Projecting with Emotion Methodology: Learning from drawings

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Abstract

In this paper we would like to describe a methodology of thinking – Architecture.
Today there are several concepts about the perception of the space. All sensorial experiences are, now, present in the way of see and interpreted the space. What we see is something that creates fillings and sensorial values, according an independent way of life; it is like walking with the eyes. Architecture and Art are in the same line of understanding the meaning, but there are something that it is different; the border between the concept of the pass and the history of the buildings. Architects are now using a different methodology to conceiving projects. They work between what they have in reality and the final form. Doing something that it is more than only "Architecture". They want to create atmospheres and emotions. The public make part of the scenario, and some unusual ideas, like the sensation of sublime, cold, hot, water, ice, storms, etc., are now present in the identity of the final project. The recognition of the space is turned to be spacio-temporal, and movement it is not only an optical phenomenon.

Key-Words: Emotion, Architecture, Perception, Learning, Drawing, Project

1 Introduction

Much has been written by academic researchers about the complex issues surrounding the problem of projecting with emotion. To understand perception and the principals elements who provoke emotion and emotivity.
In the image of a drawing of architecture, what we observe and our interpretation is directly connected with the symbols and graphic elements, which will express an idea that the author wants to be interpreted. It is the meaning of the meaning. The importance of the sketch is in the representation of the space (real or imagined), functioning as a record of the idea and how it will be executed. If we are trying to understand a project of architecture, what we can see? How we can interpret the space of the image and its connection with the meaning, or with the final result that the author wants to revel? To understand space we must found contextual instruments of communications and the respective meanings produced by them.

The necessity of Man dealing with emotions in response of the living experiences, made us create languages related to sensations. Point, line and plan become the base of design and representation, as a visual communication. Drawing becomes a visual support of Design, and it intention isn't just create aesthetic representation, but also communicate. And the result of that is the form. By comparison according to Georges Péninou [1], the advertising image produces the appearance of an attitude, as equal in architecture, which, much more than a knowing acquired, it is the response triggered by reactions in the recipient. For this author, the purpose of advertising is not communicating an image, but rather communicates through an image, the message that you want to stream. In parallel, in an architecture sketch, the meaning of the idea is not only representation of the image of the sketch, but the attitude and mentality of the observer.

Architecture has always been the result of the delicate balance between art and science. We perceive things based on our expectations and knowledge of the world. Architects, Designers and Artists in general often try to portray a scene that has an emotional and psychological effect on the viewer, by drawing on their own experiences and thoughts, and that it is here that starts the new methodology for conceiving a project, with creativity.

2 Learning from drawings

The drawing representation has been, until some years ago, done by hand. Today, young people, starts with normality them "life of registers" directly in the computer.

For some people the use of computer drawing programs represents an advance in the technology, and it is the same of doing a handmade drawing, like as being a drawing utensil, but for others it is not a "drawing". But first of all, we must understand what it is perception? We could try to define perception as the process of organizing, interpreting, and selectively extracting sensory information. The perception leads to the expression. The expression is essential for the perception. One "sees" and "it interprets", the other "represents".

The human processing information it is done by the information received and responses given via input and output channels, like; Visual, Auditory, Haptic and Movement. The information is stored in memory, and it is processed and applied. To do that, we must have for words in mind; Reasoning, Problem-solving, Skill and errors. The obstacles and methodology that the architect has to face are numerous; he must explain the meaning of his project. We understand that the tool that the architect chooses to work will go to influence the way of think, the sketch and for who observes the final drawing. That's why communicate is anything that implies an expression and an intention.

The trace will be always characteristic of the expression of who drew. It will represent ideas or forms that are translated graphically by the perception of the observer. The architect draws spaces through the manipulation between the Real and the Virtual, appealing to several techniques, such as: linear drawings, perspectives, sketches and computational animation. Nowadays the computer programs facilitate the execution of ideas, with sophisticated programs and "renders" from real images. The observer obtains in real time the image of the final drawing. Technology is constantly growing and changing ours ways of living.

The message lives in the expression of the idea. That expression, which shows the form and demonstrates several characteristics like the line, the colour, the 'renders', etc., is done either by hand or with drawing software.
The methodology of doing architectural projects has been superseded by commercial developments, academic studies and social history, based in ideas and representation of meanings. New forms and volumes will appear with modelling complexity and irregularity shapes[2] . Sketches made by hand or using computer programs are the visual manifestation that allows the transformation of a concept into another dimension or media. Exploring the representational qualities of sketches, discloses the tangible and intangible aspects that make them fundamental. Digital sketching programs have attempted to intimate conceptual thinking.

2.1 Projecting with Emotion- an experience

According an experience made in October 2011, in Gadansk at the University of Technology, in Poland, and Beira Interior University, in Portugal, about "Art and Science – Synergy of Technology and Art in the City Spaces", we understood that *Emotivity*, in projects is something that emerges expression, it is interactive, reaches people, and create ideas. The group of students and teachers are from 5 different countries, and Universities; Gdansk University of Technology - Politechnika Gdanska – Poland ; Blekinge Institute of Technology - Blekinge Tekniska Högskola – Sweden; University of Plymouth - United Kingdom; University of Liechtenstein - Universität Liechtenstein – Liechtenstein; Bremen University of Applied Sciences - Hochschule Bremen – Germany and University of Beira Interior - Universidade da Beira Interior, Covilha – Portugal. Students of the workshop team were divided in 5 individual groups of working. Itch group works with different methodologies and interpretations of the space; *Expectations* and *Context*.

The team works with the principles of; Proximity*; Similarity; Continuity; Closure; Area* and *Symmetry*.
When the group starts working, must feel the "place" according some different rolls, like; Appropriation, Dissemination, Empowerment, Networking and Subversion. With this the student starts to fell emotion and turned to be more creative. Drawing or Sketching is now digitally created and can appear unbelievable to the modern eye. But the basic image formation process has not changed.

With this methodology, Images play a fundamental role in the representation, storage, and transmission of important information throughout our personal lives. The message lives in the expression of the idea. That expression, which shows the form and demonstrates several characteristics like the line, the colour, the 'renders', etc., it was done by all groups either by hand or with drawing software.Drawing is a way of communicating and we can learn with it. The computer drawing programs do not reduce the responsibility or block the creativity of the designer.To architects, that make part of this workshop team, the perspective started to be a basic tool that takes to the demonstration of concepts and ideas. These representations, that are not more than what Virtual Reality, become the most intelligible drawings of who observes the project.

The groups use cyberspace and virtual reality to offer the technologies of computer animation and simulation. During the design process, virtual reality technologies offer to the team of architects great enhancements in visualization, sensualisation, and physical experience of virtual rooms.

About the use of virtual reality it was carried through, in 2006/2007, a questionnaire to 100 students of both sexes. From 1º year and 4º year of the Architecture Course of the UBI and also with 40 architects with at least 10 years of activity.
Questions asked with yes and no answers:
1 - For you, drawing on a computer is easier than by hand?
2- Do current drawing programs correspond to your expectations?
Questions asked requiring three examples as answers:
3- Enumerate three characteristics of what it is, for you, to draw?
4- What differentiates the drawing elaborated by computer or by hand?

The totality of the inquired people finds that the existing drawing programs correspond to them expectations. The architects with professional experience, even so understand that the initial sketches are better conceive by hand, the expression and the aesthetic pleasure between the two methods are equal.

The Expression, it is not lost when we use drawing computer programs. This speeds up the execution proceeding and only facilitates the presentation. When drawing, independently of the chosen method, "feelings" and "Imagination", they are clear in each image, showing the intentions of its author.

All the process of conception, of a project, consists of a long series of imagination and of the attempts of the designer, to transform a set of traces, in a corresponding form, the material and the reality.

The architecture is in first place art and than a science. But with the indiscriminate use of the computer, without rules and aesthetic principles, architects had become “anti-aesthetics".

The conscience of the use of computer drawing programs must be always allied to the understanding of that it is plus a tool of register of our ideas and intentions. In contrary, we will fall in the triviality and the projects will be only what the computer allowed and not what the architect wants.

The virtual reality becomes the way most advanced of representation of one project. For the observer it will be same thing to observe a perspective made by hand, or by a drawing computer program.

Virtual Reality is considered one of the most exciting technologies today, constantly evolving and improving.
The expression exists! However, in the virtual moving world, the receiver covers all space in constant movement and obtains an experience that in the static images in 3D never will obtain with as much perfection.

With this considerations the team of groups, use all kind of technologies to input ideas and show the projects proposals.

2.1.1 The workshop and the Approach

As first step of the workshop, drawings and sketches was understood as form of communication, and students must understand the distinction between occasional and intentional. They draw, observe and represent the objects at hand and body scale. With that they start drawing memories from the city, with urban image and sequence analysis from the “place”.

Then the group started to understanding the evolution of architectonic form, at the same time, teachers are challenging the students to the critic and the aesthetic analysis of the architectonic issue in its different significances: theory, criticism and aesthetic. Developing theories and different ways of feeling the project, according new perspectives of doing projects. Acquaint the hermeneutic diversity in dimension as in bounds and approaches.

The intention and approach is to transform students as self-made man, they were formed like an architect traveling, drawing, painting, photographing, measuring, and writing. With this attitude they will starts felling an aesthetics emotion, and a creativity way of thinking. The project will appear!

2.1.2 The workshop and Goals

In the website of the IP programme all participants could read the general idea for the process: "Universities has always contributed significantly to the advancement of disciplines, which thrives on visions of individuals and strength of team-work approaches. In the last century, universities were constituted as cities fragments, influencing their integral development and contributing with their characteristics. Gradually, many of them became isolated from the city, even long before the idea of a university campus appeared. Today, even if located in the street frontage, too often is the university edifice too hermetic to contribute to the city itself, to enrich it with emerging new ideas. At the same time it becomes clear that not only the traditional distinctions between disciplines are increasingly questioned but also the demarcation line between the Academia and the Outside. Thus, one of the important tasks is to bring back the broadly understood traces of university's presence, its stimulating intellectual ferment, its artistic, architectural and scientific ideas into the city – its landscape, perception, its social and spatial characteristics. Interwoven with the city space they become a means of sharing fascinating concepts, change the perception of reality enriching it with new contexts, serve as a tool of education and social change.

The idea of the Intensive Programme is to explore how the phenomenon of growing interdisciplinary approaches and tendency toward mutual interrelation of art, architecture and science could become visible in the city itself. During the realization of the IP the students will develop installation/public art/architectural landscape/ that will show/use/refer to the transdisciplinary nature of Art & Science and work out how the concept could manifest itself in the city space. The theoretical essays, descriptions of approaches developed during the workshop as well as design projects will be disseminated in frames of the 2nd conference Art and Science in 2012 (Art Line project) as well as published in a book Art & Science – synergy of technology and art in the city spaces." [3] One of the principals goals of this methodology, is to input the idea of Urban regeneration in addition to being a project, with all the inherent constraints, is even more challenging because there is still the responsibility of a history to preserve or simply maintain present some of the important memories.

2.1.3 Community Participation

The aim was to make the place user friendly. To do that, all groups, in the intervention area, must talk with people usually use that area.During all process, the team must talk with the community and share experiences and ideas. On the end of creative process, again, they must talk and show the final project, for discussion with the public in general, and with the community, including the others members of the others groups. They organized a conference, and with power point presentation and increasing with some performance, they show the result of them work.

3 The Project Details

We cannot talk about visual perception without speaking of the drawing. What is the drawing? The design is a fundamental instrument in the functional and planning methodology in architecture, in the Visual Arts and design, "the design is probably the form of expression that best sums up our relationship with the world. It enables us, with the mental preparation, developing ideas and discovery of what still we do ourselves. "[4] All groups, individually, went to outside do interpret the space and the intervention area. According them felling's, they started doing some sketches, over the plan, to understand the most important areas for the project. To do that, they talk and make some marks with colours.(Fig. nº 1) They started to understand the meaning of the streets and walkways.

Fig. 1 "Plan of the intervention area"

While all groups, start writing in small papers some words, ideas and sketches about what they fell. (Fig. nº 2)

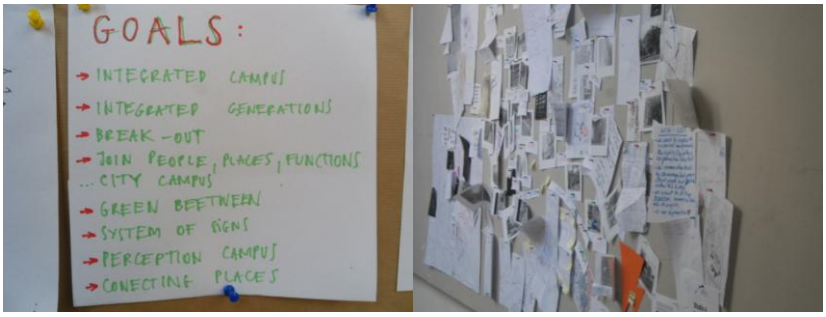

Fig. 2, "Planning the Project; first steps"

In this first level, the team make several meetings and do presentations of feelings and emotions, about the place. All groups do the same and discussed the different point-of-views and paradigms. They just can talk or do performances (Fig. nº 3). Starts the discussion time!

Fig. nº 3, "Groups working in the presentations"

In the second level, all people involved in this IP project, starts learning from individual drawings ideas. Emotion it is reflected in all sketches and presentations. While, teachers give some individual conferences about parallel problems, according the message that they intended to pass. The thematic of the conferences are around what it is architecture, perception, the meaning of public objects of art, new methodologies of conceiving projects and sow one.

4 Conclusion and Results

The final work it was presented in the Mini Symposium with the results of the international workshop. The groups could made presentation using video, power-point, models, performances, and portfolio panels. They transform the space; they make the place user friendly. As an example we can see in (Fig. nº 4 and Fig.5) the proposal of the 2 nd group, the transformation in front of one of the buildings, near the university, and applying sculptural objects, originated by a need to guide people into campus direction.

Fig. nº 4, " Pixel stream made of pixels of water, grass and light panel that would light when you step on it... or if already be shining - that would escape from you giving students invitation to follow it."

Fig. nº 5, " Convert undervalued city elements into living pieces, applying on the interior side of the modules, panels with interactive and useful information. The public himself can actually update the information."

First Conclusion:
As we can understand with this IP, Methodology, the drawing, the project and after the subject are concepts inherent architecture and not only, are also inherent in the design and the arts. Starts for us arise the idea, thought, and the first step will be the design or the Indian ink on paper, even if badly done and sometimes hesitant. Then we move on to the computer or manual drawing, which today is to be an essential tool in planning methodology.

Second conclusion:
We can consider the whole process in architecture as virtual; the role of an architect is a virtual role, because this must be endowed with the ability to imagine the whole process virtually. I.e. creates a virtual world based on thought, streamlining, at the junction of factors on which it bases its perception, building a reality that, at the outset, it is just made of ideas and will pursue, as will passing to the paper, giving a first life to its virtual world, which could wipe out or not materialize. [5]

Third conclusion:
Aesthetic emotions arise in response to formal properties, creating empathies that lead us to joy or sadness.
Forth conclusion:
The aesthetic perception of a particular architectural environment depends on a number of perspectives. In this sense the Virtual reality has become a fundamental tool in the context of perception. The tool that chooses to work will influence the thinking of who draws and who observes the final design.

Fifth conclusion:
Aesthetic experience can be defined as the time at which the subject establishes the relationship with the subject, this relationship, in which the body and all senses are intertwined. As Umberto Eco has to exist a dialogue between the subject and the object. [6]

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