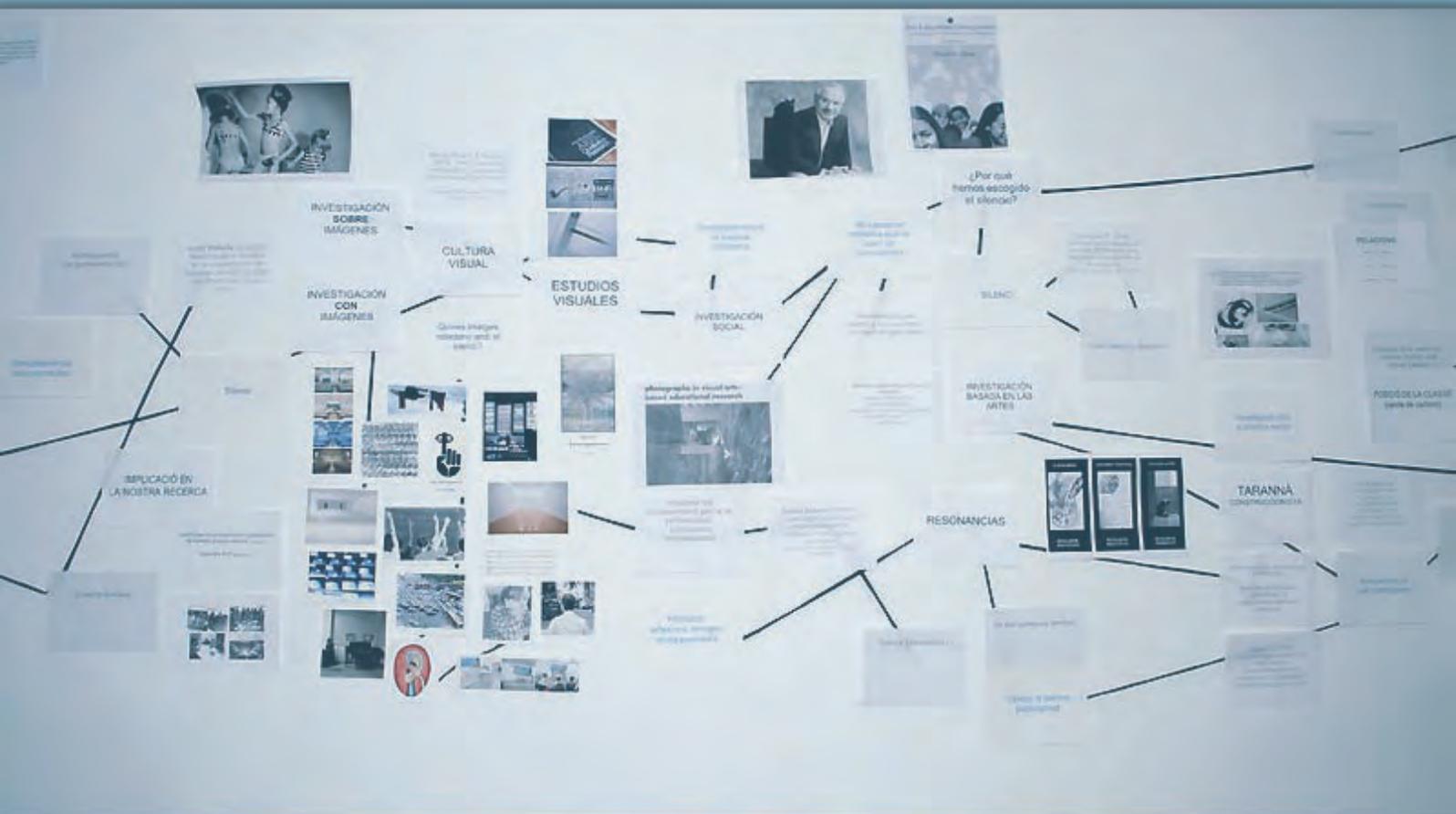


1st Conference on Arts-Based and Artistic Research

Critical reflections on the intersection between art and research



Coordinated by:
Fernando Hernández-Hernández
Rachel Fendler

ESBRINA - RECERCA

University of Barcelona (2013)

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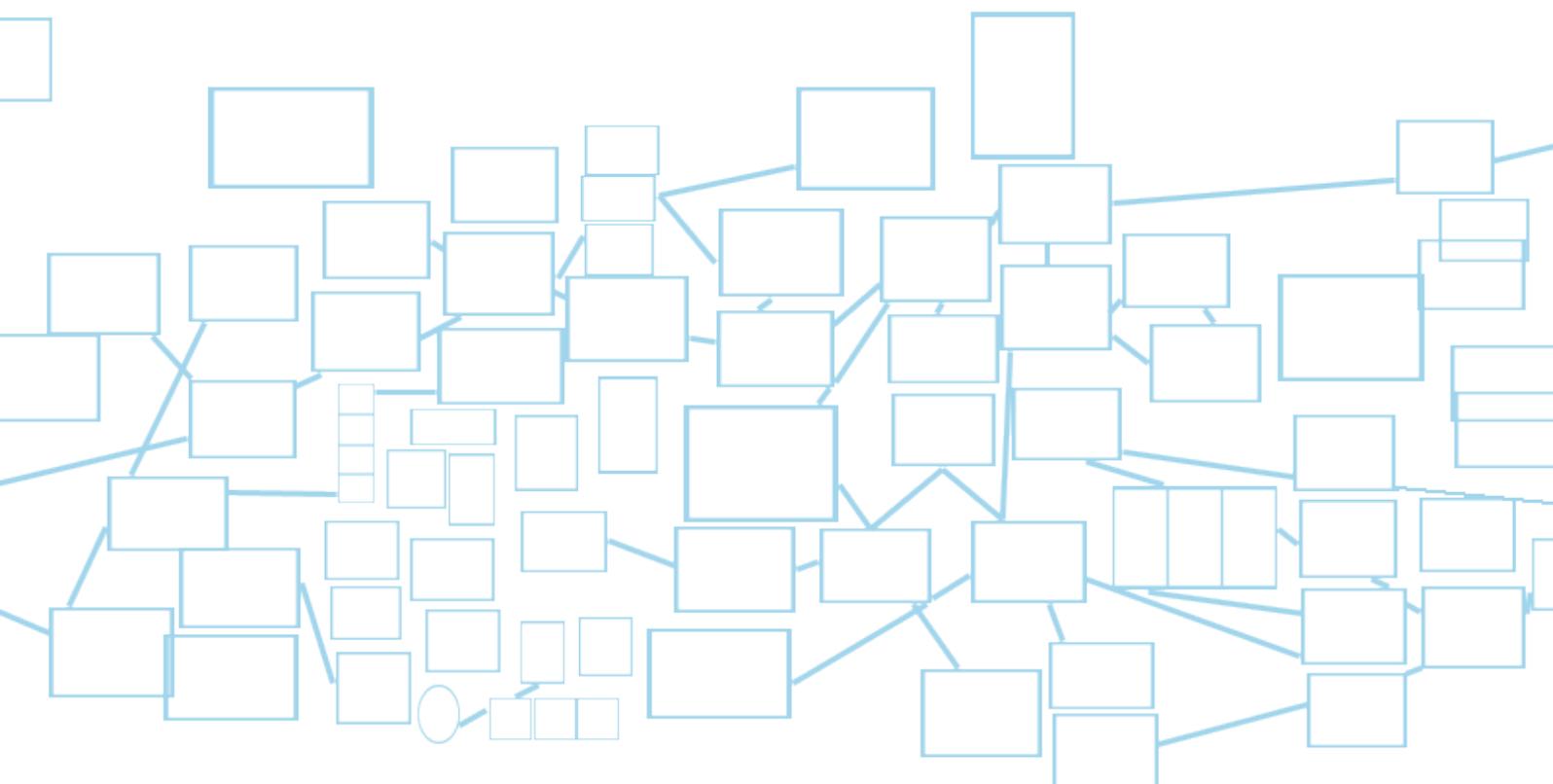


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<http://www.ub.edu/esbrina>

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1ST CONFERENCE ON ARTS-BASED AND ARTISTIC RESEARCH: CRITICAL REFLECTIONS ON THE INTERSECTION OF ART AND RESEARCH

Coordinated by:

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Between the Dot and the World

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Abstract

Space is a fundamental structure of all the dimensions of our life, specifically as the field in which all visual arts develop as the exploration in two-dimensional and three-dimensional media and in their articulation.. It can be taken as the structure of systems affine to the ones that embrace the core of our existence.

This paper focuses an art based research of space relationships within a system, between its units and the whole, exploring different connections between the small units materialized by the dot and the world it helps to build, both in metaphorical and real contexts. Accompanying the development of an exhibition, namely its context, basis and characteristics of the installations of one of the exhibition spaces, some important parts of its construction process are presented, making public some of reflections built around it.

Key words

art, research, space, system

Structuring

Art is research. It has always been relentless research. Quite recently it has acquired a research status recognized by science as a different way that allows access to the ultimate goal of knowledge that is life and to the human beings that live it (Barone & Eisner, 2012). Art based research provides the opportunity to develop an investigation about meaningful knowledge, gaining an insight about ourselves and the world that we build and ultimately are.

This text covers the process of construction of an individual exhibition entitled *Space*, held in the Cultural Centre Adriano Moreira in Bragança, Portugal from March 10th to May 7th, 2011. It is not an account of the artistic research materialized in the works exhibited, but rather presents the research developed on artistic basis, relating practice and theory into a whole, sharing the process, uncertainties and achievements undergone. The text is divided in four parts: structuring, building, presenting and reflecting. Exploring transitional characteristics of an artistic process, as something on-going, these parts are intended to emulate the research developed, presenting them as a sequence, and therefore sharing it with the reader. All the images are from the author.

Structuring is about finding out and laying the fundamental structures, upon which all the actual construction will be developed, either practical, theoretical, or a mixture of both. In this part the operative concepts of the research are presented, characterized and contextualized. Beyond an individual approach of the concepts, it is valorized the relations that are held among them, establishing working and analysis parameters.

Building is the part related to the construction of space, especially referent to the exploration of systems previously covered. There is an analysis of the different modes of space construction through the artistic works developed, assuming options and consequentially, pathways that point into some particular outcomes.

Presenting is the part related to the actual exhibition, analyzing some aspects of the relations uniting the expected results and the real contexts that are present in a real event.

Reflecting is the final part in which some reflections of both the process and the results are shared, drawing more than conclusions, further questions to be answered.

The exhibition had two main concepts: the exploration of relationships in systems between the units that constitute them and the whole that they constitute, and the exploration of the material exhibition space as an active element.

The first main concept of the exhibition questions the relationships that unite a system and its parts, establishing a close connection to humanity as a social body. Every human being is an individual, belonging to one or several systems, such as a family, a community, or a society by a complex net of relations. These relations are far beyond numerical characteristics, building a system that cannot be taken merely as the sum of individuals. The individual subject is a small part of something that transcends him or her, being nevertheless important as every part is, even the apparently and metaphorically smaller ones, as we are aware either by economic or ecological issues that concern us nowadays. Parts within systems are always connected, so systems cannot be downsized to just one individual, or to just one aspect of the relations operating within them, even for the sake of analysis. Every art form is both the theoretical and operational creation of systems that have a wide frame of references, building something that is more approximate to the actual human systems, even if it is a little bit simpler, but not compromising the main issues. In order to develop this first concept, relationships between multiple elements should be present and available to increase further relations throughout analysis, showing the multiplicity of human relationships. Trying to work in a field common to human relationships capable of providing a fruitful context of interaction development, space was thought to be an ideal ground to work through art based research. Space is the structure of all artistic exploration in two-dimensional and three-dimensional media and in their articulation. All works in the Fine Art field are developed through an act that transforms and sometimes suggests space. Relationships within a spatial system are highlighted in this research, trying to fill gaps between the unit and the whole, going all the way from the dot to the world it helps to build.

The second main concept relates to the fact that exhibition space is the whole of the material elements upon which all the exhibition develops - floor, walls and ceiling. Being the architectural space, or its extension, it is the most basic structure of an exhibition. Over and in this structure are placed, suspended or projected all works, regardless of their content or form. In spite of its relevance, it has rather a secondary role in an exhibition (O'Doherty, 1999), being considered just the hanging place of the real meaningful spaces, the artistic works. An objective of this exhibition was to value this space, placing it at the same level of the plastic works.

Exploring the context, basis and characteristics of the installations of one of the exhibition galleries, space is analyzed in its structure, and afterwards, construction. In this sense, space exploration is identified as a conceptual, compositional and expressive structural element, proving to be a field more important than the mere consideration of background commonly taken. In the end it will be addressed one of the perils of art based research, the enclosure of its results, building a cryptic system.

Space is a primal human structure, being always present at whatever the dimensions of our life. In art it is the structure that allows a building act, by combining the simplest movements in space and time. Space is also the content of this building act, as it is constructed and transformed and sometimes subject to a purposeful developing, achieving the status of goal. To think about space is somehow to think about art, being so often mixed up and combined throughout history. Space is much more than the Euclidian system to which we are so closely attached, being the root of our phenomenological bond to the world, as well as connecting and structuring several other important parts of our live as time itself. In this sense, art has explored other paradigms, such as the Dadaist space where absurdity is the norm, or Cubist space that provides an apparent visual chaos but obeys to the laws of time in space. The space that Op Art generates being dependent of vision

is far more exterior to a regular view and mostly to its reconstruction than the one that Surrealism needs. In other ways, there is a growing number of researchers that investigate other dimensions of space, as social space (Lefebvre, 2000), phenomenological construction and conscience of space (Moles & Rohmer, 2012), or the relation of space and technology (Virilio, 2007), to name just a few. These and other researches questioning space discover further dimensions of something that is complex in its composition, as it is in the ways that we relate to it.

Being a structure, space is one of the most relevant contents of the plastic arts, explored in a systematic way from Renaissance to the present day, particularly from the beginning of the 20th century by its development under different conceptual structures. Space development comprehend generic systems applied to particular circumstances as linear or parallel perspective, as well as profoundly personal explorations that are applied to generic contents, as mind maps allow to build.

Space is a plural and multimodal content, as wide as our imagination allows it to be. Beginning by a sensorial exploration of reality mediated and altered by rational contents, the dimensional construction of space develops not always consciously and voluntarily in two ways - two-dimensional space and three-dimensional space. These ways are open and often communicate between each other, as the drawings of light that Picasso made in 1949 and 1967 (Mili, 1970). They are relevant not only as three-dimensional drawings recorded and presented through photographs, but also because they were made in the air, not being limited to any regular boundaries.

As human beings we construct space concepts along our life through our neurophysiologic system that comprehends genetic data, as other data obtained by experience, building an operational body of knowledge created, systematized, mediated and altered through different ways that structure the relations of a subject and space. These ways can be organized in five axes that structure space concepts: perception, cognition, memory, imagination and action. Being active processes of apprehension, construction and projection of space, they are nuclear poles that unite different natures that imply the conscience of a spatial location with time implications, the selection of relevant data either sensorial or from memory, and response control (Posner, 2008), with the consequent preparation for future situations. This is in the end the main function of space concepts, the contextual understanding of what involves us and the development of creative actions adequate to the ends and media in the present or future contexts. In spite their separate presentation, the five axes of perception, cognition, memory, imagination and action aren't hermetic nor antagonically developed. They present specificities that require a particular approach that allows understanding the whole that generates from them. Perception reports to data obtained through the sensorimotor experiences implying an phenomenological relation between a subject and what he or she feels, either related to him/herself or to the exterior. Perception isn't an isolated activity being attached to particular circumstances, requiring cognitive action and recollection of acquired processes (Hershenson, 2000). Cognition deals with data resulting from sensations, gaining new contexts and organizing them. It deals as well with data generated within its own body. Memory mediates and alters data obtained in different times of its cognition or perception, while imagination creates new data from the existent. It is up to imagination that is required the resolution of hypothetical situations overcoming data obtained in specific situations not suitable to repeat in the same circumstances. Action comprehends all aspects of the participation of a subject in the reality that co-constructs. In spite having different degrees of consciousness, field of operation and determination, it imposes as the subject's intervention in a context in which he or she projects him/herself.

Generally, to space has been attributed a dual nature: absolute and relational. Absolute space is general and non suitable to be particularized, resulting from an abstraction of reality. Relational space refers to specific aspects of reality, establishing and recognizing connections between them, in either case, art provides not only the visualization of concepts, as its construction, such as the already mentioned Euclidian space or mind

maps.

These relationships are philosophical because they tend to explore the core knowledge that humanity values, the one that is meaningful to itself in a very straightforward way. As such, Heidegger (2010) pointed the functional role of a phenomenological knowledge, expanding Merleau-Ponty (1999) this concept to the action that the use of something implies or allows (Wrathal, 2011: 20). In a phenomenological point of view, art is capable of providing a more embracing knowledge than the one obtained through its references, focusing the process of transformation and construction. Art is about results, but in an art based research the process is highlighted, involving functional aspects, the expected outcomes, or the concepts undergone either in a production or reception stages. In this sense, the space that art explores, refers commonly to the space that the artist mobilizes and the one to which is mobilized, though the used points of view in a close context of time. The space of experience cannot cease to be personal and with different degrees of significance to the one(s) that have lived it.

Building

Any exhibition is a dialogue between the space dealt by the works that constitutes it and the space in which it is developed, like an architectural space. Independently of the fact of the works are or not developed towards a particular space, they establish always a relationship that is materialized in their disposition in particular places, searching the best value according to the structural idea, the concept that guides the exhibition. If the works are developed to a particular space, as it was the case, they are most certainly made to explore the final concept since its birth, dealing eventually with variables that in other contexts would be impossible to anticipate.

The works present at an exhibition vary from one to a number that by its extension may not be accounted, admitting however the finitude of the whole. As a compositional rule, lesser the works, greater should be its relevance in terms of attention and visual perception and vice-versa. A great number of works admits a greater dispersion of the viewer, with the real possibility of his or her saturation regarding the considered whole. In this exhibition was explored the relationship between the unit and the whole by different articulations. Therefore it was required the construction of systems built of several units, allowing to relate absolute concepts to relative ones.

Exploring the sensorimotor and rational data dealt in perception, cognition, memory, imagination and action, the works exhibited were installations, articulating different fields in an essentially dynamic and spatial layout. In the four installations that constituted the exhibition of one of the exhibition galleries, space was worked through the exploration of a common form that coordinated the interventions. As so, this common form assumed a transitional character, residing not in itself its basis, but rather in the relations that were established. In this sense, it was important the exploration of a regular and elemental form that being aesthetically meaningful and appealing wouldn't constitute itself as the focus of attention, allowing the viewer to converge to the aspects pursued, the relations established between the unit and the whole and the valorization of the exhibition space. This form should correspond to six dimensions of mental representation of forms (Treisman & Kanwisher, 1998), allowing the most unequivocal efficiency. This form should be a direct witness of the material and visual perception that we develop; it's structure should be simply, effectively and completely described; it could be easily be inscribed in a formal typology; as there should be a profound knowledge about it; shouldn't possess negative emotional meanings and lastly, it should not condition the contiguous and the exterior environment. In this context it was needed a simple and fundamental form, structurally regular and stable either from its conceptual nature, as for its construction in different materials. This form should have planar surfaces for a sequential organization of its own space, and also for its quick and normalized construction. This is the

polyhedron field, regarding the most elemental forms. Polyhedrons that would provide a good base of work were the tetrahedron, the rectangular prism and the cube. Octahedrons, dodecahedrons and icosahedrons, being regular forms, present a formal complexity not suitable to accompany the intended characteristics of the adopted form.

The regular tetrahedron, having equilateral triangles is the simplest regular three-dimensional form with the pointed characteristics, but presents three aspects that made it unsuitable to be explored: aggressiveness, perspective and affinity. This form is constituted by acute angles, possessing a physical and visual aggressiveness that, being subjective, is nevertheless quite present. This form is seldom used in the everyday object array, lacking the visual background information needed to contextualize it in different situations, as happens in perspective drawing. Drawing a regular tetrahedron in a perspective system, one obtains several views that are hardly recognized as the form, requiring the adoption of particular and suitable views, restricting the available possibilities. Lastly, the affinity of the elements that constitute the regular tetrahedron is relational and not visual, making the visual appraisal of the regularity of angles and distances more difficult than its metric measurement.

The rectangular prism is a stable form in its bigger axe, being as easy to construct as the cube. It is extremely common in our society, both in its formal exploration in different objects and by being a geometric structure in which common forms can be inscribed. Its exploration in perspective doesn't present the difficulties of recognition of the regular tetrahedron, having however a characteristic that made unsuitable its adoption as the structural form of the works. The differences of face dimensions present both in its material construction and in its drawing in perspective provide a differentiated visual rhythm that gives the form more visual relevance than the pretended.

The cube is a polyhedron that has a regular constitution laying on simple rules regarding just one dimension replicated throughout the entire form. This replication develops according to a Cartesian coordinate system that we consider one of the (if not the only) main reference frames of space. The orthogonality of the angles and consequentially parallelism and perpendicularity of its faces differ it of the regular tetrahedron, as the equality of dimensions distinguishes it from the rectangular prism. Possessing the advantages of these polyhedrons, doesn't share their circumstantial inconvenient.

After the construction of models of the cited forms for advantage and disadvantage evaluation, the cube was chosen as the most stable unit, being regular both visually and materially. Its constitution allows that its direction can be changed without modifying its perception, being the consideration of a base or a top extremely flexible. That doesn't happen in the perception of the rectangular prism, in which the bigger dimension axe is more important than the smaller dimension axe, making its rotation assume different directions. As the position of regular tetrahedron changes in space regarding the viewer, one of the vertices can detach from the others assuming the overall form a particular direction. This happens by the fact that the form is constituted by triangular faces, to which our perception and understanding attribute a direction, being nevertheless the consideration of a base and a top merely circumstantial and therefore flexible to a change.

The cube is explored not as a suggestion of a three-dimensionality that has its origins on the matrix of the concept of image- its plausibility, regarding a reality that precedes it, therefore representing something, but presenting a reality in its own right, modelled according to the concept that generates it. In this sense, the reality that the cube presents is purified in its most significant aspects exploring structures and not contexts. A cube acts as an ambassador of systematic and serial forms and spaces, as a radical abstraction of the particular spaces that we are and that embrace ourselves (Battcock, 1995).

The cube was explored in the two structural media dimensions of plastic arts: two-dimensionality and three-

dimensionality. As a three-dimensional construction it was made in two installations using different processes: adding and subtracting matter. As every cube has the same dimensions, their expression is related to the materials and processes used.

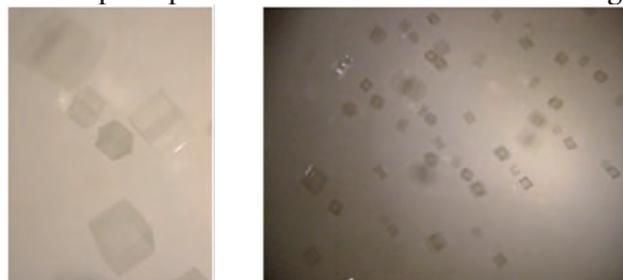
The exploration of the two-dimensional surfaces appeals to a plausible reading of cubes by dedicated processes developed in plastic arts, particularly in those that depend entirely of this kind of illusion to suggest depth, as in drawing, painting or engraving. The processes used were form exploration, direction, framing, occlusion, dimensions difference, shadows and perspective. Being simple and opaque forms, and as the suggested spaces did not presume great depths there weren't used detail differences or refraction. Form exploration relates to the presumed reading of it, developing an image with a high degree of iconicity (Kress & Leeuwen, 2007). In the case of the cube, this is something that relates to it straightforwardly. Form direction refers to the data obtained in a particular three-dimensional viewpoint. A cube can be seen in three ways that originate the viewing of one, two, or three faces. The frontal view that provides the viewing of one face is as correct as the others, but it lacks important data, therefore, the other ones were developed, presuming its oblique direction to the viewer. Framing justifies and reinforces the three-dimensional characteristics of a form that in its material constitution is two-dimensional, by adjusting the outer limits of the perceived specific space. Occlusion is one of the most elemental processes of three-dimensional suggestion because it is inferred that if two elements are presented with some kind of connection, and the further one is somehow incomplete, it has some occlusion of its constitution by the closest one, organizing the space between them and the viewer. Dimensions difference refers to the fact that form dimension is closely related to distance, so, the greater the distance, smaller are the dimensions of the elements. Shadows are a byproduct of light projection over any kind of material surfaces. Perspective comprehends a set of articulated processes that systematize perception data, adapting them to an autonomous and directed use. It assumes a great degree of data simplification, as a unique stable and immobile viewpoint, but is nevertheless functional and trustworthy.

The installations were placed near or on the walls, making them part of the exhibited pieces and not just something around them, excluding by this option an exploration of the space comprehended between walls, floor and ceiling, because any of these elements would be read as a background.

Presenting

Installation 1

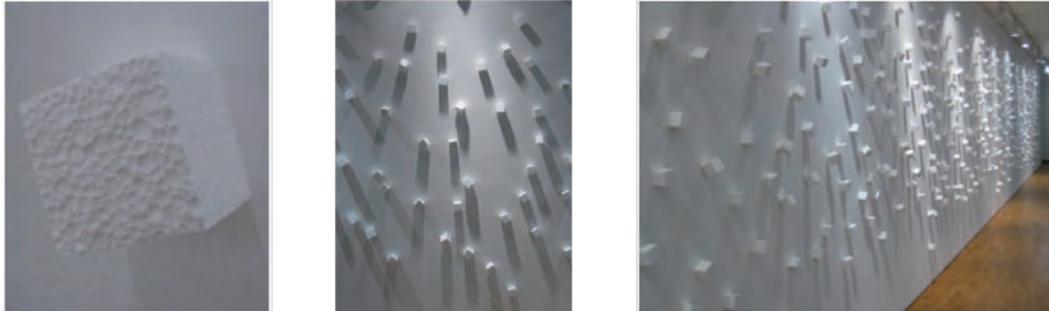
Installation 1 was constituted by 40 cubes made of A4 polyethylene sheets (transparency film) built through cutting and bending faces, united and suspended from the ceiling in different heights by nylon string. The overall dimensions of the installation were 2.5x4x1.5m, and had just a spotlight, doubling the visible forms through the shadows projected in the near wall. The installation had movement of all the pieces, altering their shadows and reflections. They grew in number and volume from the entrance door to the opposite wall. As all the cubes were transparent, the ideal perception of the installation was through movement around it.



Images 1 and 2 - Photographs of installation 1

Installation 2

Installation 2 was constituted by 472 cubes made of expanded polystyrene (white Styrofoam), each having 5cm of height and suspended in the wall by pins. The installation occupied all the wall, measuring 2.85x20m and had 13 spotlights placed in a rail at just 30cm from the wall, which projected long and defined shadows along the wall. The disposition of the cubes was rather irregular. Each cube had an important visual texture of dots provided from the material that it was made of. The dot was also present in another dimension of the work, as each cube was read as such from the distance that allowed the vision of the whole.



Images 3, 4 and 5 - Photographs of installation 2

Installation 3

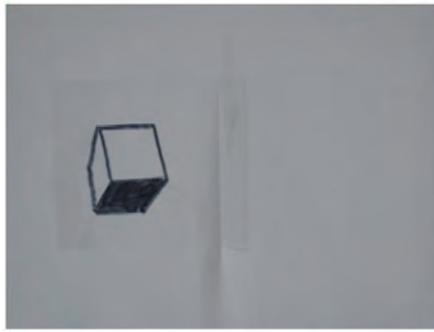
Installation 3 was constituted by 510 representations of cubes measuring between 3x3 to 8x8 cm each, and the whole 1.5x5.5m. They were made in polyethylene sheets (transparency film), drawn with permanent felt pen, painted with red synthetic enamel and glued one over another with transparent adhesive tape. As each piece is a plausible representation of a cube, and there is a general overlapping, the sense of depth overcomes the reality of the materials. The installation was lit by two spotlights.



Images 6 and 7 - Photographs of installation 3

Installation 4

Installation 4 was constituted by 371 pieces dispersed randomly throughout the wall occupying all its area of 2.85x13m, and lit by 5 spotlights. Each piece was a square with a rectangular basis made of polyethylene sheets (transparency film), hang orthogonally in the wall by transparent adhesive tape. In the square was drawn a cube with felt pen, having the suggestion of a shadow in one of the faces opposite to the spotlights. This installation questioned some of the characteristics of space and form in regular perception, as the better viewing angle wasn't orthogonal to the wall, but rather close to it.



Images 8 and 9 - Photographs of installation 4

The installations that constituted the exhibition were materializations of a reflection developed through and in space. Being formally difficult to be interpreted, they needed a contextualization that allowed informing its reading, opening it rather than closing to superficial aspects. Text that always accompanies image was in the present case, sparse to provide the needed context, as captions contained mostly technical information. It was intended that the catalogue had some further information, offering a general context that comprehended the exhibited works, addressing the observer to some particular aspects. In this sense, the catalogue, presented the concepts worked in the exhibition, as well as referred to some works or to its details. Being the catalogue also an exhibition space in a different dimension of the material one, text was articulated with image in the same direction of the exhibition itself. Text was not taken merely as an element of verbal communication, but was assumed as a visual element, changing its view from a regular frontal plane. It developed over faces of a cube, modular form of the exhibition, acquiring different directions that made reading more difficult, but more close to the core data held in the exhibition.

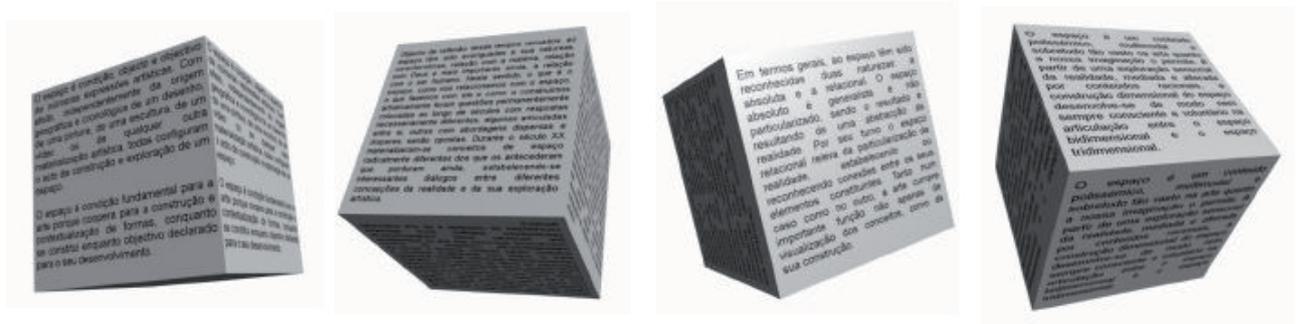


Image 10 - Extracts of the catalogue, articulating text and image. Blender file

Reflecting

As a visual artist, my work is developed throughout several pathways that don't include the works here presented. They were constructed solely through the reflections and relationships held in the process.

This exhibition provided ground for relevant individual reflections and consequent actions, but as it is intended with every art form, its connection to others meant a great deal of effort to overcome the enclosure of its results. Art is always research, but not in the same way as science. It exists only when its results are open to meaningful and perhaps different readings, while science aspires to a more straightforward reception. Art based research must take great care in working towards an efficient and creative reception, rather than becoming a closed monologue. This was prevented throughout the exhibition by an adequate theoretical framing through the catalogue, and by guided tours. The catalogue presented the context, concepts and general framing of the

exhibition, providing both iconic and textual general information. The guided tours were directed towards different age-levels, providing focused information for each of the visiting groups and its participants, from 3 to 82 years-old. What was intended was simply to offer data that allowed the visitor to build his or her own reading. Afterwards there were some further approaches that explored some of the aspects of the exhibition, as this paper, sharing and promoting discussions around it.

Space is the structure that allowed this exploration of relationships between the dot, as a singular unit, and the global system that encompasses it. The individual, as the dot, is always in connection with others and ultimately to a system to build a whole that is better than him/herself. Those relations are not suitable to be reduced to the system itself, but must be enhanced to other spaces that encompass the system under analysis providing a global, yet somehow incomplete view of the whole, for there are far more systems than the ones that we are prepared to see. While incomplete, this viewpoint provides relevant data regarding our positioning over the world and ourselves. This exhibition and paper are just two contributes to this discussion.

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