A Sketch is a notation drawing!

A Sketch is a notation drawing! This sentence is the foundation of our point of view, eliminating the differentiation through the referential source of quick drawings. Generally in quick or rough drawings a notation drawing is taken from nature whereas a sketch is an expression of a thought during the creative process of an artwork, architectural or design. However, we should consider that there are two possibilities for the notational drawing, as an act of drawing what we observe from nature or as an expression of images generated by thought.

This paper looks at determining a framework for the concept of sketch that goes beyond the thematic referential source to support an expressive attitude of the individual. Seeking for possible typologies of notation, depending on the kind of information that one tries to translate (from the natural or the mind) and especially by the methodologies used in the translation, the idea of sketch, as an architectural drawing representing form, space and the draftsman as sentient entity, results from the translation of specific intent that synthesize the relationship between these three components.

Analyzing the notation type implies rethinking the actions of pointing and notate and their results. In the context of this issue, these notes –sketches- are made in the field of architectural design, whether it is actually taking place or if the architect is in a 'journey' in order to discover other realities, enriching his experience. The design process is considered as a philosophy for daily acts, which includes sketching. Therefore for those integrated in a learning process the notations will be a part of their active or latent design process.

The notation drawing and the design process

To cast an initial typology we follow the proposed division by Laseau & Crowe [1], which suggests that the several contexts or activities could be synthesized in three concepts: Translation [2] (recording in the original), the moment of gathering all the types of data relevant to the design; Analysis, data processing in design process; and Design, where the data is handled and transformed in solutions. The theory on these three activities relates the designer with the studio duties and the environment that surrounds the practice. Sketching is understood as a need of getting familiar with this environment through graphic actions and that depends qualitatively, of the diversity of experiences taken from the environment.

The moment of translation confronts the conceptual processing of the symbolic and cognitive duality, and optical stimulus associated with the observation. In the paradigm of representation of the architectural object and its environment, perception is crucial for observation and representation. However, this does not imply a rejection of the symbolic function but a displacement to the 'expressive' dimension of the author. In this context, the role of perception is to note formal diversity and richness in the object and its space, increasing the quality of the experience. In the translation synthesis, the scene’s representation assumes a simplified character which according to Laseau & Crowe implies discrimination. It covers both the selection of elements of the observed scene, derived by focusing attention on the relevant design elements, as the set of abstract elements [3] used to optimize speed and performance. This whole experience translates the meaning of communication, which is proposed here with the intention of the sketcher to communicate with him, using the tools that he knows he has, revealing the corresponding stimuli.
Translation (recording) has, in this set of actions, the attributes considered fundamental to Sketch without however excluding the hypothesis that sketch also exists in analysis and design. In these cases, the connection to reality is replaced by conceptual codes typical to each phase. If the drawings produced in acts of translation contribute greatly to the analysis and design, the knowledge gained on this transforming subject, plus the operational specificity of the analytical process, as well as the formulations resulting from the development of the process, contribute greatly to an intelligent perception.

The analysis actions are not disconnected from the translation, however, the functional sense or purpose of preparing the images is entirely different. By the time of its production, the author is no longer confronted with the architectural form but with the image produced. He operates an articulation between the embodiment (through previous graphics experience) and the observation of drawings made with the aim of producing ‘new’ graphic entities derived from new discoveries (heuristic process). At this point, abstraction of relevant forms or even change of the paradigm of representation for a conceptual dimension, are some of the strategies of synthesis that allow composing and suggesting other objects, in a topological or formal dimension, through processes of shape generation [4].

Whether there is a work in progress or just confrontation of ideas, the design process brings another set of attitudes which indirectly affect the translation of reality. The specificity of these processes requires analysis and translation. In spite of different attitudes, the types of graphics here presented are used in order to achieve fluidity. It is unquestionable that this particular way of drafting depends on the ability to perceive reality according to the system of codes that each person holds, which is proportionally developed as the practice and reflection on the documents and the actions that generate them. However we believe that the graphic codes are not restricted to the design process phase but they are interchangeable between drawing from nature and from memory, as a mixed combination of drawing systems.

These encoded notations, common in the design process, freeing the sketcher from restrictions give space to the flexible thought, specifically, by using the graphic resources to consider alternatives based on their ability to trigger other possibilities of the research.

However, in consensual moments of the intermediate solutions, the notation drawing will be used to visualize and evaluate under the parameters of material existence. This attribute makes it a formalization drawing working with shapes outside of the conceptual stage and, in architectural context, with shapes that allow analogue experiences as the ones lived facing a street scene. In this last case, one easily verifies that there are no differences between the translation type of drawing and the translation of the image that the author has of its presence in the ‘virtual space’ of the mind. Nevertheless, this feature is highly dependent on the methodological process followed by each sketcher.

The sketcher’s expression

Concluding the previous set, this work underlines a fourth function, less developed in Laseau & Crowe’s work, designated by connotation [5]. This notion, connotation, is crucial for our conclusions about the nature of the sketch. The connotative sense surpasses the amount of visible mimetic content. Instead of translate practical and utilitarian needs, an equivalent to how objects are optically seen, the sketcher seek the environment feeling, while making one drawing or a sequence of them.

This function refers to the contribution of character and individuality in a drawing that recognizes the possibility of having or not these attributes. The presence of this fourth function in the context of this work is essential for a given drawing to be considered a Sketch. It can be said that a sketch is always a notation but a notation is not always a sketch if there isn’t the presence of this function. This is a highly debatable claim since it will be virtually impossible to make a drawing without authorial marks or obtain two equal drawings of the same set of objects by the same or different authors.

Connotation could emerge from the skill of the author closely linked to the ability to compose accentuated by the graphic qualities of the drawing. This sets the idea that the content of the transmitted message, a palette of representative visual attributes of attitude, belongs to the limited universe of ideas of its creator and, at the same time, an interface to him. It shows a coherent statement of the intellectual and emotional values on a given theme, architecture,
space and related human factors are sublimated in the act of drawing: the choice of certain frameworks, corresponding to contrasts between the objects of a scene or composition fields; of certain graphics tools, or configurations to solve certain architectural elements. With a stronger focus on the concepts through which the draftsman sees the reality and the drawing, more acute is the thematic treatment, focused on substance and less spread in superficial appearance. These are the principles underlying the synthesis and from which one can understand the subtle variations and the graphical aspect of the drawing.

Considering that each sketcher has his graphic ‘language’ [6] we are concerned with a way to expression based on the ability to metaphorically qualify the sketch. In this paradigm the author is no longer interested in the descriptive accuracy of the referent, by the revelation of what he feels through those objects. [7] The drawing offers clues about the sketcher’s perception, but also on the dynamics of his thought beyond the sensory realm. The represented image is a synthesis of reality projected on the draftsman, but for a Sketch, also a projection of the draftsman onto his environment. Its expression will be part of that cultural content that defines the character of the spaces. As a result, there’s a translation of the environment qualities that goes beyond geometry, static and mimetic isomorphism correction, typical to the canonical translations.

**Perceptual/conceptual, impressionist/symbolic-expressive Sketch**

It is considered that there are two ways of representation whose involvement is crucial to sketch. The tendency is to seek a balance between the perception/conception duality, between the visual stimulus of a set of objects, seeking a truthful representation, and the idea of transforming the concept through intellectual work and the sketcher’s subjectivity.

Mentioning the presence of a strong connotative function should not lead to the loss of contact with reality, with the observed object. The attention given to perception, proportion, scale and the relationship between objects and their basic morphological characteristics is crucial to ensure the drawing correctness principle. When the author knows what he is seeing, he knows how to draw it. In this context, the translation leaves the literal sense and becomes creation from observation. This understands the creation over the impression of the objects and their environment dynamics as opposed to the presence of reasoning and its typologies, culminating in an expression of the attitude.

This duality determines two creative ‘types’ to the expressive quality of the drawing; the drawing with an impressionist character and drawing with a symbolic-expressive character.

For an impressionist character drawing it is considered fundamental the feeling from visual, auditory and tactile stimuli, among others, and consequent action as reactive impulse. Environmental variations, such as changes in light, color, texture, sound, temperature sensation, the objects compositional dynamics and the person who experience the space, constitute themselves as agents to feel experiences which can be graphically expressed. Tom Porter, referring to a perceptual space dimension mentions the power of articulation of these stimuli with the Sketcher. [8]

The subjectivity of translating the phenomena that occur in the place is expressed in a random stain of contours, but it reveals an increased coherence and consistency, when observed within a sequence of drawings. The answer to this type of phenomena is intensely physical, with strong activity from the sketcher, moving the hand, arm and body in movements with great determination and syncopated flow. This activity also requires a great capacity for focusing and mental determination to keep the essence of the stimulus through a reasonable length of time and be compatible with the expression of emotions aroused by the presence in the place. In formal terms, this type of drawing keeps the pictorial qualities of the observed area and the problematic of translating the apparent instability of the universe to the drawing’s essentially linear, graphic quality. From the need to represent the continuous flow of transformation of human and atmospheric phenomena the sketcher represents, through graphical incident either structural or fast contour shapes, the space through the ‘masses’, its distribution in layers of depth and other impressions.

The drawing that is presented with a symbolic-expressive character, intends to reinforce the symbolic dimension ‘issued’ by the record’s qualities. Unlike the first, instead of responding to a stimulus, the drawing requires understanding and the formulation of a vision which results
in a synthesis of the object or the environment. As a reference for this kind of drawing, the
design of something that actually replaces the observation. However, symbol doesn’t mean
formal replacement by another entity that is not related to it (the key to this relationship belongs
only to the draftsman), but the recovery and enhancement of the graphics qualities produce
similar sensations on the viewer. As an example, the exploitation of visual dynamic
components, like relationships order-disorder, balance-unbalance, light-weight, concentration-
dispersion, the exploitation of plastic materials for recording, the graphic quality of the line
varying its thickness, density and surface. [9]

In this drawing, issues such as automation and fluidity do not relate to the relationship
stimulus-hand but with the capacity of manual flow responding to the image or feeling what we
want to see on paper. It is not just the play of abstract forms with connections to concepts
(typical in conception drawing) but, the interpretation of the environment according to a codified
system of concepts (signs and symbols) created by the reasoning practice on the design
process.

The drawing reflects the formal exercise that seeks to achieve correspondence between
ideas and the power of the picture, instead of working with the almost automatic translation of
the stimuli. Due to the difficulty in articulating and to rank a symbolic system in such a short
space of time, this approach is not the most practical way to represent the spatial environment.
So the author is engaged in shapes that are assumed to represent the whole, with a particular
spiritual dimension. Reaching the entire space domain implies the conceptualization of the
contents to be translated. These situations occur, especially when the sketcher is not in front of
the scene, when it comes a vision to a space.

Two sketches by Álvaro Siza

![Sketch 1](image1.jpg) ![Sketch 2](image2.jpg)

The distinction between the two types, impressionist and symbolic, is more important to a
conceptualization of a polarity than the possibility of making a recording with enough autonomy
to say that it belongs to one and not the other. The consolidation of the sense of this text can be
done with two drawings by the architect Álvaro Siza in his travel diaries from a journey to Italy.

The first drawing, a sketch made at Piazza San Marcos in Venice, shows a vertical
composition split in half where at the top area the architectural elements are distributed and in
the lower area people can be found wandering the square. A first look conveys a notation
quickly done with a fine pen and a steady stream. The pen touches the paper briefly, leaving
wave and curly marks that distinguish masses in planes of depth. The markings are distinct from
architecture to people. The first are controlled to produce a summary description of the type, the
latter characterize the dynamics of the group. However, the sensation refers to a rhythmic
connection between people and the basilica which was possibly the reason for developing the
drawing. The arches of the façade, the pinnacles and the domes are transformed into sets of
heads and bodies creating a dynamic environment that contrasts with the Campanile
representation, which is static and permanent. In the image the lines that create the shape of
the Campanile are the only vertically oriented and mark a contrast to the strength of the
consonant diagonal that supports the dynamic. The drawing is a strong impression; San Marco is structured in a connotative content that plots the composition and demonstrates the vision of space by the architect.

The record taken from Piazza Pio XII, at the Vatican, contrasts with the previous drawing in several aspects. It is clear, for example, that the beginning of the body of S. Peter Square's columns dominate the center of the composition. All attention is focused on this element not only by valuing differentiation, filling out a dark spot but also because the surrounding elements present a very low setting and high simplicity. The beginning of the sketch was very similar to the previous one, faster between serpentine lines, indicative of moving objects and defining the architecture of the foreground. However, its development runs to the emphasis of differentiation from the inside to the outside of the colonnade. In an apparent imbalance the composition of the dynamics of the colonnade seems to be pushed from the background to the center of the picture. The tonal accent using crossed lines, over the lines that define the columns, generates a contrast ratio that defines proximity, suggesting density and weight. The sketcher's attention seems to focus on the dynamic morphology of the colonnade which, according to this view is enhanced by the possibility of observing two parallel sides of the front elevation heavily contributing to the effect of serpentine. The frontal elevation of the top of the colonnade provides a scale which gives monumental character to the whole.

The themes and motivations which led to the development of the sketches are different and involve not only the ability to give manual response to impulse perception, but also to the progress of reasoning on the feeling that becomes increasingly selective. If in the first drawing the general environmental movement appears reflected across the entire image, in the second drawing the author focuses on the building as an element around which the phenomena take place, so from the center to the periphery of the image becomes pervasive and fragmented, not always for reasons related to the representation of the depth but by authorial choice that goes beyond their perceptual range.


[2] Using translation instead of recording because all the mentioned kind of drawing are recordings. Translation means the act of passing from the sensitive reality to the first sketch.

[3] Several of these abstract elements represent primary shapes and the connection with building process is a common place since the antiquity.

[4] Generative operations are the relations possible between two or more shapes or solids. The result is a third form.

[5] This is a form of communication which is the product of the manner or style with which the notes are made. (...) reveals the intensely personal nature of the thoughts (...), emotions raging from high excitement to calm contemplation, and preferences for precision or informality. (...) forms a message to others about our intentions, interests, and motivations;” LASEAU & CROWE, Visual Notes for Architects and Designers. P. 102


[7] The result of this feeling is structurally embedded in the composition through its dynamic qualities which ‘are felt through sound, tact, and muscle sensations, as well as vision. (...) describe also the nature and the behavior of the human spirit in a totally forced mode,’ ARNHEIM, Rudolf 1988 (1954), Arte & Percepção Visual, Ed. da Universidade de S. Paulo, São Paulo. P. 438. Translated from Portuguese Brazilian edition.

[8] "The combination of these varied sensory inputs reinforces, elaborates and may even alter our visual perception of the environment to give us a complete image which, in turn, can be modified by our own personality and motivation." PORTER, Tom (1997) The Architect's Eye. London: E & FN Spon. P. 29
