A study on design languages used in São Paulo architectural competitions 1990 – 2000

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ABSTRACT
The present paper aims at studying the architectural production from the city of São Paulo, Brazil, evaluating it based on the design for graphic and conceptual presentations developed for main architectural competitions during the last decade of the 20th century.

Free from market and client demand, it was presumed that in architectural competitions, architects are in a position to design less restricted in their natural expression and technological propositions.

This resulting freedom should, therefore, allow an evaluation of more innovative architectural languages, that is, an analysis of its vanguard and state-of-the-art.

The analysis of languages used in competitions was conducted alongside a brief discussion on Brazilian architecture produced in the period from 1990 to 2000. In the referred period, opening to world production and the timely influence from international trends, presented themselves as important factors in determining modifications in shape, models and attitudes in Brazilian architecture, above all, in architecture from the city of São Paulo.

In light of the research, a few important conclusions were reached as to the value and contribution of competitions to the evolution of architectural language in the period in question.

INTRODUCTION
The present paper explores relationships between Design, Graphic Design and Architectural Design.

It specifically seeks to interpret how design appears and influences contemporary architectural expression. This interpretation is achieved through the study of mutual influences and, even more so, through comprehension of the forms in which architectural writing is accomplished by way of Graphic Design. In a broader sense, it can be said that the study investigates mutual influences of languages developed in the field of graphic design and architectural drawing.

Those sketches and drawings, produced for presentation at Architectural Competitions promoted in the decade between 1990 and 2000 in São Paulo, will compose the object of study.
The 11 public competitions commissioned in that period were analysed, successfully compiling graphic material on 41 awarded works. Among these, a meaningful few, will be presented as examples of the relations the paper intends to enunciate.

To validate the use of representations proposed for architectural competitions, it is accepted that, due to the aims posed by competitions, leading contemporary ideas and concepts are presented more freely, rendering a clear reading of the state-of-the-art vanguard [1].

Another presupposition used here is that in competitions, unlike contests, it is not the architectural design itself which is evaluated, but rather the representation of that work via drawings and briefs. This aspect installs the importance of graphic design as the central component in architectural communication and expression.

The project presentation design involves, particularly, the composition of a body of blueprints wherein there must reside: the explanatory memory of the project; a set of drawings in a given technical format involving floor plan, section, elevations, all of which describe the architectural object and a set of illustrations (normally perspectives) expressing the main characteristics of the proposed architectural design.

The correct articulation of these elements, clarity of their comprehension, graphic vigour in their presentation and, lastly, economy and synthesis employed in drawing selection and blueprint design are leading criteria used when attributing value and understanding to the architectural proposals submitted to judgement.

The analysis of graphic design presentation of a project should therefore involve the evaluation of its components and relationships. The components are: brief (text), technical drawings and illustrative drawings. The relationships are the distribution and sequence of the elements, what is normally known as the composition.

**INTERPRETATION TOOLS**

A number of interpretative tools may participate in the act of reading into relationships between architecture/design/ graphic design. These can, in general terms, be described as:

1) **FIGURATIVE CONTAMINATION**

The term figurative contamination was first coined by Fiz who, in 1986, used the term while studying reciprocal influences between architecture and art during the modern and post-modern period.

In the case of relationships between design and architecture, contamination should be defined as the search for iconic remains and formal references which, having originated from industrial product language, permeate the constitution of architectural works.

Among the most notorious are the use of the locomotive, the aircraft and the transatlantic steamer as building blocks of the modern vanguard architectural vocabulary [2].

Further examples of contamination can be located throughout the contemporary urban composition of post-modern vanguard (Venturi, 1972) or all of the ‘high-tech’ generation language, in the use of the repertoire resulting from the space and digital age and industrial language referred to in the study of new materials and technologies. (Montaner, 2001) (Cejka, 1995).

Interpretation of contamination should be fuelled by an attitude which is not solely formal in nature. Understanding of the contamination should embody criteria of ‘efficiency’ and ‘meaning’ of the transferred elements, in terms of the iconological vision [3].
2) TREND INCLUSION
The relationships between design and architecture can be seen as expressions of determined artistic or stylistic trends.

Such relationships can be comprehended as being a ‘sign of the times’ or classified into ‘movements’ characterised as having occurred in artistic groups or trends which manifested themselves somewhat coherently through varied arts in established periods.

Inclusion into ‘trends’ or ‘movements’ is used by critique and history alike in order to classify and typify expressive and formal behaviour generated by a set of concerns and common concepts. In numerous historical and critical studies, denominations such as rationalism, expressionism, neoplasticism, fordism, styling, bauhausism, Memphis group, neomodernism and so on, are found.

In such an approach, traits common to design and architectural manifestations of the same movement are easily identified.

There is nothing more straightforward than finding similarities when making comparisons amongst production of a given ‘movement’, for example:

- The font family designed by Eckmann (1900) and the theatre floor plan for the Cologne Werkbund Exhibit (1917) designed by Henri Van Der Veld.

- DE STIJL magazine cover (1917) designed by Vilmos Huzar and the ‘DE UNIE’ Café façade (1925) designed by J. J. P. OUD.

Inclusions into ‘movements’ are, therefore, significant to the analysis of design procedures common to design/architecture.

Due to the large number of artists working in the field of design and architecture, we can include in this interpretative category: graphic designs, products and architecture produced by a single author. The work of Oscar Niemeyer reveals this characteristic of correlative pertinence (Museum, Symbol and Chair).

3) PERCEPTIVE-SEMIOTIC ANALYSIS
In this interpretative category, architectural representation and graphic design are studied from the standpoint of the mechanisms used in the construction of the communicative graphic artefact.

The unveiling of graphic representation mechanisms, through drawings, is based on Massironi (Massironi, 1983) who demonstrated that every object is, to its graphic representation, an endless source of expressive and communicative possibilities. This taken into account, the element selection, the choice of perspective, surfaces of representation and means of support used in the production of a graphic elaboration are all elements collaborating to reveal its meaning or its communicative intention.

Thus, the communicative objective of one or more drawings is defined by that which the object is to transmit. In observing the conditions of what was selected to be communicated, the means by which this selection took place and is exposed, it is possible to comprehend what in that object was communicated.

It can be depicted from Massironi’s tools that the elements for understanding the representation of an object in Graphic Design are the following:

- The characteristics of the used signs (marks, lines, colours, textures).
- The relative positions between the surfaces of representation and that of the observer (representation system, front surface, oblique, etc.).

- The selection of what is shown in an emphasis and exclusion process.

To exemplify this understanding, two representational images of architecture are used here. In a comparison between the representations of the Charlottenplaz - Scholossplatz (1972) design by Rob Krier and that of the design for the El Even Odd house (1978) by Peter Eisenman, these mechanisms become clear. In the Krier representation, the object is communicated while trying to establish links with the urban fabric and with the sequence of visualisations of an observer on ground plane. Through Eisenman, the object is seen with geometric clarity of a concept, excluded from its surroundings, seen by an observer at the improper point. In Krier, the architecture is shown as a concern with its perception and its relation to the urban fabric, in a sequence of visualisations. In Eisenman, architecture is expressed as an occupation with the clarity of conceptual geometry.

THE REPRESENTATIONS OF ARCHITECTURE: DESIGN AND GRAPHIC DESIGN

Analysis of the drawings and images submitted to the studied competitions leads to a few considerations on the relationships between design/ graphic design / architectural representation.

These considerations imply, without a doubt, that the last decade of the past century has seen an array of transformations in the representations, reflecting change in visual culture. Such changes may be understood based on the following elements: the use of new references, the use of new means of image production and the influences of new artistic and cultural attitudes.

The first consideration on representations is characterised by the diversity and plurality of the presented graphic creations. Despite the standardised shape and dimension of panel submission in competitions, there is a significant choice variation in graphic representation.

The variety is noticed in the employment of an assortment of materials (lead, coloured pencil, ink) as in the corresponding techniques (free-hand drawings, technical drawings, sketches, computer aided perspectives, etc.). It can be supposed that the use of various techniques in graphic creations corresponds, to a certain degree, to the plurality of the design trends taking place in the second half of the 20th century.

Plurality acknowledged by the basic texts which record the production of design and architectural artefacts (Noblet, 1993), (Denis, 2001), (Hollis, 2000), (Montaner, 2001), (Cekja, 1999) and (Jenks, 1982).

Plurality of the more recent architecture, arising from criticism to the alleged uniformity of the ‘International Style’. Plurality constituted by various postures: historic post-modernism, regionalisms, deconstructivism, neomodernism, etc.

Plurality in design, through surpassing the Bauhaus heritage, the Ulm heritage or the many ‘good form’ movements. Plurality of concerns, whence emerged consumer-led design, alternative design, peripheral design, radical design, etc.

In graphic design, plurality is represented by the transgressions of pop typography, by deconstruction and allowances conceded to digital typography in comparison to more orthodox productions generated by the use and dissemination of ‘Univers’ and ‘Helvética’ fonts.

Graphic designs elaborated for competitions occurring in the last decade, because they present architecture in a varied manner, correspond, in a way, to the verified plurality. This fact is related to Massironi’s interpretations, for
in each differing architectural proposition there lies established a link to the shape in which the object was exhibited or intended for viewing.

Other than the variety of graphic representations, subsequent observations may be acknowledged if the drawings are studied from its figurative contamination.

These observations show that in architectural competitions in the beginning of the decade, there was a greater number of varied source references than in the competitions occurring towards the end of the decade. Exception being made to the last Competition for the Immigrant Memorial (2000), in sight of its more sculptural rather than architectural qualities.

In the first competition to be analysed - Brazilian Pavilion in the Seville Exhibit (1991) - the finalists presented extremely diverse graphic-architectural references.

The winning design by Bucci, Puntoni and Vilela (fig. 01), holds a reference to ‘modern design’ on account of its basic geometric forms and minimalist character. Propositions by Rodrigues and Saraiva (fig. 02) spring from a ‘high tech’ vision incorporating, however, a ‘pop’ chromatic impact.

Laender’s project (fig. 03) has the native Brazilian Indian tent as its premise for a shelter to house the exhibit. A primitive hut, tempted by the new material technology, represented by technical resources of applied graphics. Among all the images offered by finalist teams, this was the only one to include a digitalised overhead perspective of the ‘tent’.

Towards the end of the decade, contrary to what was occurring with graphic diversity and attitudes in the beginning of the 1990s, graphic references and resources, as well as proposal variations, became more homogeneous. Springing from revisions of modern propositions, designs were being developed endowed with high technology without, however, possessing ostentatious ‘high tech’ formality or late modern extravagances. This finding mirrors, up to a point, the relative stability brought on by an international trend domination, like the one considered in the book ‘Supermodernism: Architecture in the Age of Globalization’ (Ibelings, 1998).

In the competition for the FAPESP (Fundação de Amparo à Pesquisa do Estado de São Paulo - São Paulo State Research Support Foundation), conducted in 1998, some of these propositions are found.

In this competition, the blueprints for the finalist designs (being, this, a two stage competition) presented themselves, in terms of graphic design, using great technical and formal rigour. Computer generated perspectives described different propositions with relative uniformity.
For example, in designs by Frascino and team, and Fialho, Figueiroa and Santos (fig. 04), the perspective’s treatments, observer position and representation surfaces, all contribute to take the edge off striking differences in spatial organisation.

Fig 03  Fig 04

Similar graphic resources, used in a similar fashion, tend to level the differences in architectural propositions. Nevertheless, a spectacular use of photographic assemblage won the competition for Viglieca and team (fig. 05) based on the clarity and vigour with which this representation exposed the proposal.

Fig 05

Making use of photographs of the natural vegetation in the city of São Paulo (Atlantic Forest), the technique expressed the installation of its building as a dividing element. On one side a drought ridden terrain, on the other a large green patch (natural reserve). On the arid side, a near opaque façade, on the other, a glass curtain running top to bottom. The architecture of a construction destined to lodge scientific research would transpose opacity to reach transparency, arid to fertile, unwanted to desired, landscape destroyed to environment rebuilt. Anxieties with graphic recognition of architecture bring about other propositions.
The most widely used constitution when composing blueprint panels for architectural competitions followed roughly the order below:

1. General panels containing explanatory memorandum and design justification.
2. Panels containing more technical scaled drawings showing setting, plans and sections.
3. Panels with general perspectives of the design from the most significant viewpoints.

This linear presentation, throughout the last decade, is slowly but surely being modified. First of all, it is no longer a linear syllabus, where plans, sections and perspectives coexist on a sole blueprint or panel, like in the design by C. Libeskind (fig. 06). On one of the design panels, there are elevations, sections and axonometric and conic perspectives. Views of the object from various angles, positions, degrees of nearness, both internal and external.

The panel’s graphic design proposes a meaning to the spaces, showing the wealth with which the blocks were designed. The layout shows the design’s intent that, according to the author would be to create ‘articulated elements down streets, forming neighbourhood blocks which would mark off certain territories (...) reaching an area parted by a street, the sets are joined in their internal lower-level parks (...) these parks would in turn serve as communal living spaces, in constant dialogue with the buildings.’ [4].

Changes in the presentation itinerary go a step further in a second proposal. The layout not only creates a multiplicity of visualisations, but surprises in the layering of referred multiplicity.

In one of the finalist designs for the 1st SEMAR-SP Centre of Professional Training Competition (1996), the team made up of Biselli, Medeiros, Cafcalas and Del Bianco, presented panels where texts, technical drawings, illustrations and backgrounds are superimposed (fig. 07).

The architecture is exposed not only through a procedure of succession and multiplicity, but in an event of fragment superposition. What is meant by this is a series of sections, views and paths by way of simultaneous visual perceptions, according to how the design intends to show itself to the future user.
The panels by Medeiros (fig.08) for the Competition for Ideas for the State School shows briefs, sections, elevations, perspectives and the possible flexibility of the blocks, all on the same panel, where the background is also composed of illustrations and technical information.

Using graphic design, Medeiros demonstrates a way of executing a standard project guaranteeing architectural pertinence, in the most diverse ground plot and urban situations imaginable. The project, in its perspicacity, inverts the issue of the terrain adapting to the standard design.

Graphic design, with its superposition and multiplicity, reveals the buildings product design as possessing an open and flexible system.

In these observations, from a perceptive-semiotic stand, a few other interpretations may be established.

The first is related to the technical production of the images. Libeskind’s work (fig. 06), despite being referring to the multiplicity of vision on the architectural space, is still produced with traditional drawing instruments and composition, considering partial drawings and texts and layout (final composition).

The panel for the SENAR-SP and the Competition for Ideas for the State School (figs.07, 08), are pieces produced by way of computer aided drawing techniques.

New graphic resources allow greater freedom, coinciding with opinions expressed by Hollis: ‘with computers, designers can generate relations of complex meaning by use of superposition and layering of text and image elements, instead of connecting them either vertical or horizontally.’ (Hollis, 2000: 203)

Each panel, instead of being produced as a sum of elements, are actually elaborated in a near sole phase. In this phase, elements and arrangements can be produced and studied at the same time.

The pre-visualisation of the board allows more rigorous control of its project, shades of hue, graphics and colour. The designer has more control over the final production of the image.

Likewise, we can compare the production of a panel to that of the printed page, making use of the same resources of computer graphics: ‘Greater control over production has allowed the designer to make decisions in the creation process. Before this, (...) the designer gave separate instructions for the composition and reproduction of the images. Once the designer had prepared the instructions for the page set-up, any alteration as to size or positioning was difficult to execute. Now, the designer was responsible for the type setting and left the work ready to be transformed into film by the printer.’ (Hollis, 2000: 204).
These procedures should be listed alongside other attitudes derived from relationships between artistic cultural movements and their contamination.

From the 1980s onward, what Montaner (2001) classified as ‘the new formal abstraction’, as opposed to the ‘deconstructivism’, comes into effect. Along with propositions from many architects such as Peter Eisenman, Daniel Libeskind, Bernard Tschumi, Rem Koolhas, John Hedjuk, ‘the new formal abstraction’ forged the ideal of ‘a transition architecture trying to conceive a new idea of dynamic space that is not orthogonal - and new means of representation - through superposed efforts, models, perspectives and computer simulations and not the conventional perspectives, plans and sections’ (Montaner, 2001: 230).

It is plain to see the transfer of elaborated graphics, constructed in these architect’s printed projects and works, to the language of the studied competition panels.

In graphic design itself, some ‘deconstructivistic’ lines were established, as Farias (2001) highlights: ‘deconstructivistic design is now a synonym for complex layout, using elements placed in various layers and fragmented forms, typographic arrangements that in some way defy rationalist patterns of reading, often using fonts designed according to those same principles.’ (Farias, 2001: 30).

There are numerous correspondences; Medeiros’ panel (fig. 08) does not escape the comparison with the proposition by Tschumi for the ‘Follies’ project at Parc de La Villete (1985).

Besides these signs of contamination, panel layout complexity is deeply related to the grammar of graphic designs by Gert Dumbar, Neville Brody’s propositions for ‘The Face’ magazine and a complete approach classified by Hollis (2000) in his book as being ‘new fads: electronic technology’.

Occurring contamination between architectural design and graphic design shows through in the last competitions of the decade.

The winning design for the Immigrant Memorial (2000), by Cartum and Keating (fig. 09), despite having presented a flawless group of free-hand colour pencil drawings, produced panels with multiple visions of the projected artefact, detached from a linear discourse. Its main sculptural element is a square plank set along side the highway. All the while geometric, the sculpture is proposed in rusted steel (deconstructed), bringing back memories of an old weathered barrier, a reminder of the arduous crossing faced by those forced to immigrate. Second place goes to the design by Leite, Quercy Junior, Reis and Wiste (fig. 10), the panels possess a graphic project based on digital resources, transparencies and superposition. The transition bar proposed as the main architectural sculpture is a clear reference to Daniel Libeskind’s CITY EDGE (1987).
PANORAMA

The investigation on relationships between design/ graphic design/ architecture, based on designs proposed for public architectural competitions conducted in São Paulo between 1991 and 2000, lead to a set of clarifications on methodology and content which may be thus identified:

• The use of the interpretation tool suggested - figurative contamination, trend inclusions and perceptive-semiotic analysis - enabled critical description and analysis of the studied works.

• This description and analysis was made possible thanks to the conjunction of the analysis tools. It was noticed, through the approach, that such instruments are still diffused, not presenting clear limits. In this sense, the analysis required a combination of instruments for a more significant interpretation of the studied relationships.

• Multiple interfaces between design/ graphic design/ architecture were verified demonstrating the existence of a vast field of explorations in the design representation arena.

• The tendencies for change in design language corresponded, in part, to the use of architectural and graphic design drawing resources created by digital resources.

• Behaviour of graphic and architectural drawing in the constitution of the architectural work reveals similar anxieties in relation to changes in visual culture and to the state-of-the-art ‘vanguards’ in that period.

• The analysis includes only the representations of the competition winning designs simply because only one of these designs was ultimately built. Therefore, a critical analysis of the produced architecture and its relation to the visual presentations was not possible, due to the impossibility of verifying their proposals in the final constructions.

• Figurative contamination and intake of the various international trends in the field of graphic design and architecture manifested themselves abundantly in the language contained on the panels and architectural designs.

Pieces of graphic design in architecture have the ability of generating imaginary entities. This can be translated in a mere ‘paper architecture’ or result in profound qualities when creating humanised spaces, adequate settings and locations which express the desires of that society wherever they are installed.

The evaluation of the relationships between graphic design / design / architecture can just refer to syntax, signs and references, dealing with the study of stillborn buildings longing for conclusion, mere ghosts of a lost architecture.

Nevertheless, the analysis of the relationships between graphic design / design / architecture may allow an understanding of the use of imagination, which will in turn allow the creation of quality artefacts and works, catering to needs, pluralities and the challenges posed by our current societies.

What is the meaning of design after all?
FOOTNOTES
1. Some reflections on this theme are further developed by Juan Carlos Apolo: El concurso, un evento, un juego con las ideas, in: Revista Elarqa (22), Editorial Dos Puntos, Montevideo (1977).
2. These references are recognised by architects and designers such as Le Corbusier (1972) and Maldonado (1977).
3. The differences between iconography and iconology where described in Panovsky (1987).
4. Personal statement made by Claudio Libeskind to the authors.

BIBLIOGRAPHY
BIOGRAPHY

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