Issues of Inscription in Temporal Experience

Re-composing a Staircase

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Abstract

Any attempt to compose temporal perception of space, that is to expand our ability to create time forms rather than spaces, brings forth questions regarding implicit assumptions and the "ideas we think with". These include metaphoric process, inscription, temporality and spatiality. This effort is part of my general research regarding the inscription of temporal experience in architectural design. The spatial and temporal element of the staircase is used as the key-example allowing me to study the way that embodied experience relates to spatial and temporal parameters. I claim that perceptional mechanisms are analogous and linked to those of inscription and therefore they can be notated. There can be no reflection on perception without some mechanism of inscription; there can be no conscious experience that isn't inscribed in some kind of language. The key to understand the following analysis is the belief that in descending or ascending, the moving body and the spatial element that directs it, constitute a unity a new sign which is formed by the interior dipole expression - indication.

Analysis of the XENIA's staircase -xenia is a hotel in the island of Poros created by the architect Aris Konstantinidis- and its re-composition according to Mallarme's poem "Igitur" is the object of my study. Given that space as whole is composed rhythmically of points of tension or discontinuity, just like time is composed of instants, I focus on such points of tension. Tools of music, such us these elements that constitute rhythmically the perception, that is quantitive and qualitative intonation as well as the succession that they create, will curry analysis out. In my previous study under the title "descending in landscape" I analyzed the rhythmical structure of staircase in terms of quantitive intonation, intonation by duration. In this new study I shall analyze qualitative intonation, namely intonation by intensity and tonality.

Through the analysis above, I shall explore ways in which staircase expresses -that is metaphorically exemplifies- the temporal idea of the spatial structure. The underlying metaphor being explored, resides in the manner and the mechanisms through which the construction of rhythm in poetry gets connected to the construction of rhythm in architecture. Metaphor does not relate one individual work to another but rather one system of thought and notation to another. The metaphoric relation allows meaning to be expressed differently in each system according to the manner of inscription and symbolization of temporal and spatial syntax. Thus, syntactic metaphor functions as a retrospective common foundation that links the two different symbolic systems, poetry and architecture. Finally what is silently implied by the metaphoric re-composition of the staircase is that syntax may underlie different meanings, so it may allow reformations based on the same syntactic structure but expressing different meanings.

Introduction

Any attempt to compose temporal perception of space, that is to expand our ability to create time – forms rather than spaces, brings forth questions regarding implicit assumptions and the "ideas we think with". These include metaphoric process, inscription, temporality and spatiality. This effort comprises part of my general research regarding the inscription of temporal experience in architectural design. The spatial and temporal element of the staircase is used as the key-example allowing me to study the way that embodied experience relates to spatial and temporal parameters. Particularly, modes in which perception of staircase predicts the perception of overall space are to be researched in this paper. I claim that perceptional mechanisms are analogous and linked to those of inscription and therefore they can be notated. There can be no reflection on perception without some mechanism of inscription; there can be no conscious experience that isn't inscribed in some kind of language. The key to understand the following analysis is the belief that in descending or ascending, the moving body and the spatial element that directs it constitute a unity a new sign which is formed by the interior dipole, expression – indication. Expression, that is embodied movement, is inscribed on its indication, that is the staircase and conversely, indication prescribes its impending expression.



Figure 1
View from ground floor. (Photograph by Aris Konstantinidis)

Analysis of temporal structure and perception while moving on the main staircase of the "xenia" hotel in the island of Poros created by the architect Aris Konstantinidis (fig.1) and its recomposition according to Mallarme's poem "Igitur" (particularly: "un coup de des jamais n' abolira le hazard") (fig.2) is the object of my study. Given that space as whole is composed rhythmically of points of tension or discontinuity just like time is composed of instants, I focus on such points of tension. Tools of music, such us these elements that constitute rhythmically the perception that is quantitive and qualitative intonation as well as the succession that they create, will curry analysis out. In my previous study under the title "descending in landscape" I analyzed the rhythmical structure of staircase in terms of quantitive intonation, intonation by duration. In this new study I shall analyze qualitative intonation, namely intonation by intensity and tonality. Through the analysis above, I shall explore ways in which staircase expresses -that is metaphorically exemplifies- the temporal idea of the spatial structure. The underlying metaphor being explored, resides on the manner and the mechanisms through which the construction of rhythm in poetry gets connected to the construction of rhythm in architecture. Thus, metaphor does not relate one individual work to another but rather one system of thought and notation to another. The transcription between architecture and poetry, considers rhythm as the subdivision of a span of time into sections perceivable by the senses. Furthermore, in this procedure, the metaphorical scheme clarifies an important functional distinction between referential meaning and meaning intrinsic to syntax. The two become interconnected since syntax functions to inscribe meaning and in turn, intrinsic meaning is metaphorically exemplified through its inscription in formal structure.

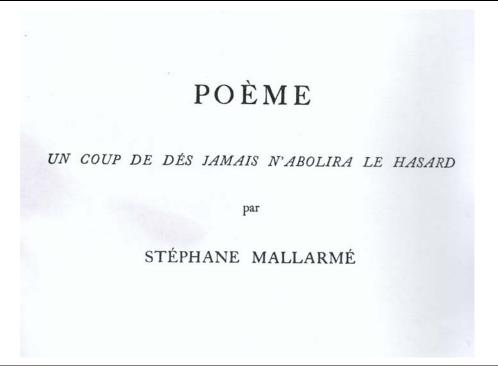


Figure 2
Poeme by Stephane Mallarme

The metaphoric relation allows meaning to be expressed differently in each system according to the manner of inscription and symbolization of temporal and spatial syntax. Thus, syntactic metaphor functions as a retrospective common foundation that links the two different symbolic systems, poetry and architecture. Finally what is silently implied by the metaphoric re-composition of the staircase is that syntax may underlies different meanings, so it may allows reformations based on the same syntactic structure but expressing different meanings.

Notation and inscription

I attempt to re-compose the staircase using elements that constitute experience while moving on it. Two issues derive from this effort. The first refers to potential of those elements to be transcribed

to different expressional systems. What is important here is the ability of systems to be expressed through symbols. In my example where I study the ability of empirical data to constitute a notational system, what I truly search, are elements that can be expressed through symbols and on which conditions the symbolic system they create may be considered as a notational one. The second issue is directly linked to the previous since it refers to what is silently implied, the inscription. According to modern views, mechanisms of perception are analogous and linked to those of inscription. (Derrida, 1967). Our spatial and temporal experience of world is inscribed in every creative human activity. In architecture the design of a project creates such an inscription.

Analysis re-composition

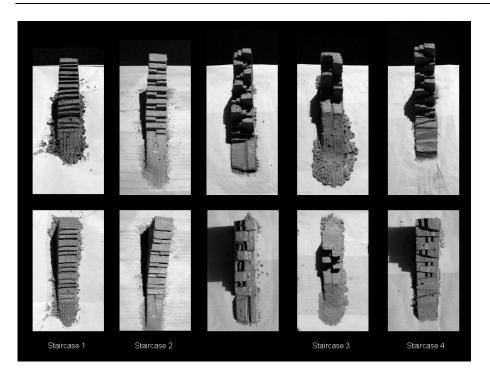


Figure 3 (I)
Re-compositions of staircase. (models by the author)

Analysis of staircase arises from its syntactic structure. It is based on movement's temporal syntax. Particularly movement is divided in two periods (we have two stair cases which connect three levels). Each period is divided in seven bars. Each bar is considered trilateral (three steps or one landing). In this normal structure rhythm is achieved mostly by quantitative intonation. Repetition of trilateral stepping establishes the structure of mettre which is external while rhythm is internal. The notion of rhythm exists independently of mettre, free of fixed models. The beat participates in rhythmic process by alternating strong with weak. Rhythm fills the bars in a variety of ways. The rhythmic motif - the smallest constructional unit of significant content and definite expressive value - is here defined by qualities of duration and strength. The motif comprises two distinct but indivisible events: up and down, light and heavy, arsis and thesis, long and short. But rhythm itself is defined as a "meaningfully formed musical line of force" (Steglich, 1927). Rhythmic groupings in the above metrical organization occur as the way in which one or more unaccented beats are grouped in relation to an accented one (Cooper and Meyer, 1960). Accentuation is achieved by means of qualitative bipoles such us dark and bright, tough and soft, rough and smooth, heavy and light, stone and metal. Above all, rhythm, in staircase, as in Mallarme's poem is linked to materiality, to the experience of succession of stone and concrete in architecture, of words in poetry. Because in both poem and staircase words and materials are used in order to declare their nature and an artificial relationship (fig.3:I-III).

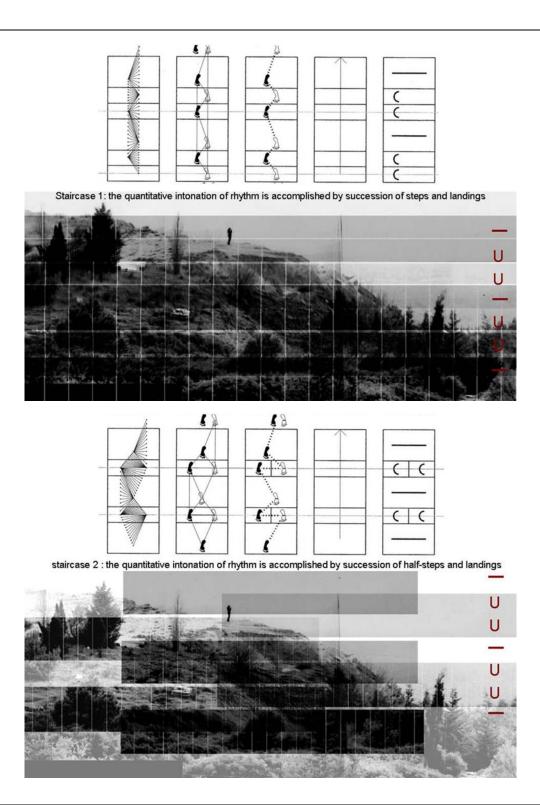
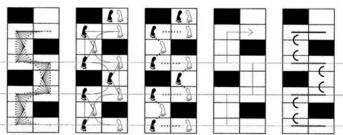


Figure 3 (II)
Re-compositions of staircase. (models by the author)

Rhythm as foundation of a notational system

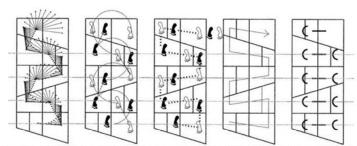
According to this view space isn't referred to as continual but rather as a set of points-spots. While time is referred to as non-continual but as a set of instances. The staircase is such a point-instant in the overall perception of space or a period of time. We perceive the continuance of both of them as a reconstruction. The process is synthetic and is called configuration. Configuration constitutes the first foundation of the perception of both time and space (Kant, 1979, 1982). It is based on the re-constructural function of memory and our natural tendency to perceive spatial and temporal stimuli and group them in primary shapes or scenarios. The definition of rhythm as sections of time

being perceived by senses renders it in a way of constructing the common foundation named configuration. So rhythm creates sections of time, namely points or instances whose structure can be perceived by senses. That is sets, of such extension and duration that they can be perceived as such. These features are defined by the individual's ability to conceive as continual only stimuli of certain extension and duration. Any signs of emphasis or change aid this process. We claim that such groupings provoked by signs of change are syntactically and semantically disjointed and differentiated, this is why they may be considered as characters of a notational system (Goodman, 1976).



staircase 3: the quantitative intonation of rhythm is accomplished by succession of half-steps and side half-steps





staircase 4: the quantitative intonation of rhythm is accomplished by succession of side steps and landings

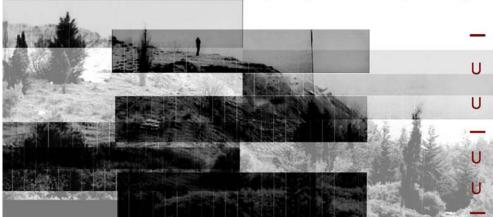


Figure 3 (III)Re-compositions of staircase. (models by the author)

In the 4th chapter of the book "languages of art", N. Goodman examines/ considers the possibility of the existence of syntactic and semantic requirements which may allow him to check when a symbolic system is notational. If the notational system is defined as an articulated unity of character and positions related to them, then syntactic requirements are related in turn with grammatical accuracy in this notation, while semantical ones refer to the conformation with what is correctly spelled.

The characters of notational system have to be:

Syntactically disjointed, syntactically definitely differentiated not ambiguous, semantically disjointed, semantically differentiated.

The definition of expressional systems as unities resulting from the placement of semantic upon syntactic fields explains N. Goodman's persistence to the exploration of their ability to be notated. What we seek isn't just the ability of existence of some writing structure but mostly whether this structure has some meaning whether it is semantically correct. Accordingly the question whether it is possible to define the meaning of the characters of a system is posed.

Or vice-versa knowing that the characters of a system are attempted to express some meaning is it possible to be led to those provided we know the characters? In the case of the design of the staircase our interest shall be focused on the capability of dealing with temporal units of rhythm as syntactically disjointed and definitely differentiated characters considering that syntactic field is the foundation of our capability to have Tran subjective access to experience. In any case attempts to deeply metaphorical, and as such it is claimed, can be realized not by transferring properties but mainly by broadening or changing fields. This broadening can be achieved due to the fact that syntax is related to the ability of characters to be inscribed. Inscription allows processing which is literal as far as syntactic field is concerned and thus able to modify it.

It will be demonstrated how temporal intonation of rhythm are considered syntactically disjointed and definitely differentiated characters, after it is explained that syntax here isn't considered to be a mental structure. It refers to the a priori ways of mental structure. It refers to the a priori ways of perceiving space and time yet, it is directly related to the way our body acts as medium of transferring data from sense to cognito. Eventually this is an embodied structure.

Rhythm - memory - staircase

Memory encourages us to study rhythm in the sense of temporal patterning. Psychologically speaking, memory is perceived by means of storage systems, commonly referred to as short-term and long-term memory banks (Parkin 1999). Long-term memory is loosely divided into procedural and semantic – episodic (or generally declarative). The term declarative memory denotes the memory, which is accessible to conscious and so contrary to procedural memory, which defines learning that cannot be defined consciously.

That concerns different dexterities, which belong to systems of procedural nature. The initial acquisition of certain dexterities might require conscious learning; however, these dexterities are converted into purely procedural activities by experience. Such dexterity could be the movement of our feet in order to ascent or descent a staircase. This movement is bilateral and based on the thesis – arsis (of the foot) dipole. So, it creates a general shape that recalls when required, giving it a particular form. That form is related to certain conditions of ascent or descent.

Shape is defined as the cognitive model for an understanding of the world. It is constructed by previous experiences of the individual and it can be used as a base for remembrance of facts. Its function lies in the fact that it reduces the amount of information that has to be stored in memory. Accordingly, shapes are crucial for the operation of short-term memory because they prescribe the size of the stimulant that can be perceived as a unit whether it is spatial or temporal. This is why they determine the psychological length of rhythmic sections and therefore include their syntactic

structure, their symmetry, the distribution of accents and how far the intervening events are able to be chunked-down into groupings of smaller familiar patterns.

Any attempt to analyze and design rhythm can be reduced to the studying of perceivable rhythmic sections according to either their quantitative features (extension, duration) or their qualitative ones as will be discussed. Movement on a staircase can be analyzed rhythmically in a set of spatial and temporal sections. This is a compulsory procedure for our organism because of its limited ability to perceive our activities as continual. The size and sort of temporal units created, consists the structure of our inner rhythm. This inner rhythm manifests itself in the relationships between units of time and between points of emphasis. Thus duration and stress are the central determinants of rhythm, its constituent factors. How much can be perceived "in a single now" depends also upon the speed at which rhythmic patterns are presented.

It is thought that both perception and action in all serial ordered behavior is hierarchically organized, that is, it involves different conceptual planning levels, as opposed to simple grammatical chains. It is most likely that this organization is rhythmically based, that the two concepts are highly related and that the character of segmentation in planned sequences is dependent upon neural organization. The perception of time or space is bounded therefore by the rules governing the structure of language, rules that underlie the structure of memory. Thus the span of immediate memory is related to grammatical rules which are themselves rhythmically based and by perceptual strategies developed as in the example of walking or dancing. What is regarded or retained as a pattern length is influenced by both its rhythmic structure and the degree to which immediately subsequent or preceding parts of the sequence interfere with memory processing. Rhythm plays a great part not only in perceptual-motor skills but also in emotional expression. The progress from involuntary spontaneous rhythmic movements towards voluntary muscular control and its close relation to the perception and ordering of time is widely recognized.

It is believed that heartbeats are comparable to rhythmical beats as far as speed and frequency are concerned. Moreover the contraction and expansion correspond with arsis and thesis that is the raising and lowering of the foot. The movement on the staircase initially organizes pulse rhythmically and so our breath. Respiration should not be considered just as an autonomic nervous reaction. Under some voluntary control, different musical tempos occur for different changes in respiration.

Any change in the inclination of the staircase entails a change in the speed of the movement and consequently a change in pulse. In that way little inclination gives the potential to gain speed and vice versa. Since speed in music or poetry is converted into tempo, any change in the inclination of the staircase corresponds to a change in tempo.

This inner rhythmical organization of our physiology eventually forms our perception and our behavior in general. The starting-point of the interpretative approach to rhythm has always been the expressive changes in features that don't change themselves, such as the fixed shape of the staircase. It persists in the quest of the meaning of those expressional changes -metaphorically exemplified changes- through their inscription in movement. We can infer that rhythm is organized through the staircase in which it is inscribed, and is perceived through the bodily movement by which it is expressed.

The temporal units of rhythm as characters of a notational system

What emerges from the aforesaid analysis is the potential of time sections – created by rhythm - to function as characters of a notational system. Syntactic disjoint ness and differentiation are their natural properties. That is because the prerequisite for their existence consists their distinction attributed not only to the function of memory or breathing but to our natural tendency for configuration as well.

In addition semantic disjoint ness and differentiation exist as a demand only if the syntactic distinction of characters is accepted. In fact differentiation of characters in to semantic and

syntactic factors is purely functional. It is argued that this differentiation is commensurate with the one between the so-called referential meaning and the meaning inscribed on the syntactic field of expressional systems. Eventually it is about the fundamental functional distinction of expression from inscription. The continuous swing between them defines the way we think. Those two functions comprise an entity being it's distinctive members. We are convinced that even before something is inscribed on the language of some expressional system, some differentiated relations have already been constructed which in turn lead to certain points of a language structure according to Saussure (Saussure, 1979).

To sum up if what is called pre-language existence of meaning is real this cannot consist of just distinctive "semainomena" without consist of the corresponding distinctive "semainonta". Eventually there can't be any thought without a corresponding inscription, so that it would be argued that thought has the structure of an inscription.

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