rchitectural competitions are no longer simply professional praxis for architects and a recurrent exercise for students at schools of architecture. The competition has also turned into a field of research, and this book is part of an effort constituting the architectural competition as a field for studies with scholarly claims. The first doctoral dissertations on competitions were presented in the 1990s in Europe. Another clear manifestation of research interest is the growth and spread of scholarly conferences on architectural competitions.

The contributions to the book show in a convincing way that the architectural competition is an interesting and rewarding object for research. The competition processes bear rich empirical findings to which one may refer for knowledge about architecture as professional practice, as educational subject and research platform. The architectural competition illustrates processes of change in society that are technical and organizational as well as social; it shows up constructive dilemmas, the borderline of rationality and the relative, creative insecurity of knowledge production in architectural projects.

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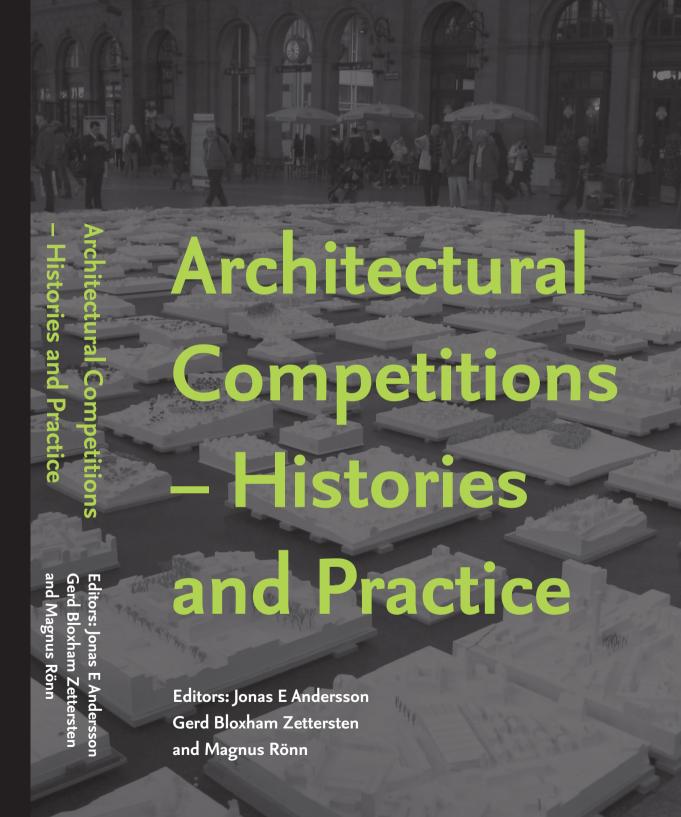
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RIO KULTUR KOOPERATIV



# **Architectural Competitions**

- Histories and Practice

# Architectural Competitions – Histories and Practice

Editors: Jonas E Andersson Gerd Bloxham Zettersten and Magnus Rönn

The Royal Institute of Technology and Rio Kulturkooperativ

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### **Editors' Comments**

JONAS E ANDERSSON GERD BLOXHAM ZETTERSTEN AND MAGNUS RÖNN

To be in the position of presenting accounts that are exciting as well as instructive and informative on the subject of architectural competitions is a pleasure. Something has happened. Competitions are no longer simply professional praxis for architects and a recurrent exercise for students at schools of architecture. The competition has also turned into a field of research, and this book is part of an effort constituting the architectural competition as a field for studies with scholarly claims. The competition as a field of research reflects a new phase of development with an inception in an academic interest and in a need for research. It is surprising that research into architectural competitions has been so limited until now, in particular when considering the fact that the modern architectural competition is an institution in function in Europe for more than 150 years, having played a central role, both for practicing architects and in architectural education. The introduction of competition rules during the late 19th century and at the beginning of the 20th coincides with architects getting professionally organized in associations and unions.

The first doctoral dissertations on architectural competitions were apparently presented in the 1990s at institutions for architecture in Sweden and Norway. Now there are around fifteen academic dissertations and a number of ongoing doctoral projects in Canada and Europe. Another clear manifestation of research interest is the growth and spread of scholarly conferences on architectural competitions. Until now four conferences have been carried out with a start in Stockholm in 2008, followed by Copenhagen in 2010, and Montreal and Helsinki in 2012. A fifth scholarly conference focusing on architectural competitions will be taking place in Delft in 2014.

The driving force behind research interest may be found in the deregulation and market orientation of the building constructions sector during the 1980s and the reregulation in the 1990s through the European Parliament and Council directive (2004/18/EC), regulations that have been transferred into the national legislation of the member countries. The architectural competition is seen as a way of benefitting competitive engagement. Through revisions of the legislation after 1994, the competition has acquired a double role, becoming both (a) a method for producing good solutions to design problems in architecture and urban design, and (b) a formal instrument for the procurement of services for public architecture commissions. The news here is not that prizes in competitions lead to commissions, but the fact of the directive which is a joint one for the member countries in Europe. According to Swedish application of the EU directive the demand for a competition is met if at least three firms or teams participate. The inner market may also be limited by national language requirements in public tendering.

A controversial regulation in directive 2004/18/EC is the demand for anonymity in article 74, stating that the jury must not know the identity of the authors of the competition entries. The good intentions behind this demand are evident. It is the professional qualities of the competition proposals that engender the decision—nothing else. The commission must go to the authors of the best overall solution to the design problem. A competent jury, detached in relation to the competing architects, must find the winner on the basis of the merits of the proposals. The jury members must not allow themselves to be affected by the reputation, education, experience or financial status of the competitors. But the demand for anonymity has a down side. The organizers begin to look around for alternative ways of public procuring. The rise of dialogue competitions in Denmark is a way of bypassing anonymity. Another outcome is the development of forms of procedure, similar to competitions but outside of competition rules and the control of the architects' organizations.

Supported by legislation, organizers can now make far-reaching demands on the architectural practices in their invitations to prequalification in competitions with a limited number of participants, but the will to compete within architecture and urban design cannot be forced. That urge is not to be found in regulations or administrative directives, but in the engagement of architects and social planners. The spirit of competing has a background in the Jesuit schools, known for their efficient and competitive education. Sancta Æmulatio, the holy urge to compete, was encouraged by giving each pupil an æmulus with whom he should compare himself and who had as his task to stimulate learning (Liedman, 2007).

Through continual comparisons the students were to be spurred on to improve their performance, which was training in being both colleagues and rivals.

We know more about the role of the competition in the French education of architects in the 18th century, a form of learning that was refined in the academies and copied around Europe and the US. The essential element of teaching at the Académie d'architecture and the École des Beaux Arts was the annual Grand Prix competition (Bergdoll, 1989; Svedberg, 1994; Wærn, 1996). The students were to make an independent first sketch which was then developed in studios under the supervision of a master into detailed drawing on wall charts. The pedagogical point is clear. Through the sketch the individual abilities of the students were tested to quickly analyse the competition problem at hand, devising a fundamental idea as a basis for design. The design proposal was to show if the task had been solved in a qualified way, and this was crucial for the move up into the next form. The charette method, initiated at the Paris academies of the 19th century, is a modern variant of the work method at the École des Beaux Art, denoting the practice of solving complex design problems in intensive sittings. The competitions gave the academies a status as an international meeting place in the 18th century. Socialization into competition culture was started, as we have seen, already during the architects' education when the competition became a central exercise in the learning process.

Traces of the French tradition of competitions survive in present-day architectural education in the recurrent student exhibitions of exam projects. The need to compare the design projects, evaluating their quality, has also laid the basis for architectural critique as a method for the evaluation and grading of proposals. In the French tradition jury members were invited to examine and comment on the students' solutions of a yearly completion task.

Participating in architectural competitions is associated both with a playful learning process, delight, collaboration and with competition in dead earnest. The tension of the chase for the fundamental idea that will resolve the design project has been testified to among practicing architects. The time for the handing in of the proposals is approaching irrevocably. When the competition proposals have been sent in and exhibited, the members of the jury walk around in the room to acquaint themselves with the design solutions. A sense of curiosity and delight fills the exhibition room. A new world is being opened before the eyes of the jury. The future is at stake.

Part of competition culture is making the proposals public through exhibitions, where they become the object of critical review in a form of worthy emulation of each other. Competition programs, competition proposals and jury statements are possible to download from home pages. The public presentation of architectural projects in competitions via home pages, journals and exhibitions lend communal character to knowledge production. Education and professional praxis combine in the creation of a professional identity where competitions play a key role with their own rules, secretaries and competition boards to supervise the conditions of competitions. It is this professional control that is being challenged by new competition forms and administrative directives in public procurement acts.

The architectural competition is a future oriented production of knowledge through architectural projects. From that perspective the competition takes on an appearance of futuristic archeology. The future is being investigated with the support of design—not how it is, but how it could be if the proposals were to be implemented. What is important here is that the proposals contain different modes of solution for the same competition design problem. There is no given answer, no "correct solution", but instead the potential of alternative good solutions to the competition task at hand. For this reason doubt and lack of certainty is a constant companion in the jury's examination of the design proposals.

That architectural competitions generate knowledge is hardly a controversial statement. Nor is the assumption that the learning process implies the handling of drawings and illustrations as though they constitute built environment. It is when we take up the question of the nature of knowledge, how knowledge may be given form and communicated that the question becomes controversial. It is characteristic of architectural projects that knowledge is embedded in the image and is communicated via drawings, illustrations and diagrams. The aim is for the images to be self-explanatory. Sometimes brief explanations in text are needed. However, the descriptive text has no value in itself, but is intended only to clarify the knowledge that is already deposited in the images and being conveyed through visual impressions. It is an already formed environment which is being revealed to the observer as design. The pictures transmit experience. The text on the other hand is intellectual in character, appealing to reason. Consequently, text and image represent two very different understandings of knowledge which are both to be found in architectural competitions, and which are

made manifest in the mode of communication and visualization of knowledge to the observer.

Architectural competitions are based on three fundamental presuppositions: (a) that drawings and visualizations may transmit credible knowledge and (b) that quality in architecture is something that may be seen and transmitted via images. And in a principal view, (c) that architectural projects is a practicable method for investigating the future and testing ideas. Through visualizations the observer gets a fast and clarifying, efficient and easy to grasp overall picture of the architectural projects. Learning lies in the meeting with the image. The idea of efficient evaluation, too, is included in the competitions tradition. A group of competent practitioners is assumed to be able to read the imagery of architecture, understand the architectural projects and point to qualities, omissions and non-clarities in the proposals. That is how the basis for jury procedure looks.

Faith in the architectural competition as a professional tool for the production of knowledge assumes that organizers may trust the judgments made by competent members of a jury, in spite of the fact that the proposals represent only a certain number of possible visions of the future. It is not examples of "real" environment but visualized proposals that are being tested. However, computer graphics make it possible for the illustrations of an architectural project to have photographic precision, looking like pictures of real built environment. We are easily fooled by the degree of detail. Therefore good judgment is central in the evaluation of proposals in competitions and their simplified interpretations of the future. Good judgment is the product of experience, examples, praxis and training. We cannot read up on good judgment; instead a rich repertoire of cases is required that may be reused as experience, principles and patterns for the development of solutions in new situations.

Thus there is a movement in competition processes that makes the transmission of knowledge shift between text and image. The centre of gravity varies. The introductory invitation to architectural practices is a brief text description of the competition's design task and its conditions. The competition programs, too, convey information as text on the task at hand with a supplementary material of maps and pictures of the site. The competition proposals on the other hand employ the image as their principal source of knowledge. So there is a clear displacement of the centre of gravity. The proposals for solutions to the design problems are visualized in drawings, illustrations and models. At this

stage the image is the central element in the transmission of knowledge. Without images, no design. After that the text takes over. The jury statement is a written report accounting for the outcome of the evaluation. Visualizations of awarded proposals are included, but only for the purpose of illustrating the conclusions of the jury. The text is the medium for transmission of information. It is by reading the jury statement that we learn which of the architectural projects in the competition that has been awarded  $\mathbf{r}^{\text{st}}$  prize.

As matters stand, in text-based communication images are used to illustrate the knowledge that is deposited in written language. The text is king, power lies in the word. Architectural projects represent a diametrically opposed conception of knowledge. Now it is the image that transmits knowledge about the future. Knowledge is being visualized. The eye is given the deciding function. Seeing the quality in an architectural project has priority to the descriptive text. In order to be successful in architectural competitions the competing architects must catch the attention of the jury, and that is not done through written language, but by design. In the meeting with the proposals the jury sees the architectural projects as a built environment with qualities, non-clarities and omissions. In a mental process, the jury members enter the imagery, trying to experience the drawings as real-life environment.

A common denominator for most article contributions in this book is that they describe an epistemological axis activated through the competition process. The epistemological axis in competitions encompasses both text and imagery as empirical findings. This combined knowledge, which the texts and the images supply, makes it possible to define a typology, in which the architectural projects of the competitions describe principal solutions to specific design problems. Through this analysis, we may point to patterns, lines of development and breaks in trends.

Therefore we open the book by bringing out competitions as viewed from a national horizon. The first contribution by Maarit Kaipiainen is a survey of architectural competitions in Finland. Since the 1870s about 2000 competitions have been organized in Finland. Kaipiainen's contribution is based on a catalogue that was compiled for the exhibition on architectural competitions shown at the Museum of Finnish Architecture in Helsinki in 2008. Here we have an overall description of the competitions system. An interesting difference from other European countries is the fact that the competition rules contain a specific paragraph laying down the handing over of the competition material to the

museum of architecture. The wording goes: "In a design competition, the conditions and the judges' report, including attachments, but with the exception of classified portions, shall be filed in a reliable way. In the case of architectural competitions the competition material shall be filed by the Museum of Finnish Architecture" (SAFA Competition Rules, 2008). Since the rules are the same ones for architects and their clients, this paragraph may be interpreted as a sign that the competition results are viewed as a collective source of knowledge that needs to be documented and made available to research.

The second article is an investigation of the contemporary competitions culture in Switzerland. Antigoni Katsakou gives us a tale of success. Every year c. 200 competitions are carried through in Switzerland. From the point of view of architecture this country is inspiring and instructive. Through Antigoni Katsakou's contribution we get an insight into a specific competitions system making it possible for young architects to win competitions, start up architectural practices and begin to build their professional careers. Switzerland has a long tradition of competitions and an advanced competitions system that evidently encourages professional renewal. But here, too, external forces challenge the tradition. One threat is the changeover from open competitions to invited ones, making it hard for young architects to succeed in the competitive battle against established architectural offices with good references and a sound reputation. The competition as a tool for tendering makes for an administrative and legal displacement of the centre of gravity. Katsakou also points to the new modes of representation, computer-based images, as an internal challenge. The contestants produce visualizations that are increasingly true to life in their architectural projects of future examples of environment, which makes clients believe that the conceptual proposals are ready to be built. The competition projects are rendered as elaborated ones before the jury has chosen the winner and the organizer has given the 1st prize winner the design commission. The new ways of visualizing architectural projects have a photographic precision that affects both the image and the understanding of its contents.

The third contribution to the book gives an account of the way in which the architectural competition in Sweden has been used as a sociopolitical instrument in the development of appropriate dwellings for an aging population, a challenge that Sweden shares with many welfare states. Jonas E Andersson describes a national drive in Sweden in 2011-2012 that focused on housing for the elderly and that used the architecture competition as a professional laboratory

in order to generate innovative solutions and creative proposals for the task. Supported by a governmental program, three invited competitions were carried out in the municipalities of Burlöv, Gävle and Linköping. Andersson gives a survey of the competition processes and an analysis of the winning architectural projects. The architectural competitions illustrate two ways of meeting the needs of the aging society. One way presupposes the inclusion of apartments for the elderly in common residential building. This housing type is intended for continued living in a familiar environment, i.e. aging in place. The other way is to design special housing for frail elderly people who are in need of care and caring around the clock, i.e. the assisted living concept. However, the second type of housing is not freely available on the market; but instead, access depends upon an assessment made by the municipal administration for eldercare of the older person's need of assistance and care, motivated by a diagnosis or a medical condition. This type of housing combines the deeper meaning of home with the demands on an appropriate work environment for the care staff. Whichever the orientation, the conclusion of the three competitions is that appropriate housing for the aging society should be provided with universal architectural qualities and general accessibility and usability, in line with the concept "Design for all" or "Universal Design". The fundamentally different types of architectonic solution may at best be combined, integrated in common residential areas.

The fourth and fifth contributions deal with prequalification, which is a selective procedure in competitions with a limited number of participants. The prequalified competition is now a dominant form. Its spread may be viewed as a result of the organizers' wish for control, administrative rules and the demand for a cheaper, faster and more efficient process, from invitation to program work and the contract offered to the rst prize winner. The rationale of such demands may, on good grounds, be questioned in the light of the long life of buildings.

Magnus Rönn opens the discussion on the basis of experience of a selection of architectural practices for three competitions for dwellings for the elderly that were carried through in 2011-2012. A total of 120 design teams sent in their applications in expectation. Eleven teams were invited. Obviously the battle for places in the competition was very hard. Only 9% could proceed. That is a standard figure, for Sweden. Through their invitation to prequalification the organizers had access to a large number of applications from competent architectural offices with good references and a good reputation within the sector.

That is one reason for the seclusion of young architects and newly established practices. Magnus Rönn makes a critical investigation of the prequalification process through interviews and an analysis of documents in the archives. In order to be invited the candidates had to satisfy a number of "must have" demands referring to prescriptions in the Swedish Public Procurement Act, LOU. It is a prerequisite for being allowed to proceed in the evaluation. The professional merits of the candidates are then tested on the basis of criteria for design ability, creativity, competence and resources. It is in this evaluation that the organizer appoints the design teams selected to participate in developing solutions to the competition design task.

Judith Strong carries on the discussion by investigating selection procedures in England and their influence on the competitions tradition. She describes attempts to develop alternative procedures as a way of softening the negative effects of the prequalified competition, as well as the difficulty experienced by smaller architectural practices in getting invited, the bureaucratization through legislation and the demand for anonymity which makes the organizer hesitant regarding competitions as a form. According to Strong the open competition has vanished, in principle, in England. But this is not just an effect of the demands for anonymity. A strongly contributing factor is privatization. No longer is there a public sector organizing open architectural competitions for new housing, hospitals, schools and buildings for municipal activities. The new methods of selection began to be developed in England in the 1990s. In her article Strong examines the different ways of selecting architects for commissions. Here there are dialogue-based methods that start out from simple interviews and presentations at meetings, to go on to scrutiny that may be likened to examination, short-listing of candidates based on references and analyses of competition programs for complex design tasks. Increasingly often the competition problems call for multidisciplinary design teams.

From the competition as an instrument for selection and procurement we turn our eyes to a Portuguese architect who has gained international reputation. Pedro Guilherme and João Rocha present in their contribution Souto de Moura and a selection of his competition projects. Souto de Moura is an architect with star status operating on the international stage. During the period 1979-2010 Souto de Moura participated in fifty national and international architectural competitions. In fourteen of these competitions he was awarded rst prize, and in particular in the national competitions organized in Portugal. Guilherme

and Rocha describe and analyse some fundamental traits in Souto de Moura's design ideas in four competition projects used as case studies. We may watch how design evolves in the architectural projects via sketches, models and images used for reference. In the centre of the case studies there is an attempt at identifying an architectural grammar in Souto de Moura's work. The cases are analysed in terms of authenticity and reuse, readability, simplicity and clarity, as well as materiality and time. The competition proposals are used in the article as sources for understanding of his idiom.

What could be a better competition design task than a school of architecture? Leentje Volker gives us an account of the competition for a new architecture school at Delft University. The background is dramatic as the school was hit by devastating fire in 2008. The directorate at once started planning for a competition for a new architecture school. It is this design task and its web page for communication that Leentje Volker deals with in her contribution. The intention was to give young architects a chance to show their potential, inspiring them to great exploits. The medium was the open ideas competition, using English as the competition's language. The competition resulted in 471 proposals, most of which came from Europe and the US. The awarded projects were carried out by architects native of the Netherlands, France, Belgium and Finland. Several of the awarded architects had been exchange students at Delft, apparently giving them an advance understanding of the competition task. The organizer communicated with the contestants via a website, requesting digital submission of the proposals. This facilitated the administration of the competition process, probably also contributing to the large number of submitted projects. Volker notes, too, that digital submission simplified the jury's assessment of the proposals. Through the digital submission request the competition resulted in a data base that may easily be made accessible to future research.

The architecture school at the Royal Institute of Technology in Stockholm, too, has been damaged by fire and will be given new premises. The new school is planned to become one entrance to the campus. But instead of a competition, the directorate chose in 2007 to organize a parallel assignment procedure together with the client and the Swedish Association of Architects, inviting four architectural practices, three from Sweden and one from Japan. In comparison with the process at Delft, the directorate of the Royal Institute of Technology gives an appearance of caution with its investment in safe cards and security instead of supporting a curiosity-induced search for a new school building.

Kristian Kreiner discusses the design phase from the horizon of the architectural practice. The demand for anonymity in competitions results in a one-way communication process which he names "shadow dancing". With the program as their point of departure the contestants must dance with an absent client in their development of proposals as solutions to the design task. It is a logical consequence of the demand for anonymity which means a prohibition against dialogue in the design phase. The designing teams get no direct communication with the organizer and the jury. So with the competition program as their base the participant architects are forced to invent a picture of both the competition design task and the organizer. In such a construction the program may be read in several ways. It is both a description of the competition design task, a presentation of the conditions that apply to the competition, a source of inspiration and a challenge to the design team. Embedded in the task is a strategic interpretation, in understanding the clients' intentions and what are central directives for planning that may not be exceeded, compared to negotiable demands. In the Nordic tradition, it is the jury determining what may be seen as a minor deviation constituting a permissible change of the competition rules. Kreiner points out that it is the response by the design teams to the competition design task that gives the jury good reason for developing in retrospect the competition program's criteria for assessment of the architectural projects. In effect the competition proposals throw an illuminating light on the competition design task. Here is a creative moment in competition processes seen to emerge only when the jury gets acquainted with the proposals; consequently it can not be predicted, neither by the organizer, nor by the jury or the individual competing teams. To the organizer, creativity is revealed in the form of surprising solutions to a design problem.

Charlotte Svensson takes us into the jury room in her contribution. The jury's charge is to identify, among the submitted projects, the one proposal offering the best solution to the competition design task, also when the world outside the jury room asserts itself. According to Svensson, the jury's evaluation of the architectural projects may be seen as a meeting between rationality and architectural critique. This is a consequence of the jury's composition, of members representing differing interests, knowledge and professional background. Appointing a winner through a rational decision process, or alternatively, through an architectural critique method, represents two different ways of finding a winner. The jury embodies both methods. Politicians and officials are used

to a basis for decision-making that holds in it a quantification of qualities. Allotting a score to an offer through measurable criteria, as a basis for a decision on procurement of services, is seen as being rational. Quantification conveys a picture of objectivity. Whereas the architects on the jury instead seek the best overall solution through a series of evaluations based on architectural critique. The qualities of the competition proposals are tested when an architect jury member enters the visualized solutions, interpreting them from out of professional apprehension and experience. In this case, what determines the choice of a winner is a co-balancing of aspects forming a general picture. Svensson claims that the work of the jury in competitions is a creative process that ends with the jury normally agreeing on a winner, in spite of the fact that the jury members make use of different strategies to identify quality in competitions, and that they represent different interests, parties and professions. Evidently the wish for consensus has strong status within this tradition of competitions.

Elisabeth Tostrup discusses the competition in 1939 for the Government Quarter building in Oslo, and the rebuilding of it after the terrorist bombing in 2011. Preservation of the government buildings must be combined with a deeper understanding of the 1939 competition. Tostrup's contribution to the book is a reconstruction of the architectural ideals in that competition. The jury consisted of five members, three of whom were architects. Two of the architects were appointed by the National Association of Norwegian Architects that had also approved the competition program. The competition was open to Norwegian architects and generated 49 proposals. The competition projects show that the architectural profession in Norway was dominated by a modernist stance that had won a hegemonic position within a short space of time. Four proposals were awarded, but the jury could not agree on a winner, and therefore it proposed a new competition. The renewed competition was never realized due to World War II. Instead a committee was appointed in 1946 charged with the selection of a winner from among the awarded architectural projects in the 1939 competition. Erling Viksjö was awarded 1st prize and was asked to develop his competition proposal. At the same time ideals were beginning to change. It was no longer a matter of self-evidence to create space for new buildings in a modernist idiom by tearing down buildings in the city. A growing interest in preservation and adaptation called for a reworking of the competition proposal. It was only in 1958 that the construction of the Government Quarter could start. According to Tostrup irresolution regarding the winning proposal and

the change in architectural ideals have affected the design decisively, something which is now a returning discussion about the function or mission of architecture after the 2011 terrorist bombing of the Government Quarter in Oslo.

The last two contributions to the book, too, represent a historic context. Thomas Hoffmann-Kuhnt starts by discussing the use of historicisms in German architectural competitions on the basis of four case studies. The background for the competitions is the destruction of cities during World War II and the wishes to rebuild historically important monuments. Common to the four cases is that the competitions have been presented in the German journal of competitions, wettbewerbe aktuell (wa). The first case concerns the reconstruction of the Berlin City Palace. After the reunification in 1989, the Parliament decided in 2008 to announce a competition that prescribed a recreation of the Baroque facade of the building. This was an open competition that generated 129 proposals. The second case is the reconstruction in 2010 of Herrenhausen Palace in Hanover. The aim of the architectural competition was to recreate a museum in this place. Fifteen architectural practices were invited after prequalification. The third case is the competition for new premises for an archive and for art exhibitions in Beeskow Castle in the city of Beeskow which is a centre for music and culture. This competition, too, was organized in 2010 as a prequalified competition with fifteen invited participants. The fourth case is the transformation of the Moritzburg Halle in Magdeburg into a new art museum. In 2004 an architectural competition in two steps was organized to design a museum in the historic building. The first step resulted in 300 proposals, of which seven were taken further as invitations in the second step. Hoffmann-Kuhnt formulates two principal conclusions after having compared the cases. First, he claims that the awarded competition proposals illustrate fundamental strategies in the design of contemporary additions in a historical context. Secondly, Hoffmann-Kuhnt is of the opinion that the brief is a key document, specifications is a limiting factor and a more general description of the task seems to increase the variety in the teams' design proposals. According to this hypothesis the program has a steering function in competition processes.

The book's final contribution is Mats T Beckman's study of the architectural competition in 1934 for the first land airport in Stockholm, at Bromma. In the year 2000 the airport was given the status of a national, protected historical monument through a government decision. Ten years later the same status was given to some of the airport structures by the Stockholm county administration. It may

be said that this demand for protection is a sign of the long-term significance of the competition. Beckman describes the background planning. The future of air travel lay open, and Stockholm needed an airport. Four young architects, known internationally from work on the Stockholm exhibition in 1930, were invited. In the biographies of the architects the commission is described as a competition. But there is no evidence of an invited competition in the archives. Nor does the program show any references to competition rules. That, too, is surprising. Therefore there is good reason to suspect that the competition was not organized on the basis of current competition rules, nor that it had been approved by the architects' local association of Stockholm. The Swedish national association of architects was formed only in 1936, but the competition rules have been operating since the beginning of the 20th century. Designing an airport for international traffic was a future oriented task which had the prerequisites of putting Stockholm on the map. The task must have seemed to be very attractive. The competition program is a brief document of four pages lacking aesthetical ambitions. Beckman analyses the four competition proposals in a model that has two axes, where one axis moves from well-tried solutions to new ideas. The other axis runs from rational simplicity to complex structures. According to this model, the winning architectural project is one that the jury perceives as being practical and possible to develop, using well-tried solutions. Therefore it appears as if the jury, before an uncertain future, chooses security before the spectacular, the untested and the innovative. The modernist architecture in the winning proposal represents a kind of aesthetic rationalism of the day.

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In conclusion: The contributions to the book show in a convincing way that the architectural competition is an interesting and rewarding object for research. The competition constitutes a source of knowledge of both width and great depth. The competition processes bear rich empirical findings to which one may refer for knowledge about architecture as professional practice, as educational subject and research platform. In the competition we may therefore investigate in fruitful ways how organizers, juries and competition teams produce, communicate, visualize and evaluate images of future built environment. It is the task of research to problematize this field of knowledge. The architectural competition illustrates processes of change in society that

are technical and organizational as well as social; it shows up constructive dilemmas, the borderline of rationality and the relative, creative insecurity of knowledge production in architectural projects. The collated articles point to the capacity in competition culture of thinking, despite a given framework, in innovative ways, passing by habitual notions; the holy delight in competing is still a resource to be exploited. The power of architecture to form and make space for individual life targets and communal societal visions is of pressing importance for many, and stands out as a necessity for society.

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#### **Abstract**

International competitions reflect the architect's personal design beyond controlled systems of social relations, comfort zones, age, gender or even expertise, in a fast and risky sublimation process. At the same time they generate publicity and a public recognition which may surpasses the investments in time, energy and financial resources.

Based on the work of the 2011 Pritzker laureate – Portuguese architect Eduardo Souto de Moura – we put forward the hypothesis that international competitions act as an intersection between research and practice evolving through the nature of individual architecture.

Souto de Moura follows Alvaro Siza Vieira and the Oporto's School design practice. From 1979 to 2010 Souto de Moura submitted 50 competition entries, more than half international, of which 26 competitions were realized between 2007 and 2010.

International competitions, besides acting as a refraction of a working method for a specific proposal provide an important resource for personal reflective practice and are seldom considered, compiled or jointly analysed.

This paper will collect, document and outline the epistemology of the professional practice associated to the phenomenon of internationalization of this Portuguese architect. We will illustrate two competitions – "Salzburg Hotel" (1987-89) and "The Bank" (1993) – and one built project in Oporto – "Burgo Tower" (1991-95 Phase 1; 2003-04 Phase 2; 2007 Construction) – that share a progression of methodological imagery, clarity and innovation from primordial immateriality towards the built form.

Souto de Moura's work relentlessly and repeatedly searches for the solution that serves the program and the task at hand taking risks and challenges as stimulation for creativity, conveying reflection in theory and culture and, at the same time, remaining obsessive towards specific themes. Souto de Moura is permanently a scientist in a lab: satisfying client's needs (or as acting as one), creating beauty, elegance and solving riddles, thus addressing competitions with qualified rhetoric.

We conclude proposing that competitions provide a theoretical corpus of knowledge, besides what is specific and unique to each one individually, which infer the existence of an overlapping and intertwined, complex system of projects. Consequently, competitions constitute an optimised interface for the continuity of research for the architectural author where design statements put forward in proposals transcend the boundaries of the competition.

Key words: Architectural Research, Competitions, Eduardo Souto de Moura, Portugal

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# Architectural competitions as a lab

- A study on Souto de Moura's competition entries

PEDRO GUILHERME, CO-AUTHOR JOÃO ROCHA

#### INTRODUCTION

The initial assumption that supports this investigation is that competitions provide the time and the place to develop a research on individual practice. This research is often used and perfected in the works that follow. Thus, we put forward the hypothesis that competitions may act as an intersection between research and practice evolving through the nature of individual architecture.

This research follows a mixed approach. The findings in the article are based on a literature review of relevant architecture studies and analyses about architectural competitions.

The investigation starts by pointing out the specific and highly complex nature of the internationalization of Portuguese architecture and its architects. We will frame and focus on the 2011 Pritzker laureate: architect Eduardo Souto de Moura. We will present the case studies including two competitions - "Salzburg Hotel" (1987-89) and "The Bank" (1993) – and one built project in Oporto – "Burgo Tower" (1991-95 Phase 1; 2003-04 Phase 2; 2007 Construction) – that share a progression of methodological imagery, clarity and innovation from primordial concept immateriality towards the built form. The competition entries, quotes from jury reports and interviews illustrate the research questions and how the competition can be understood as a research tool. We propose to identify some results that can be observed from the presented case studies and elaborate on Souto de Moura's architectural grammar of knowledge.

Although architectural competitions in Portugal and entries of Portuguese architects abroad have never been subject to any systematic research, this study gathers evidence of an epistemology of the professional practice associated with the phenomenon of internationalization of this particular Portuguese architect. Following these results we base our discussion on the evidence of a link between

investigation and practice by the use of competitions. We briefly identify some types of mechanism that may lead to knowledge during the architectural design (Alexander, 1965, 1971; Darke, 1978; Attoe, 1978; Lawson, 2001, 2004, 2005; Hill, 1998, 2003, 2006; Till, 2005a; b, 2009, 2011) and introduce the "reflection-in-action" (Schön, 2003, first edition 1983) as expressive "knowing" and part of the "lab" process. The literature review is used to put the case studies in a research context (Lipstadt, 1989a, 2006; Nasar, 2006; Strong, 1996; Tostrup, 1999, 2010).

Finally, the paper summarises the outcome of our investigation and formulates possible conclusions and some doubts to be answered.

# THEORETHICAL FRAME OF REFERENCE The Internationalization of Portuguese Architecture

From 1960 onward portuguese foreign policy gradually renouced the overseas territories (Angola, Mozambique, São Tomé and Príncipe, Portuguese Guinea and Portuguese Timor) and changes focus towards the European market, gaining exterior visibility and interest. Nuno Portas' (1934-) participates in the architectural "Small Congresses" in Spain organized by Oriol Bohigas (1925-) in Tarragona in 1967 and in the following year he brings Álvaro Siza Vieira (1933-) to Victoria's Small Congress. This becomes the initial moment for the international recognition of Portuguese architecture.

Together, Siza Vieira (deeply influenced by Alvar Aalto architecture<sup>2</sup>) and his work, the intellectual and political activity of Nuno Portas and the interest

I Nuno Portas, architect, researcher, teacher, politician and critic, was since 1957 editor at the Portuguese magazine "Arquitectura". In 1974, he assumed the position as Secretary of State for Housing and Town Planning, a post he held through the first three Interim Governments. He promoted the creation of housing cooperatives and of local support offices (GAT), created the SAAL and started the processes leading to the adoption of the Municipal Master Plans.

<sup>2</sup> In 1949 Siza begins his training at the School of Fine Arts (later FAUP). In 1950 Carlos Ramos arrives to the school with an envisioned "reform in teaching architecture (...) and a major change in the level of information (...) a certain openness (...)" (Conversation between Álvaro Siza and Eduardo Souto de Moura, 2011, p.53). A young teacher Fernando Távora opens up to travelling and to magazines: "First it was Corbu[sier]. But times were changing and things started coming from abroad. New publications gave notice of what was going on, where, how and by whom. (...) Távora appeared, with a sparkle in his eyes and a book in his hand: "Brasil builds. (...) Other magazines suddenly disappeared (monographs of Gropius, Neutra, Mandelson, Mies) they were mysteriously substituted. (...) later our eyes opened to marvellous architectures, arriving from all four corners of the world. Merged one after another in turmoil, mixing, resting in the subconscient, waiting" (Siza and Morais, 2009, p.371). This opening was only possible then and as English magazines became available, then Italian and later

generated by SAAL (Serviço de Apoio Ambulatório Local / Local Ambulatory Support Service) architectural operations (1974-1976) become the subject of the permanent attention of Oriol Bohigas, Bernard Huet (1932-), Vittorio Gregotti (1927-) and Kenneth Frampton (1930-) in Spain, France and Italy throughout the 70s and the 80s.

After the 25th of April Revolution of 1974 Siza Vieira embraces a solid and continued, national and international, activity. Between 1979 and 1990<sup>3</sup> competitions were of the utmost importance for his international recognition. Souto de Moura (1952-) is deeply influenced by his assumed master's practice and embarks in his own personal venture much earlier in his career. Souto de Moura uses competitions as potential research opportunities relevant for subsequent projects.

#### Competitions by Portuguese architects

It is possible to find individual winning projects or referenced entries in monographs of Álvaro Siza Vieira, or Souto de Moura. We may also find some competition entries in some Portuguese or foreign serial publications. However, no coherent study on competitions has been made up to now.

In 2006 the Ordem dos Arquitectos (Portuguese Chamber of Architects) conducted a survey (Cabral and Borges, 2006) to better understand architects, how they began their professional lives, how they exercise their profession, as well as their main values and attitudes within their profession.

The survey reaches three main conclusions (Cabral and Borges, 2007): (1) the main characteristic of the ethos of architecture lies in a recurrent tension between vocation and profession due to its artistic dimension which, in turn, distinguishes it from other liberal professions; (2) secondly, the "jurisdiction" imposed by Portuguese architects over the practice of architecture is weak; and (3) finally, the "liberal professional" continues to be the type ideal for architects to work in Portugal.

Japanese. Short trips abroad became also possible and Siza goes to different cities in Spain and to Paris. Carlos Ramos recommends Siza to find Nordic architects and he bought some Architecture d'Aujourd'hui (among them the monographic issue about Alvar Aalto – n.191, June 1977). It was the beginning of a great passion for Alvar Aalto).

3 We can see a first period between 1979 and 1980 with the Bonjour Tristesse, Schlesisches Tor, Berlin, Germany (1980); a second period between 1980 and 1983 with the Kulturforum, Berlin, Germany (1983); and a third period between 1985 to 1990 with Campo di Marti, Giudecca, Venece, Italy (1985), La Defensa, Madrid, Spain (1988-1989) and the Bibliotheque de France, Paris, France (1989).

In accordance to this study male architects take part 14% more than female architects in competitions and obtain double the number of prizes (23% against 12%). Only one third of Portuguese architects compete in open national architectural competitions, and only 7% in more than one competition. A smaller number of architects (15%), usually older and male architects, enroll in rectricted national architectural competitions. Almost half of all architects questioned state that office size is fundamental to winning architectural competitions.

It is relevant that only a very limited number of architects (7%), identified and described by Cabral and Borges as "the profession's elite", participate in foreign architectural competitions.

This so called "professional elite" definitely includes both Pritzker Prizes (Álvaro Siza in 1992 and Souto de Moura in 2011) and their work in competitions is relevant for international recognition of their professional quality and of Portuguese architecture.

During the last decade several exhibitions confirm that most incursions by Portuguese architects in foreign territory (Coelho, 2009; Carvalho, Tostões and Wang, 2009; Gadanho and Pereira, 2003; Metaflux, 2004) are in competitions and seem to share identical objectives of research and recognition.

Architectural competitions (winnings) and the recognition of an authorship are described by Cabral and Borges as being linked to the personal success in the profession in relation to peers and in society in general. Gender (weight 0.11) and age (weight 0.25) contribute to a career of success which provides both personal satisfaction (weight 0.22) or status and financial satisfaction (weight 0.34).

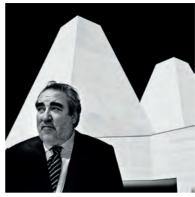
Based upon this data and examples from unquestioned architects, one may confirm if competitions for Portuguese architects, both in Portugal and abroad, provide a strategy to obtain professional recognition, and if competitions serve as a research lab to architects.

#### Souto de Moura - professional profile

Souto de Moura was born in Oporto on the 25th July 1952, studied sculpture and graduated in architecture in 1980 at the School of Fine Arts of the University of Oporto (later FAUP).

From 1974 to 1979 he worked with Alvaro Siza Vieira at his architectural practice and in 1980 he began his career as an independent architect, after winning a design competition for "Casa das Artes" (Vilar de Allen Viscount Mansion / "Arts House", in Oporto, Portugal, 1981-1991).

Souto de Moura's early commissions were modest residential houses, mainly in Portugal. Later, he was commissioned with shopping centres, schools, art galleries, and a cinema, in Spain, Italy, Germany, United Kingdom, and Switzerland. Between 1989 and 1997, Souto de Moura spent eight years on the rehabilitation of Santa Maria do Bouro, a half-destroyed 12th-century monastery in Amares, transforming it into a Hotel (Pousada). More recently he built the Braga Stadium Fig. 1. Souto de Moura pictured over Casa das (2000-04), the Casa das Histórias Paula Histórias Paula Rego, Cascais. Rego (2006-09) and the Burgo Tower (1991-95 Phase 1; 2003-04 Phase 2; 2007 Construction).



From 1981 to 1990, Souto de Moura was assistant professor at his alma mater, and was later appointed Professor at FAUP, the Faculty of Architecture at the University of Oporto. Along with Fernando Távora and Álvaro Siza, he is one of the well-known names of the Porto School of Architecture. He has been a visiting professor at the architectural schools of Geneva, Paris-Belleville, Harvard University, Dublin, ETH Zurich and Lausanne, and has participated in numerous seminars and given many lectures both in Portugal and abroad. His work has appeared in various publications and exhibitions.

Souto de Moura was awarded the Pritzker Architecture Prize in 2011 and in the jury nomination we can read "During the past three decades, Eduardo Souto de Moura has produced a body of work that is of our time but also carries







Fig. 2. Early drawings by Souto de Moura illustrating design ideas.

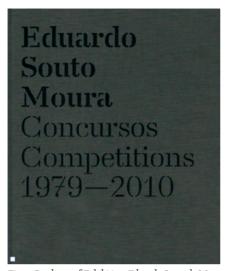


Fig. 3. Catalogue of Exhibition. Eduardo Souto de Moura – Competitions 1979-2010.



Fig. 4. Floating Images. Eduardo Souto de Moura's Wall Atlas.

echoes of architectural traditions." And further, "His buildings have a unique ability to convey seemingly conflicting characteristics — power and modesty, bravado and subtlety, bold public authority and a sense of intimacy — at the same time." (Media Kit: announcing the 2011 Pritzker Architecture Prize Laureate, 2011).

Álvaro Siza, the first Portuguese architect to consistently work abroad in the late 70s (Berlin after 1979, La Haya after 1983, Venice after 1985 and Salzburg after 1986), and Souto de Moura share a national, inherent, conditional ability to read the context of the site and to recreate it with added materiality.

Souto de Moura's international recognition reflects not only the growth of the architectural profession in Portugal after the 1974' Revolution and the intense interest in its architects during the 80s, but also an architectural quality based on a critique of undifferentiated values of global civilizations and the development of the values implicit to local cultures and to materials.

#### Competitions by Souto de Moura

In a recent exhibition (Barata, Campos and Oliveira, 2011) all relevant work on competitions by Souto de Moura from 1979 to 2010 were displayed in the Gallery

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Data (Barata, Campos and Oliveira, 2011)	#	%
Number of competitions between 1979 and 2010	50	100%
Number of national competitions	24	48% (24/50)
Number of international competitions	26	52% (26/50)
Number of international competitions – Europe	24	92% (24/26)
Number of international competitions – Non Europe	2	8% (2/26)
Prized competitions (first and second places)	16	32% (16/50
Winning (1st place) competitions in Portugal	11	46% (11/24)
Winning (1st place) competitions abroad (international)	3	12% (3/26)
	I	ı

Table 1 - Competition Statistics from Exhibition "Competitions 1979-2010".

at the FAUP and later published (Barata, Campos and Oliveira, 2011). This exhibition illustrates the international recognition of Souto de Moura and establishes an initial inventory of his competitions both in Portugal and abroad.

From 1979 to 2010 Souto de Moura participated in 50 competitions. He obtained relevant positions (1st and 2nd prizes) in 16 competitions. 26 competitions were completed between 2007 and 2010. Some relevant statistical information is presented in table 1.

The first conclusion we may draw is the growing importance of competitions to guarantee a commission<sup>4</sup> in the last 5 years.

From the exhibition data we may conclude that most competitions deal with significant urban buildings (cultural, health, sports and religious programs make up 31 out of 50 competitions) or directly related to urban developments (7 out of 50) and only a few (4 out of 50) deal with the housing theme, half of which are hotel programs.

Souto de Moura has a low rate of successful competitions (32% of all competitions obtain the first or second prizes), and he is, statistically, more successful in Portugal (he won 11 out of 24 competitions) than abroad (3 out of 26 competitions). As Souto de Moura says "50% of all [my] designs are never built. So many buildings are not built ... today alone I lost two tenders! Two!"(Rangel, Martins, Sá and Faria, 2009b, p.91)

Competitions are either won or lost, and even if Souto de Moura wins it does not mean that the project will be built. There are bureaucratic, economic and

<sup>4</sup> Yet, with the date collected, it is unclear the true economic relevance of competitions over direct acquisition of architectural services.

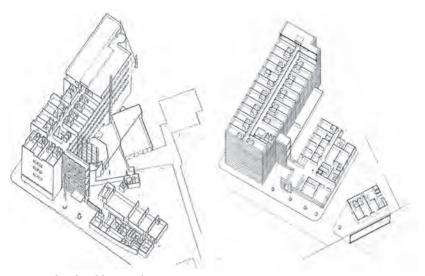


Fig. 5. Initial Study, Salzburg Hotel (1987).

Fig. 6. Final Study, Salzburg Hotel (1989).

other steps that have to be overcome with diplomacy and compromise. This effort is not always successful.

# THE CASE STUDIES Salzburg Hotel (1987/89)

This is an urban project where the location is the foundation of the idea. The periphery of the site and its urban relations give structure to his proposal.

The triangular site is situated between a residential area and the great mass of rock which cuts right through the city. The project tries to conciliate the various areas, programmes and legal impositions and presents a two volume building that separates the private areas from the public areas.

Souto de Moura's success in this competition is due to his response to the theme, in an urban context, and to his experience in the interplay of volumes and shapes.

Three years after (1989) Souto de Moura submits the final proposal to the Council. Some important changes to the initial design were made in the volume, construction scheme and materials: concrete, stone and iron.

Between the initial (competition, 1987) to the final proposal (1989) there is a change in the attitude of the architect. In the first scheme the "(...) wilful (deformed)





Fig. 7. View of the model, Salzburg Hotel.

Fig. 8. View of the model, Salzburg Hotel.

axiality and its urban adornment achieved through contrast of materials and gigantic flag poles, a mise en scene of prudent urban and compositional continuity with the Mitteleuropäisch city read by means of the tools of neo-academicism. The second project is an object that constitutes itself, in terms of a rigorous logic of construction and material, at the cost of making worse the urban articulation which it felt obliged to establish in the first version." (Anon, 1998, p.17)

In the final proposal the problems of form are settled in the shape of an isomorph and infinite building.

The design references for this project are piles of overlapping elements, such as wood, concrete or iron. It is unclear when Souto de Moura collected these references, but they emerge at an early design level as if they were pre-design immaterial objects that communicate the project to the architect and help him to keep focused on the idea.

There is some research and selection among the images, some unspoken narrative that keeps images and project linked together. Souto de Moura reflects and acts swiftly in the brief moment of the competition. He selects the images from his Wall Atlas (Bandeira and Tavares, 2011) and applies them as scientific experiments to the project. The images are so strong that they convey the hidden (personal) moment of conception to others. These images say it better and say it sooner.

These everyday objects that Souto de Moura uses as figurative transposition research "(...) the minimal structure which permits the greatest possible combination of interpretations, with the idea that if something gets changed in the combination of materials, in the phase of adaptation to the new function, evidently it was not essential to be exactly as planned. In this way the evocative force of the form overcomes that of the function for which the object was created, permitting the



Fig. 9. Design references for the Salzburg Hotel project.

degree of flexibility necessary for the sort of interpretation required by a society in continuous evolution." (Angelillo, 1996, p.21)

These images are not arbitrary, but premeditated in the sense that they are compulsory, collected on a daily basis by Souto de Moura, reflecting some kind of personal filter. These images become affective, expecting to be used, and will be used and reused in other projects.

To someone evaluating the competition these images say what Souto de Moura would have liked to say.

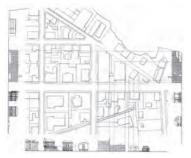


Fig. 10. Plan, Salzburg Hotel.



Fig. 11. Basement Plan, Salzburg Hotel.

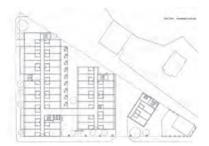


Fig. 12. First Story Plan, Salzburg Hotel.



Fig. 13. Second story Plan, Salzburg Hotel.

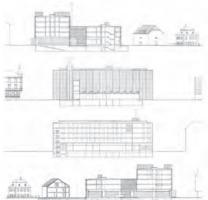


Fig. 14. Sections, Salzburg Hotel.

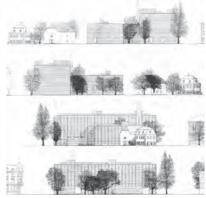


Fig. 15. Exterior views, Salzburg Hotel.

In this case these images serve yet another purpose of explaining the skin of the building, the facade design, which is unexplained by the design programme.

Souto de Moura states: "As often occurs in my projects, the question of the system of construction became a kind of obsession. Design is increasingly determined by budget, schedule, dimensions and building codes. The role of the language to be deployed is restricted to the surface, a field open to all sorts of dangerous artistic gestures. The result aimed to achieve a clear implantation of a harmonious volumetry within a container-type facade, capable of diluting the impositions of a five story structure onto a street lined by neo-classical villas displaying their volutes, cornices and entablatures with dignity." (Peretti and Bortolotti, 1999, p.113)

#### The Bank (1993)

This was a private, restricted competition by invitation held by Olivetti in 1993. The Bank is a fictitious project with a fictitious program, and without a fixed location, "(...) based on ideas, which are necessarily the fruit of reflection and research" (Capezzutto, 1994, p.30). Souto de Moura's (1952) studio in Oporto was invited, along with David Chipperfield (1953) based in London and Jacques Herzog (1950) & Pierre de Meuron's (1950) studio from Basel.

The reasons for the choice of these architects were:

- they belonged "(...) to the same generation born around 1950 (...)" and represented "(...) a relatively homogeneous group of architects ... who aim to become great masters" (Capezzutto, 1994, p.33);
- they were "European architects, with comparable social roots and cultural backgrounds" (Capezzutto, 1994, p.33);
- they "are among the best in the world" (Capezzutto, 1994, p.33);
- they "would form if not a movement or a trend, then at the very least a group of friends" (Capezzutto, 1994, p.33).

Souto de Moura is described as having trained at Oporto School of Architecture and having "worked for Fernando Távora and Álvaro Siza, from whom he developed his attention to the site, his construction knowledge, his sensitivity to the materials used and his ability to condense even the most complex architectural theme to essential terms. His research into architectural types has led him, through a painstaking pursuit for perfection, to propose a series of exciting,

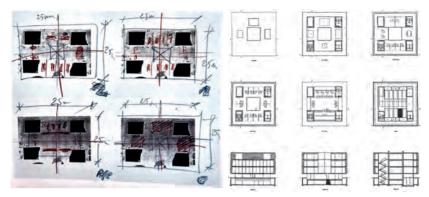


Fig. 16. Sketches, design principles, after Tàpies.

Fig. 17. Plan and section for the Bank.

innovative and at the same time logical modifications. Souto de Moura's great attention to detail is not affectation, but the consequence of a process of refinement and elimination of the superfluous" (Capezzutto, 1994, p.34).

Unlike usual competitions, there were meetings between the architects and the Olivetti jury. This is a feature seldom seen in competitions but brings to bear an exchange of ideas between the client and the architect.

The task was to design a medium sized bank branch building in a provincial European town, whose location was left to the individual choice of the architect in a 25x25 square meters floor area and three stories.

Souto de Moura addresses the competition as the construction of an object:

This is not a competition or a project, but the construction of a model of a possible building with no specific location. The project, in the sense of a catalogue for the implementation of an idea, is limited to the construction drawings and its transportation case. What is left is a sort of material archive which gradually turned into a final idea as it was developed. (Capezzutto, 1994, p.74)

Somehow the unspecified project location is in contrast to the attention to the site initially praised as a characteristic of Souto de Moura's architecure by the jury. Souto de Moura addresses this question again taking use of his imagery atlas. This time he selects an image of Tapies, a painting that becomes the origin of the plan.

By resembling early drawings from Team X with collage and lithography Souto de Moura explores his first hypothesis, based on four symmetrical corner

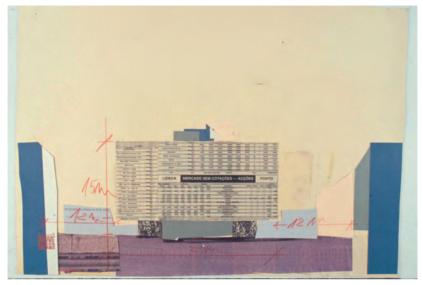


Fig. 18. Collage concept for the Bank project.

units on the square plot, and variants address the requirements of each level. The free space within shapes a square, empty courtyard.

Reference images, like those from the work of Tapies, also provide research material for facades and detailed sketches or models. Souto de Moura researches the ideograms, which tell all without articulation, and the images, which elaborate the possible construction. Again, from initial stacks of concrete beams, to stacks of iron elements, to overlaps of wood stacking systems, images are used as project material and potential structures capable of originating space.

All these images sometimes preceding the idea are connected by an unwritten narrative of obsessive nature.







Fig. 19. Sketches by Souto de Moura for the Bank project.





Fig. 20. Exterior view, the Bank model.

Fig. 21. Bank model of the courtyard and section.

From the moment of the first sketch to the final moment of the drawing of the project there is time to reflect upon the nature and ethos of the building.

With the same need to erase the stories, Souto de Moura uses the same principle of the "container facade". The height of the building is artificially tempered and contaminated by the materiality chosen, as if buildings could restore the nature of the material in Souto de Moura's images.

This is in fact a project research about overlappings, a theme initiated in the Salzburg Hotel and continued at the Burgo Tower, which is the final object of our investigation.

# The Burgo Tower (1991/95 Phase 1; 2003/04 Phase 2; 2007 Construction)

The Burgo tower was the first large building that Souto de Moura designed; he mocks "I always say that I moved from one floor to twenty. I never built three or four floor buildings, I moved from one to twenty." (Rangel, Martins, Sá and Faria, 2009d, p.58)

The site is located at Boavista Avenue in Oporto and the building consists of a level platform and two volumes which are designed at different scales. The lower building allows for the enclosure of an urban square and a sculpture<sup>5</sup> gives meaning to the place. The tower rises up from the platform, near the lower volume. This two volume solution clearly responds to the site complexity with simple geometry.

The same images, once again, serve as motto for the design of the outer layer of the facade. This construction, later detailed in the execution project, follows

<sup>5</sup> Sculpture by Ângelo de Sousa.



Fig. 22. References for composition of the facade, Burgo Tower.

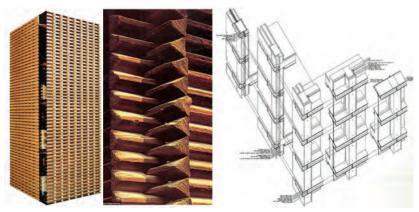


Fig. 23 (left). Souto de Moura reuses this concept as prototype for a bar unit. Fig. 24 (middle and right). Design reference and detail of facade construction.

a path of research only possible with the long timespan (1978-1993, or 1978-2007 including implementation) available to Souto de Moura since Salzburg. The image remains an iconic symbol of the construction to be erected.

In an interview with El Croquis, he explained, "I find Mies increasingly fascinating ... There is a way of reading him which is just to regard him as a minimalist. But he always oscillated between classicism and neoplasticism ... You only have to remember the last construction of his life, the IBM building, with that powerful travertine base that he drilled through to produce a gigantic door. Then on the other hand, he arrived in Barcelona and did two pavilions, didn't

he? One was abstract and neo plastic and the other one was classical, symmetrical with closed corners ... He was experimenting. He was already so modern." (Key projects by Eduardo Souto de Moura, 2011, Media Kit: announcing the 2011 Pritzker Architecture Prize Laureate)

Souto de Moura acknowledges the Miesian influence, speaking of his Burgo Tower and answering an Italian architectural critic, Francesco Dal Co, stated "it's better not to be original, but good, rather than wanting to be very original and bad." (Key projects by Eduardo Souto de Moura, 2011)

In this project there is a clear connection to the Salzburg Hotel and to the Olivetti bank project. At that time (1993) Souto de Moura was in Switzerland and was deeply influenced by Swiss architecture (Diener & Diener, Herzog & de Meuron or Zumthor) in a hybrid mix between tradition and modernity, monumentality and deception.

The volume was predefined: the maximum height was fixed by the firemen and the width (span) by the engineers. Therefore the design had to focus on the skin and the pictorial materials, not for fashion but as natural consequence.

For some reasons the initial project could not be built for 17 years and had to be revised mainly due to economic restrictions, in fact it had to be "adapted to the current situation. Because the situation changed, it is a kind of second project." (Rangel et al., 2009b, p.90).

Precision and truth (or deception) are constantly at stake. "Burgo is an authentic building because it is a mirror of the lie it really is (...) it is not a stack or it would not have columns." (Rangel et al., 2009d, p.60) This deception reflects a condition of modernity with which Souto de Moura must work.

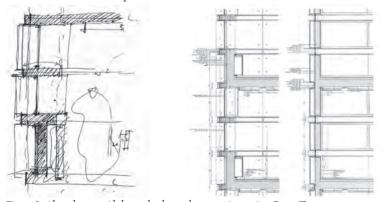


Fig. 25. Inside scale vs outside layer: sketches and construction section, Burgo Tower.



Fig. 26. Burgo Tower, Oporto, Portugal.

Then I thought that the building should be the result of a superposition of floors (...) as stacked things, that permit to distort the scale in a way one could not understand if each superposed element corresponded to one or two levels. (Maza, 2004, p.230)

Two huge modules of simple geometric shape, with traces of straight lines, break the architectural landscape and house the largest office building in the city.

There is a clear intention of masking the number of stories, materialized as construction details. One cannot tell at a distance the number of stories; the height of the building loses sense and turns into an abstraction. As Souto de Moura says "I have a trauma about abstraction. I happen to love realistic paintings and sculpture, but I feel somewhat reluctant to use conventional domestic forms because I cannot design them. When I attempt to make them, they seem ridiculous and fragile to me (...)." (Rangel et al., 2009d, p.60)

Within buildings of urban relevance, such as this one, Souto de Moura researches the visible qualities of architecture through the use of the facade as mediation between exterior and interior: transparency and reflection. Thus he reflects upon the novelty of visual elements, as did the Baroque architects, too, centuries before.





Fig. 27. View of the Burgo Tower. Fig. 28. View from the main access road, Burgo Tower.

### RESULTS

In this period (1979 – 2007) Souto de Moura gives us a glimpse of the interdisciplinary debate following the cultural changes of 1968 and the social and political agenda it influenced (which was relevant at SAAL). From a "grand narrative", a sense of social decorum, a commitment to the cause (larger than the architectural profession) and an ideological concept of progress, Souto de Moura continues the old modernist love for honest constructions and pursues scientific progress (in construction) by collaborative research with other professionals.

He states "(...) architecture can't just be the answer to a problem that is called construction, not architecture. Architecture is construction plus some added value which is creating sensations that make people feel good. It can never be premeditated, if it is, it is a disaster." (Rangel, Martins, Sá and Faria, 2009c, p.30)

He constructs a systematic approach to the project at hand by researching, not only - as Aldo Rossi proposes in the "architecture of the city" - how to take part in the history of the city, but also in the desacralization of history and academicism – as Venturi's "complexity and contradiction" proposes – or the transparency and simplicity of architecture - as Donald Judd speaks in "architektur".

Antonio Angelillo<sup>6</sup> (1996, p.13) states Souto de Moura's "(...) pursuit of a new interpretation (subjective-environmental rather than analytical-rational) of the context (...)" which gives credit to his "(...) restitution of artistic practice to the

Antonio Angelillo (Gorizia, Italy, 1961) worked with Alvaro Siza at Oporto (1988-89) and, between 1989 and 1997, was the chief editor of the international magazine "Casabella" under Vittorio Gregotti direction.

design process, in the rediscovery of the values of concreteness and realism implicit in architecture, in the belief in a certain inherent objectivity in the construction." (ibidem)

Souto de Moura relentlessly gathers bits and pieces of information to induce thinking and drawing as he constructs his atlas of important ideas (Bandeira and Tavares, 2011). This is an important part of his research as he uses and reuses the same images along three projects separated by almost 14 years (1979-1993).

With no shame he says "Architecture can be copied. It is fine if it is copied unconsciously. If it is deliberate, it is disastrous." (Rangel et al., 2009d, p.62)

Within this applied research to the project at hand he gathers influences from historic architects, specific artists, poets or writers. He gathers images of personal consequence in a personal narrative.

Following a Vitruvian and old modernist ethos of integrated utility (utilitas), beauty (venustas) and construction (firmitas), Souto de Moura unites architecture and design to post-completion performance.

I think my architecture might not be too well suited for magazines or too fashionable but it is developed with conviction. It has a mission that is to give an answer to certain problems. (Rangel et al., 2009b, p.91)

With little spectacle, but with profound labour, he stands out from the growing sensational and individualistic built images. By doing so he goes against the increased rhetoric and image-making that exacerbated the subtle homogenizing effect of the "special ones" or "star architects".

He says "contradictions and all complex information cannot be visible. We cannot massacre the users. If the public has the minimum idea of my effort, then my work is not properly done. If has failed. It is like in a book: when the reader understands exactly which books the writer read. The reader gets disappointed". (Afonso et al., 1998, p.32)

## Architectural Grammar

Souto de Moura uses his projects, and in particular competitions, as starting points and fundamental opportunities to further investigate his architectural grammar.

We can observe the "relation between wall and ground" in the Braga Market (1980-84) or in the Cultural Centre Casa das Artes (1981-91); the "question of the

habited-table" in Quinta do Lago (1984-89) or in the House at Cascais (2001-02); the "importance of the section" or the landscape in the stairs and quarry of the Braga Stadium (2000-04); the "condition of the ruin" in Baião (1990-93) or in the Pousada de Santa Maria do Bouro (1988-97). (Abrantes, Rangel and Martins, 2009)

Based upon these two competitions and one completed project presented as case studies it is possible to propose a grammar for competitions with additional key points:

# Authenticity and (re)use

These projects address the issue of authenticity and its deceptions. The rigour and truth of materials and construction is, sometimes, simply not possible.



Fig. 29. Braga Stadium.



Fig. 30. Design reference, Sanctuary of Asklepios at Epidaurus.





Fig. 31 (left). The Burgo Tower, Oporto.

Fig. 32 (right). Design reference, Mies Van Der Rohe, Hochhaus am Bahnhof Competition, 1922.







Fig. 33. Stairways from the Braga Stadium, Braga. Fig. 34. Design reference, National Assembly Building of Bangladesh / Louis Kahn.

Souto de Moura often has to reach compromises and the un-truth (different from the lie) becomes also a theme for investigation.

"It is interesting but it is false. It can be interesting because it is false." (Abrantes, Rangel and Martins, 2009, p.7) He acknowledges the same un-truth in some of Mies Van der Rohe work and finds it fascinating.

Souto de Moura uses these two competitions as early studies on how to camouflage the number of stories and then he is able to apply it at Burgo Building.

From time to time Souto de Moura flashed back, revisits, subverts and reuses principles formerly used in past projects. But also from others: "You never begin from scratch. It would be silly. It would be unnatural. I have to use things that have been done by others and adapt them to specific situations. This task must be performed unconsciously so that there is no analogy or similarity, otherwise it would look ridiculous." (Rangel et al., 2009d, p.62) Also "I copy from all my previous detail designs. I know which ones don't work. I have corrected and tested them. (...) It is the principle of intelligence: do not waste energy". (Rangel et al., 2009b, p.94)

# Readability, Simplicity and Clarity

The main idea in a competition must be quickly readable and apparent. All projects are different but they all are quite simple in terms of an idea and how to deal with the site, with the city and with the program.

His ideas are adequate to the place and to the program. The relation to the materials becomes evident. There is an apparent simplicity in the "climax" of the process of research - the Burgo tower - as Souto de Moura hides a complex building. Quoting Souto de Moura "the concept of simple is very complex. There

is a rule (...): the more simple it looks, the more complex is the process it hides". (Santillán and Sargiotti, 2008)

Within the research the subject becomes clearer. In the Burgo tower Souto de Moura is able to synthetize the quest he long pursued in a clear architectural concept materialized and constructed.

# Materiality and time

Recurrent images formulate the materiality of the project. The exterior detail of the facades often hints what the project is going to be like, and in competitions preference may be given to those who are not vague about the construction of the exterior layer or facade.

But time allowed for competitions is so limited that only a fraction of work is humanly possible. Souto de Moura says: "Designs have to be completed by tomorrow and there is no time to think about solutions (...)" (Rangel, Martins, Sá and Faria, 2009a, p.14).

The length of time from initial drawing to final detailed plan gives Souto de Moura the time he lacks in competitions. This explains why projects from competitions to final solutions are so often modified. Not in the concept but through a remarkable review and optimization of construction. This can be easily observed in the Burgo building as Souto and his team of engineers optimize the container facade along the height of the building, differentiating the construction details of the stacking facade of the lower floors from the upper ones.

#### DISCUSSION

# On Investigation in Practice

The discussion on design activity by itself as research medium following scientific method to some degree can be dated from the 60s. Relevant work was done by Christopher Alexander (1979) on "image" and "language", by Jane Darke (1978) over the "primary generator" cited by Lawson (2004, 2005, 2001), by Wayne Attoe (1978) followed by Friedman (1997, 2003) and by Schön (1983, first edition). More recently Jonathan Hill (1998, 2003, 2006) has discussed the frame and boundaries of the actions of architects (and architecture) while Jeremy Till (2009, 2011, 2005); a) has debated upon the interactions of researching in architecture.

Although one might consider a controversial choice we will pursue Schön's view in this paper since it is more focused upon the relevance of the continuous process of acquiring and producing knowledge within practice.

In fact, architecture, not like other exact disciplines, is not simply the exact result of a specific deductive method, but rather a product of a "reflection-in-action". As Schön believes "competent practitioners usually know more than they can say. They exhibit a kind of knowing-in-practice, most of which is tacit (...) [they] often revel [in] a capacity for reflection on their intuitive knowing in the midst of action and sometimes use this capacity to cope with the unique, uncertain, and conflicted situations of practice" (Schön, 2003, pp.viii, ix).

This "knowing" is composed of a systematic knowledge of architecture, although highly professionalized due to its specialized field of expertise, firmly bounded, scientific and standardized corpus (Schön, 2003, p.23) although increasingly entangled within a broad spectrum of other competences. Boundaries among architectures are continuingly shifting (Hill, 2003, 2006) and even between architects clearly identified with the same school (like Souto de Moura is identified with the Oporto School) there are many variations (either subtle or fundamental) in the exercise of the profession.

As Heylighen and Neuckermans (2000) state "Architects' greatest impact therefore comes during the early stages of the design process, when they must come up with one or a few ideas, powerful enough to encompass the different aspects. These ideas are known to architects by many names, (...) but most often are called the 'parti' or 'concept' [Lawson, 1994]. Such a concept does not necessarily require the addition of an extra ingredient. In fact, every component already present in the design situation, e.g. a special feature of the site or a curious trait of the client, may qualify for this focal role. Moreover, underlying ideas are rarely found in the singular."

But it is undeniable, as Schön (2003) shows, that there is a reflection in practice that, following a systematic approach by means of scientific method, constructs theories based in "deliberate and idiosyncratic constructions (...) [continuingly] put to test" (Schön, 2003, p.59). This reflection is obviously personal and based upon the individual (repetitive) experiments and is as varied as the opportunities to reflect.

One may think over the norms of judgments, the strategies or theories of some pattern of behaviour or situation, or upon the divergences of practice. These occurrences may be unique or unstable and serve as a critique to the initial understanding of the problem, serving to construct a new description and providing the opportunity to renew experimentation and testing. Additionally, these occurrences may constitute an appreciation, which can serve to



Fig. 35. The architect's presence, hands of Frank Lloyd Wright, Le Corbusier, Mies Van Der Rohe and Alvar Aalto, postcard by Souto de Moura, Christmas 2011.

frame a role and value it, either morally or ethically, in relation to others and by others.

For Eduardo Souto de Moura the laboratory is possible when the project, freed from contingencies alien to the object of research becomes a blank sheet of paper. The pragmatic simplification of the statement – program, context, client – into elementary rules defined as preamble and thence unalterable, determines the limits of the available sheet. And then the project becomes a necessary instrument, a field of experimentation, the backdrop. (Clement, 1999, p.11)

# Quoting Schön (2003, p.68):

When someone reflects-in-action, he becomes a researcher in the practice context, He (...) constructs a new theory of the unique case. His inquiry is not limited to a deliberation about the means which depend on a prior agreement about ends. He does not keep means and ends separate, but defines them interactively as he frames a problematic situation, He does not separate thinking from doing (...). Because

his experimentation is a kind of action, implementation is built into his inquiry. Thus reflection-in-action can proceed, even in situations of uncertainty or uniqueness, because it is not bound by the dichotomies of technical rationality<sup>7</sup>.

In the case of art related professions, we may assume that for some architects reflection-in-action is the core of practice. It is within the epistemology of practice – as one usually refers to the (architectural or personal) method – that the dilemma of rigour and relevance is settled. It links the art of practice in uncertainty and uniqueness to the scientist's art of research.

# On competitions

International competitions test architect's capacities (Lipstadt, 1989a; Santos Fialho, 2002, 2007; Tostrup, 1996, 1999, 2010) beyond controlled systems of social relations, comfort zones, age, gender or even expertise, in a fast sublimation process (Gil, 2008; Ramos, 2009), as well as induce a recognition and publicity that surpasses the investments in time, energy and financial resources, forcing a (re)interpretation of the role of the architect (Nasar, 2006).

As Hélène Lipstadt states in her opening text:

For at least 2,500 years, architecture competitions have been employed to choose one architect or one design among many, to distinguish excellence in appearance and in function, to award commissions, and to educate young architects. (...) Competitions are battlegrounds of opposing and antagonistic solutions, giant architecture class-rooms with invisible boundaries and, often, open enrollments. They provide the forum for struggles for one's personal best, team efforts forged in camaraderie, debilitating taxes on body and pocket, and, for the happy few, joyous public triumph. Competition encourages those who only observe, including the public, to applaud or admonish architects as if designers were contending in a public tournament. (Lipstadt, 1989b, p.9)

Competitions are a standard administrative method for procuring design services and reflect the equitable distribution of design commissions, the need for openness in the distribution of public funds, the quest for better design,

<sup>7</sup> Technical rationality "consists in instrumental problem solving made rigorous by the application of scientific theory and technique" (Schön, 2003, p.21). It assumes three components: an underlying discipline or basic science; an applied science or engineering; skills and attitudes that induce performance of services.

further public participation and an overall improvement of the built environment. They further represent:

Vehicles for the release of creativity, vitality, new talent and new ideas (...) creating opportunities for renewal and change in the built environment. Competitions open way to the art of architecture and creative freedom, though within a set of rules and programmes, and through disciplined and expert procedures. (Strong, 1996, p.29)

Each participant in a competition – sponsor, client, competitor, architect, jury and the public – has his own definition of the cultural and symbolic qualities of the building type, site and design and has, to some degree, a fair expectation of the innovative architectural design (which may or may not prove to be successful).

There seem to be two major interests, sometimes opposed, at stake in a competition. The first is the client (public or private promoter) to whom competitions offer the opportunity of multiple choices in design solutions, provide awareness and public opinion (although controversy may arise), permit to gather prestige and recognizance for its patronage, or to obtain the best quality design possible within the available budget. The jury serves (or ought to serve) the interests of the client. The second is the competitor – architect – who wishes to win a commission (although it is clear that competitions consume an inordinate amount of time, money and effort with no guarantee of return) since it should provide an equitable access to the market (even to young architects), to obtain, provide or increase status (within the class of architects) or, in business terms, to bind the client to a design proposal, often in that connection insuring the desired freedom for the author's creativity, and may provide an opportunity to explore new themes and extend areas of expertise.

In fact "it may provide a firm [or an architect] with the opportunity to think about ideas it would otherwise not explore on a day-to-day basis" (Collyer and Berk, 2004, p.13).

Both national and international competitions reflect the architect's personal design beyond controlled systems of social relations, comfort zones, age, gender or even expertise, in a fast risky sublimation process. "In general, competitions can bring out the best in people" (Nasar, 2006, p.23) and generate publicity and a public recognition which may surpass the investments in time, energy and financial resources.



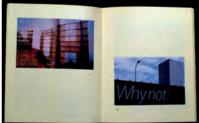


Fig. 36. Pages from the Eduardo Souto de Moura's Wall Atlas.

International competitions assume a stronger and unconstrained position that can help in focusing the concept and the discourse whilst assuming the distance and the reference to the site (locus).

Many architects are aware of pitfalls they may face when entering a competition in their own country and calculate their chances accordingly. Whereas competitions in Europe, which are administered either under the auspices of the national associations or on a non-regional basis according to EU rules, are relatively transparent (...) (Collyer and Berk, 2004, p.12).

Eduardo Souto de Moura provides testimony to an insight of how competitions lead to experimentation in design and investigation in architecture, proving that it is relevant for his own on-going work.

#### CONCLUSION

In the two recent exhibitions of Souto de Moura's work, following the 2011 Pritzker Prize, the first focusing on competitions (Barata, Campos and Oliveira, 2011) and the second focusing on his personal imagery atlas (Bandeira and Tavares, 2011), it is clear that his work knowledge embraces a varied experience ("O que aprendi com a arquitectura?": Eduardo Souto de Moura, 2009), far beyond the usual rigid limits of architecture – humanistic and cultural. All flow of multidisciplinary and artistic information is channelled towards the architectonic thought either as product or as cultural production.

The competition project, with its drawings, texts and images, constitute the end of research. Schön (2003, p.81), quoting Quist, makes references to "drawing and talking [as being] parallel ways of designing and together make up what

[he] calls the 'language of designing'". These verbal and non-verbal dimensions are closely connected. Taking into consideration Tostrup's research (2001) we can clearly identify drawing (both present in Souto de Moura and Álvaro Siza) as visual rhetoric, which, in conjunction with other means of communicating the idea (verbal rhetoric), tend to shape the argumentation of reflective action. Quoting Souto de Moura "drawing is a research" (Santillán and Sargiotti, 2008) and quoting Álvaro Siza, Souto de Moura recalls "drawing is researching for lucidity". (ibidem)

Although "artistic ways of coping with these phenomena [uncertainty, uniqueness, instability and value conflict] do not qualify, for them [positivists], as rigorous professional knowledge" (Schön, 2003, p.42), it is clear from the examples presented here that, on specific occasions, the project, most frequently in competitions, assumes the condition of scientific research or "reflection-inaction".

Angelillo confirms that in "small works, installations and interiors, furniture design thus becomes experimental laboratories for the study of structure and space." (Angelillo, 1996, p.21) And Marie Clement concludes, "We need only think of the project for the Salzburg Hotel to imagine a paradigm of this system. The passage from the first project, an attempt to articulate the conservative city and an interpretation of its orography, to a plan simply designed by the necessary program, makes the building available, ready to establish the 'container type facade', as with the University of Aveiro, the Olivetti contest or the Burgo Tower. This obsessive concern in a triangular quest which weavers between discipline, language, and construction, establishing within the succession of these projects, the principle of a 'contamination', expressed without false modesty in the 'blue notebook'. Each one of these projects, a complete fragment, takes on the preceding events and already contains within itself the embryo of the following one. Contaminated and contaminant." (Clement, 1999, p.11,13)

The one million dollar question would be if this "contamination" could be possible without competitions?

I can only assume it could. We cannot deny seeing research in other Souto de Moura's work. It is clear that during the time he worked with Álvaro Siza at SAAL (1974-1976) he gathered experience and did research on dwelling that was used to further develop his personal commitment to the habited box, which

<sup>8</sup> That erases the stories, therefore the very principal visual element of a building's height.

<sup>9</sup> From Aldo Rossi, "Il mio libro azzurro", 1960.

he developed obsessively in his following single-family houses. Angelillo (1996, p.19) confirms this view stating "Domestic architecture has always been an important field of experimentation for the architects of Oporto".

However, it is also quite clear that he chooses competitions as prime environments for experiments and investigations. It is apparent that it is within competitions that Souto de Moura addresses questions most intimate to his "course" and "discourse". Competitions therefore seem to be the optimal place for him to innovate and to deal with all that cannot be dealt with on a daily basis.

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