pilar, Claudia A.
Facultad de Arquitectura y Urbanismo (FAU), Universidad Nacional del Nordeste (UNNE), Argentina
majorroibon@gmail.com - capilar@yahoo.com

ABSTRACT. This document aims to highlight the benefits of design competitions as an instance of full creativity, where they can be incorporated sustainability and friendly aspects to cities. The results of the design decisions made in the experiences of the authors in competitions urban design and public space of cities of northern Argentina are exposed

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INTRODUCTION

One of the most important challenges of the modern urbanism is to achieve the incorporation of environment sustainability criteria to the design of cities, where actually we have around 70% of the total population.

Thus, the eco-urbanism concept arises, based on the idea of strengthening the balance between the built environment and the natural environment (or original territory) where population is settled, in an increasingly complex reality where issues such as vulnerability and environment degradation, we should add the crisis of climate changes, social, cultural, economic and politic problems.

In this framework, the public space is presented as one of the principal components of urban weft, the suitable place to experience design operations tied to nature, contributing to consolidate the city idea and its image.

This paper aims to tackle architecture and urbanism competition, as a mechanism to generate concepts and thoughts which allow achieving innovative proposals, key ideas also contribute to local identity, from the global vision. In other words, the central idea is to find balance between nature and the city.

Finally, this paper summarized some of the author’s experiences awarded at professional public space design contests in national and international scope, considered as an opportunity to incorporate sustainability criteria – eco urbanism and eco concepts, to projects of regeneration of the urban space.

CONCEPTUAL FRAMEWORK

Current urbanism is found on the search of a more integrated view in which only considers the functional organization and the vehicular order as a solution to cities issues. Thus, Salvador Rueda presents the need of viewing a new urbanism concept: “ecologic Urbanism” that in the biodiversity scope it adjusts from the design itself to the natural conditions of the location, because it is about taking the most advantage of what nature offers, sun, rain, underwater course or even the condition of a bedrock. The new urbanism is obligated to respect the geographic peculiarities of the territory in order to preserve the existing natural values, and the loading capacity of the territory.

In this way, some concepts can be synthesized as conceptual basis of the experiences that will be exposed, related to the new visions of urbanism in the frame of sustainability: eco urbanism, public space design and professional contests as opportunities to incorporate this perspective.

Ecourbanismo-Ecourbanism

The “ecourbanism” as a concept refers to the cities management taking into account the ecologic aspects linked, most of all, to the territory occupation. The objective is to achieve urbanized areas in an environmental balance. Besides, it proposes a transdisciplinary view of social aspects articulating the multiple and complex variables which intervene with the urban design, overcoming the compartmentalization of conventional urbanism.

In the Ruano’s studied cases (1999) different ways of facing interventions for the restoration
of damaged ecosystems are verified, through the analysis of the relation between the individual and its physical environment, proposing new designed interventions from its basis starting with its ecologic principles.

Basically, related criteria to buildings ecologic construction, the treatment of the public space, the incorporation of vegetation, mobility, especially those related to pedestrian areas, and non-vehicular circulation, strategies for the incorporation of renewable energy and the rational use are of water, as well as the exploitation of pluvial water, management of urban waste, considering recycle, re-utilization and recuperation, use diversity, social groups, and constructive typology are considered.

Ideas Contests

It is hard to find the beginning of architectural competitions. One of the most important backgrounds in the human history could be the “Acropolis” in Athens, more than 2500 years ago. Moreover, the cathedrals and religious buildings in the Middle Ages and the Renaissance, such as the Piazza di Spagna in Rome or the dome of Florence Cathedral, by Brunelleschi. In all cases, from this key ideas emerged proposals which remain as historical background.

Well ahead, between the eighteenth and nineteenth century (XVIII y XIX) the competitions increased and spread in the United States, France and England. England made the first rules and regulations. Then spreads to other European countries were developed. At the same time, the competitions that started to take place, had as main objective to stimulate creativity and achieve different explorations.

By the time in a modern and contemporary stage, some paradigms of important competitions results to become architectural icons, across international borders, like “Enlarge of Barcelona” (1859), “ Tribune Tower”, Chicago (1925), Sydney Opera House, Australia (1955) or Centre Pompidou, Paris (1977) by the recognized Renzo Piano and Richard Rogers.

Regarding urban parks, the most important contribution was made with the result of the competition for the first recognized topic park: Villette Park in Paris (1982) by Bernard Tschumi, with a new proposal, chosen among more than 470 proposals, including Rem Koolhaas, Zaha Hadid and Jean Nouvel.

Between 60s and 70s, in some Latin countries like Argentina or Chile, the competitions were pubic policies to distribute among their professionals the work of public buildings. In others countries like Colombia, since the 90s with significant social and political changes, the architecture and urbanism develop at the same time in most cases as a result of public tenders and competitions. One of the most important examples is Medellin, with the “library - parks” experience in 2000.
Nowadays, the competitions organized with architecture contests, in their different design scales (urban, regional, architectonical, of components) and workspace (public-private, national, international, local, etc) are special circumstances where in a limited time, architects individually or in groups, realize a specific production for the proposed thematic. The alternatives that arise can become the construction of new theories or materialize from the crossing of different concepts.

In addition, several writers wonder from theory and from different offices, if competition is the best way to get good projects or, is only a leap to generate theoretical and professional discussions. Meanwhile, others writers believe that competition is a good practice to promote "democratization" of professional practice.

Nevertheless, Architectural competitions have always been a “fertile field” where new ideas, experimentation, reflection and discussion about the design can be arise, having impacts on city’s development.

From the sustainability scope, they become in a real opportunity to propose and spread ecologic strategies for urban scale as well as for the particularized design of the diverse components of the space.

**DESIGN EXPERIENCES IN PUBLIC SPACE**

In order to illustrate the concepts we talked about in the conceptual framework, four experiences of urban design which obtained prizes in national and international contests are presented. Criteria of sustainability were applied on them.

The presentation is organized from a data sheet that has: prize, contest name, authors, collaborators, organizers, place and year, contest objective, general concept of the adopted design, and the applied eco concepts. At the end, we show representative images of the proposal.

**BELGRANO SQUARE, RESISTENCIA (CHACO, ARGENTINA) SUSTAINABLE URBAN GREEN SPACE**

**Data sheet**

1st Prize of Provincial Draft Contest
"Remodeling of Belgrano Square, Resistencia, Chaco"
Authors: Barrios D’Ambra, Marcelo; Pilar, Claudia y Roibon, María Jose.
The emblematic logic- formal- arises from integrating the existing elements on the location and it is pretended to preserve, stand out, rank and take them as the generated idea of the whole, the outstanding lines of the mural. The intension translate to the aerial elements (illumination effects) and volumetric (banks system and terrain undulations) ornamental (metallic floras schemes), drawing on pavement, among others.

**Eco Concepts: Landscape and Environment**

- Vegetation. It is important the respect for the existing species, and we interpret this as its preservation, integrating them to the design (90%), their relocation if needed, but only in a minor quantity; the incorporation of trees, and herbaceous autochthonous species, and some other with a low environmental impact (low maintenance, and high adaptability).
  - Utilization of photovoltaic solar power to feed the lighting of the service sector.
  - Lighting through LED technology which requires lower energy expenditure, and has a higher useful life.
  - Urban retarders (water storage tanks to water to minimize the impact of the volume on the peaks of high intensity precipitations in a short period of time). These will be located at the new proposed terraces to revalue Belgrano’s Monument.
  - Exploitation of the existing equipment (terraces, and bathrooms) which recyling will be done interfering as little as possible.
  - Absorption surfaces. The quantity of the original absorption surface is preserved.
  - Catlaps for selective recollection.

Proposal of consolidation of the public green spaces and their connection through urban green connectors and sports active points of public use for the aerobic circuit of the public green spaces.
Source: Files of the Contest
BAJADA VIEJA IN POSADA’S CITY (MISIONES, ARGENTINA), RESPECT, MEMORY AND INNOVATION.

Data Sheet
2nd Prize in the Ideas International Contest COSTA CENTRAL UNO POSADAS Theme 2: BAJADA VIEJA
Authors: Pilar, Claudia y Roibon, María Jose.
Collaborators: Roca Zorat, Cecilia; Lataza, Álvaro y Alberto, Fernando.

Contest Objetive
Remodeling the area of Bajada Vieja which represents the most ancient sector of Posadas city, with a strong relation with the harbor functionality, the topography of the place (with an appreciable slope) and its relation with the old San José trench.

Design Concept
The environmental urban proposal is based on three ideas:
- Sustainable city. Conformation of significant green spaces system, linked through urban green trails.
- Collective urban Memory. Conformation of a patrimonial circuit.
- Smart City. Adding the smart cities concept.
- The urban proposal, is based on guidelines which contemplate the identity of the place and the cohesion between the natural and the cultural, the anthropic and the vegetation, incorporating the natural landscape to the closer environment and contemporary proposals of uses and materialization.
  - Bajada Relation-City
  - Bajada as a contemplation space of the surrounded nature.

The geometry of Bajada Vieja and the charted of San José trench do not respond to the orthogonal plot of the rest of the city. That is why they became a strong conditioning of the design. The proposal took that particularity reinforcing the idea of the plot rupture which incorporates broken lines. The coastline integrates this logic that is linking the proposed geometry with the existing plot.

The proposal unifies streets and sidewalks creating a new profile of the pedestrian-vehicular street, with its respective urban furnishing, signs, lighting and landscape, respecting the existing arboreal species and adding new ones according to the specific design.

It is proposed the harmonic coexistence of residential functions, cultural, touristic and commercials, with scales and themes which agree with the slow movement (world phenomenon that challenges the speed worship). From a functional point of view, a system of pedestrian places in relation to the proposed path that are linked between them and with the environment is shaped, reinforcing a touristic pathway-recreational-cultural, attractive and singular in relation to the city and the region, making visible and maximizing interest locations, according to its location, historic, cultural and environmental value.
ECO CONCEPTS: MIXED USES AND PRESERVATION OF THE COLLECTIVE MEMORY

- Preservation and respect for the built things. Exploitation of the existing equipment (terraces) whose recycling will be done with minimal intervention.
- Use of high durability and low maintenance materials.
- Use of low environment impact and low maintenance materials.
- Use of local materials.
- Environment education. Environment communication.
- Lighting. LED technology which requires a lower energy cost and has more useful life. Catlaps for selective recollection.
- Vegetation. Respect for the existing species, conservation and integration to the design.
- Incorporation of the vegetation on Bajada Vieja and its surrounding sectors.
- Integral proposal of inter sectorial participatory management

System of significant public green spaces and the proposed urban green trails.
Source: Contest files

Images of the proposal: urban space and relation to the patrimonial architecture.
Source: Contest files
INTEGRAL SYSTEM OF METROPOLITAN TRANSPORTATION (SITM) AT THE METROPOLITAN AREA OF POSADAS (MISIONES, ARGENTINA)

SUSTAINABLE MOBILITY

Data sheet

Contest Objective
Renew signaling and the urban furnish for transportation in Posadas, and endow the city a new transportation urban furnishings, replacing the existing one and incorporating new elements, in order to improve the services, adding others that enhance quality and innovation as well as the conditions of the public space use, to maximize its conditions and its touristic development.

Design Concept
For the furnishing and signaling of metropolitan trasportation of Posadas, an iconic and pregnant image is proposed, which accomplish an expressive variety -although the limited number of constructive components. Incorporating different termination and coating materials in relation to the emplacement. Simple shapes were used, apprehendable for the user, which shape a morphologic system of orthogonal characteristics, whose elements are combined in diverse ways, coordinated from design modules patterns. The intention was that through its repetitive use in the public space, help in the construction of the city image, to a clear interpretation of the Integrated System of Metropolitan Transportation (SITM). A good care was taken to accomplish the adequate visual continuity for the user of the public transportation (buttress are located at the angles where they do not block the visual). Likewise, lateral closing for the given dimensions to improve the security conditions were proposed.

The diverse components of the system were designed from its singularity, but taking into account its use flexibility in the proposed construction system. The module pattern was based on a plot of 50 cm, which comes from the width of the benches, adequate thickness to achieve the visual impact and a rational use of the used materials.

The design attends the total elimination of architectural barriers and the inclusion of different ages. An interactive panel is proposed with SITM and touristic information, which includes tools for oral transmission for blind people.

In order to yield a varied design, starting with few elements, the work was done on the basis of the personalization principle or customization. Thus, a system of “basis components” was designed, that are coated with different materials to adequate to the various requirements of each place of implantation. In this way, a variety is achieved and the place idea is reinforced, without laying down rationalization and normalization of the constructive system.

ECO CONCEPTS: UNITY IN DIVERSITY
- Use of low environment impact and low maintenance materials.
- Use of local materials.
- Modularity and rational use of materials.
- Prefabrication which decreases the environment impact of the work.
- Generation of photovoltaic solar energy.
- Environment Education.
- Environment Communication.
- Promotion of public transport which results environmental favorable.
- Incorporation of low statured vegetation.
- Lighting. LED technology which requires lower energy cost and has more useful life. Catlaps for selective recollection.
Synthesis Panel of the refuges and the adopted technology.
Source: Contest files

Image of a refuge prototype. Source: Contest files.
PEDESTRIAN AREAS OF SALTA CITY
(SALTA, ARGENTINA)
FRIENDLY PEDESTRIAN CITY.

Data sheet
1st prize in the NATIONAL DRAFT CONTEST FOR THE REVITALIZATION OF PEDESTRIAN AXIS OF THE HYSTORICAL CENTER- SALTA CITY
Authors: Pilar, Claudia; Roibon, María Jose; Zorrilla, Mario y KozakGrassini, Nicolás.
Collaborators: NuñezRolón, Ramiro, Lataza, Álvaro y Alberto, Fernando.

Contest Objetive
Remodeling the existing Pedestrian axis to propitiate the economic social and environmental revitalization of the Historical and Commercial Center of Salta city, and the treatment of public spaces related to the area.

Design Concept
According to the basis the work was done in order to guarantee the susstanainability of the system of the urban life recovering the harmonic relation between individual, society and nature, taking into account the demands and challenges of cities today. The need of a structuring of human environment, of the intervention sector, has to do with the readability in the orientation sense, the security of the paths and the facility for places apprehension, is synthesized in two axes:

- Sustainable City. With the conformation of significant spaces system, from teh proposal and towards its closer and further environment, linked through urban green pathways with an eco urban, landscape-environmental proposal.
- Collective Urban Memory. Strengthening the patrimonial circuit, where we include the linking between the three categories of patrimonial buildings as the bases proposed and a reworking of the ancient memory “Tagaretes” which cross the city, from an intervention proposal in the public space that reconstitutes its path.

Thus, the urban proposal is based on the guidelines that view the cohesion between the cultural and the natural, the anthropic and the vegetation, including the natural landscape of the closer environment and highlighting the identity of the place with contemporary proposals of uses and materialization. There is where the inspire principles are: Landscape. Culture.

ECO CONCEPTS
- Preservation and respect for the built things.
- Incorporation of photovoltaic solar energy generation in the proposed constructions.
- Use of high durability and low maintenance materials.
- Water incorporation for the evaporation freshing.
- Encourage the use of public transportation which is environmental favorable.
- Incorporation of vegetation of low statured.
- Lightning. LED technology which requires a lower energetic cost and has more useful life. Catlaps for selective recollection.
Proposal at urban scale. Source: Contest files

Intervention schemes and pedestrian images. Source: Contest files
FINAL REMARKS

Cities are considered eco systems which occupy a small portion of the planet surface, and yet they host 70% of the world population. They consume the 80% of the resources and generate the 80% of the waste.

It is essential to demand awareness from humankind about the use of the natural sources, as well as a territory planning and the habitat to be in balance with the environment, where the architects and urban planners play an important ethic role.

Architecture contests result a great opportunity to propose urban answers conceptually overcoming, and with no conditionings and also close to the possibility of incorporate the theory to the design.

The evaluation for our peers, who belong to the same discipline, allows establishing an anonymous dialogue of a high conceptual character.

Start from the site, analyze its conditioning characteristics, elucidate its problematic, propose pertinent and creative answers well-reasoned, and justified from the theoretical point of view are only some of the complex steps that imply the participation on this type of opportunities.

Sustainability recognizes in contests an opportunity to become protagonist. Being questioned and answered. Being the problem, part of the solution.

Contests legitimize architecture as a discipline that crosses beauty, functionality, materiality, and the social and environmental commitment. Specially contests whose objective is the intervention of the urban space, in places with high historic commitment, and results in a great challenge which is necessary to support from the academic, management and professional areas.

The analyzed cases show that design contests are discussion, reflation, proposal and management spaces. The incorporation of eco concepts of simple designs, feasible to put into practice and economically viable can the engine of change and inspiration not only for the analysis projects, but for the professional collective, favoring the involvement of the government and the citizen. Environmental sustainability is no longer an isolated concept and it has became in the axis of any proposal, with the belief that everything add up, and that we have to be part of the solution. Cities for being more friendly, have to be environmental sustainable, and contests are opportunities to capture this aspiration.

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