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From Verbal to Visual

Nazmive Ozturk

Assistant Professor, Faculty of Architecture and Design, Anadolu University, Turkey

*Corresponding author

Nazmiye Ozturk

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Abstract: Almost every verbal component can be converted to a visual one. This conversion emerges when meaning is produced by structural use of the material. In this paper there are two example which are designed by Nazmiye Ozturk. One of them is "Inflection and Surflexion". The second one is "Equal Combinations and Structural Continuity". Inflection, and Equal Combinations, which are constitutive concepts in Robert Venturi's book "Complexity and Contradiction in Architecture", are transformed into two design experiments.

Keywords: Verbal, Visual, design, Surflexion, inflection

INTRODUCTION

Does the design need to be explained verbally? What kind of relationship has between design and verbal explanation? Should verbal equivalent of a design be word or article? It can be reproduced such kind of questions about design and words. The responses of the questions can be varying from designer to designer or from project to project. Between 2009 and 2012 when I wrote PhD thesis, I searched how the concepts turn into forms. There are a lot of concepts in design and architecture. Some of them are old, some of them are new. Almost every designer knows Basic design concepts as rate, proportion, symmetry, harmony, balance, hierarchy. We can call them as old concepts. They are more new and contemporary concepts as inflection, ambiguity, flexibility, hybrid, complexity, equal. The new concepts mean new forms. Every new concept can come out as new form. The forms and words are languages which are owners of different structures. And can turn into each other. For instance when we say hourglass, it determines both word and form in our mind:

Table-1: Verbal and Visual can turn into each other

Verbal	Visual
HOURGLASS	

The table 1 is show that the form can turn into new word as well as the word can turn into form. In this presentation i would explain to you two design experiences. One of them is "Surflexion" and the other is "Structural Continuity". These two designs have common points. Both of them are visual counterpart of the concept.

"Surflexion"

This concept is not available in any dictionary. Because this concept is new concept or word uncovered by me with a form. How the "Surflexion" is emerged? When I have investigated old and new concepts in architecture, I discovered that in 1966 the American architect Robert Venturi derived new concepts for architecture and revived some concepts. The contradiction-adapted and contradiction-juxtaposed are some of the derived concepts. There are also revived concepts such as duality and inflection. I turned the part of these concepts into visual forms in my doctorate dissertation. The meanings of "inflection" which is one of them as follow:

- The act or result of curving or bending: bend
- Change in pitch or loudness of the voice
- The change of form that words undergo to mark such distinctions as those of case, gender, number, tense, person, mood, or voice
- Change in curvature of an arc or curve from concave to convex or conversely (http://www.merriam-webster.com/dictionary/inflection)

The term which is indicated by the latter of these concepts, used in calculus area of the geometry: (Inflection Point) is the point, on which convexity changes direction on the curve [2]. In this definition the orientation concept is covered the relationship between design and geometry with form. It can be said that the concept "inflection" from the all definitions above relevant to "design language". The meaning of the design language is general manners about which we can say as intent, making/formation and it creates form, structure and unity of language programs. When we try to draw the simplest geometry of "inflection", it is occurred this graph:



Fig-1: Change in curvature of an arc or curve from concave to convex

From this curved line we can generate hundreds of form alternatives. After this point it can be changed according to elections of designer and problems of the design.

Process

I try to search of question "how can I explain this concept in creative ways", because of my aim was explaining the concept "inflection".

It was essential that the symbol in Figure 1 should exist in form and section. I improved the curved line in Figure 1, from hands and with computer by drawing it two and three dimensional. Advanced all process of study by doing the models. Primarily in process which begins with paper models, I experimented with plate materials such as acetate, Plexiglas, metal. I take advantage of surface space for bending the surfaces easily. Inspire of sheet metal has hard surface, I obtained flexible surface, which can bend easily through holes on the surface Stainless steel plate, at the same time provide the form to be permanent. I gave the name "convex surface" to obtained design. The images belonging to all process' can be seen here in figure 2. We can visualize this process as below:

Table-2: Verbal and Visual Transformation of Surflexion

Concept -	Symbol	Design -	New concept
INFLECTION			SURFLEXION

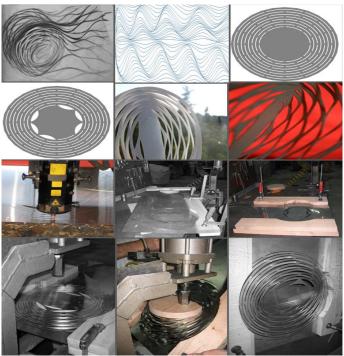


Fig-2: The design and production processes of Surflexion

"Structural Continuity"

The second example relies on "equal-combinations". The combination as combination of grouping merge used generally in a lot of areas as chemistry, economy, religion, painting, sculpture, poetry, not only in mathematics. Equal combinations mean to be equivalent or in equal amount of elements, which create combination, in integrity. In architecture or design area, this concept was used in the book of Complexity and Contradiction in Architecture by Venturi.

Venturi said that the equal combination was derived from uncertain hierarchical relationships of non-directed part and it is more difficult integrity than inflection. The combination between excessive opposite forms, two dimensional balance on building facades of these forms and formal balance in relationship between every part with integrity are equivalent combination according to Venturi [1]. "equal-combinations" is the concept, which is considered with concepts about obtained integrity with a combination of parts. It consists the concepts as continuity, multi-union, knitting rhythms and creates top title.

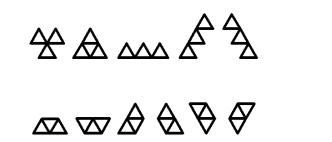


Fig-3: Obtaining From Parts, Variations Groups Different From Each Other

In the definition and symbol above as previous, it can be occurred variable alternatives depending on architect's design originality. According to Figure 3, the process belonging to part-integrity relationship which was designed by me as follow: For "equal-combinations" I designed the unit, which can be multiplied before. I improved this unit on computer by modelling it through three dimension. Then developed the form with paper models. At the result, I called the arised design as "structural continuity". The structural continuity means the part continues to stand as one unit and when it multiplied. At the end of process, it was occurred design which showed on slide and searched the potentials of unit's proliferation (Figure 4)

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RESULTS

Briefly, in design the form and concept can turn into each other (Table 3). The students which wants to experiment it, can follow the following way: 1) Let's choose the current concept. 2) Let's search this concept in depth and absorb it. 3) Let's create short dictionary definition. 4) Let's turn it into symbol (graphic expression). 5) Let's consider this symbol as three dimensional and design the form. 6) Let's give the new name to created form.

Table-3: Verbal and Visual Transformation

Re-definition	Visualize	Design	Rename
Verbal	Verbal → Visual	Verbal+Visual	Visual → Verbal

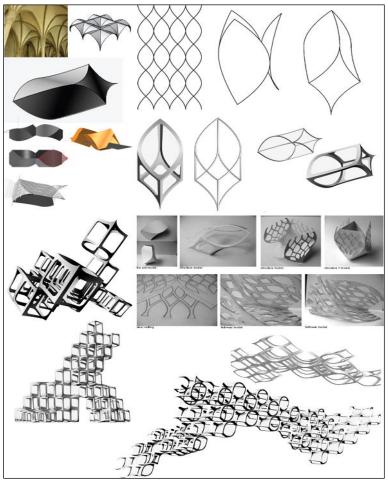


Fig-4: The design and production processes of Structural Continuity

REFRENCES

- 1. Venturi, R. (1988). *Complexity and Contradiction in Architecture*, 7. Edition, NewYork: The Museum of Modern Art, Graphic Society Books.
- 2. Steward, J. (2011). Single Variable Calculus, USA, CA: Brooks/Cole Cengage Learning.