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*When does space afford a **fleeting** and **contingent** view of you?*

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Anti-form:

When does space afford a fleeting and contingent view of you?

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This paper introduces a new approach to the description of architectural form in order to foreground the fundamental properties that distinguish it from other media of expression. More particularly, architectural space is treated as a field in which the repetitive or contingent patterns of everyday use lead to the creation of particular relationships between the occupant subjects. The new approach to description is introduced through three parallel analyses. The first addresses Mallarmé's poem '*A Throw of the Dice never will abolish Chance*' (1897); the second discusses the conversion of an apartment in Athens, Greece, designed and implemented by our team (2006); the third deals with a diagram drawn by George Brecht in his *Notebook III* (1959, in: Daniels and Braun eds., 1991) to describe subjects included and relations developed in the production of a musical work. The new description of architectural form presupposes a fresh consideration of architecture as a medium and leads to a new stance towards architectural composition. To these ends, the analysis of the poem leads to an appreciation of the compositional properties that are associated with 'anti-form' while Brecht's diagram suggests a potential revision of the way in which we represent architecture. The architectural project offers an Example of how anti-form can be materialized by constructing visually interrelated multi-functional spaces, open to alternative patterns of use and syntactic interpretations. As they go about their everyday life, the occupants of these spaces acquire specific competence in handling emergent patterns of co-awareness. This leads them to a richer and more alert relationship to their environment.

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Keywords: Architectural Composition, Hypothesis, Anti-Form, Stéphane Mallarmé, Georges Brecht

- I. **Anti-Form¹ is a form which can be cognitively dissolved into parts in order to be imaginatively perceived in new ways and mentally reconstructed according to new syntactic relationships² while remaining physically intact. The process of reconstruction is subject to no fixed rules.** Each person will arrive at his/her own hypothesis, which will lead him/her to decide how to connect the 'bare' parts.

The parts are charged with specific properties.

The hypothesis is generated by a process of detection and discovery of the properties of the parts as well as of their common and distinct features.

The more properties get detected, the more alternative syntaxes can be projected.

Work on anti-form presupposes: 1) the awareness and exploration of anti-form's parts and their properties and 2) the awareness that they will be apprehended through intellectual engagement and through action bonded together in a *contingent*³ cognitive process which '*produces the sensuous element of thought*'⁴ (Peirce, 1998).

II. Stéphane Mallarmé, A THROW OF THE DICE NEVER WILL ABOLISH CHANCE⁵, page 8/11



Figure 1. *A Throw of a Dice will Never Abolish Chance*, page 8. (reproduced by courtesy of Michel Pierson & Ptyx, ed.)

Amongst the 11 Pages⁶ of the printed format of the poem, pages 4, 6 and 8 can be read in various ways, more numerous than in the rest of the pages. This is due to the way in which the *lyrical fragments or a few beats occupy one third of the space of paper in diverse patterns of dispersion*⁷. On these three pages, more than one complex of words 'thrown' on the recto (left part) are almost aligned with complexes of words on the verso (right part), close to the bounded spine of the book. The original⁸ format of the page is 38x56 cm - the Gallimard edition gives a smaller format of 32,5x50cm -, big enough - compared to that of the head of the reader - to reduce the probability taking a distance so as to obtain a *synchronous view of the page within a comfortable angle of vision*. Our eyes initially seem to 'fly' over the words. We cannot read the page unless we decide which reading path to follow, which words or complexes of words to combine. Being accustomed to the western top-down, left-right reading habit, our eyes move in the form of a directed sequence of horizontal and bent lines. Immediately, we realise that the usual printed 'material' has been left blank and '*silent*'. Reading is transformed into spatial exploration. We try to grasp the synchronic order of the page and the relative positions of the words, without focusing visually on any specific one; only then can we decide what in particular to read.

Anti-syntax/ Creating Crossroads: Page n.8

In the following five diagrams, I will demonstrate four ways of reading, in order to trace the constitutive parts and properties of the printed page of the poem. I suggest that this manner of reading can be applied to the rest of the poem and it can even direct decisions regarding its translation into another language.

DIAGRAM 1: CONVENTIONAL READING, RHYTHMIC MOTIF, BREAKUP OF THE VERSE.

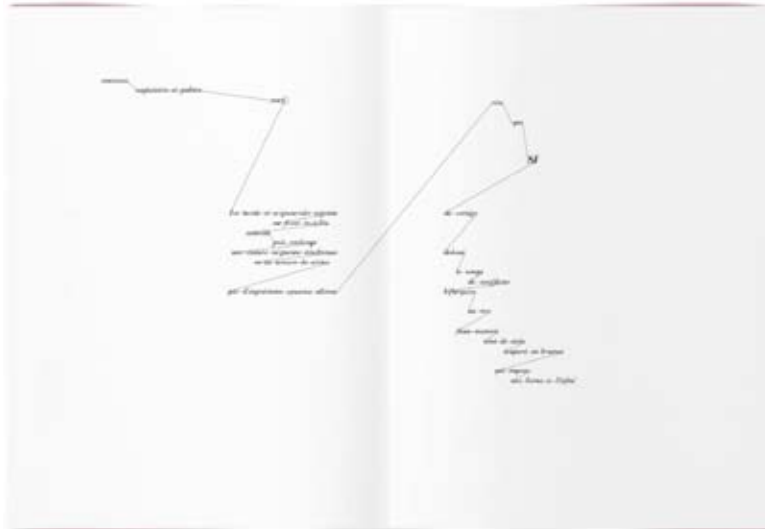


Figure 2. Diagram 1 on page 8 of the poem

The first possible reading is illustrated in Diagram 1 [Figure 2]. The zigzagging continuous line, directed from top-left corner towards the bottom-right corresponds to the conventional western reading, which also presumes separation between the verso and the recto of the page. Therefore this would be the first reading rule to follow. At the word ‘muet’ (silent or mute), though, the reader might confront a dilemma as to whether to move towards the verso part. The imprint of reading results in a conventional ‘*rhythmic motif*’ of connecting four parts in two dyads: i) 3 scattered ‘*beats*’, ii) a complex of 7 lines, formally syntactically and semantically articulate, iii) 3 scattered ‘*beats*’, again, ending at the SI (IF) which paves the way to other pages – capital characters permeate the whole poem and iv) another complex of 11 lines in a less articulate form than the first, exemplifying the breakup of the unity of the verse, deliberately implemented by the poet through the use of ‘*the print-less distance to separate groups of words or words themselves*’ in his ‘*pursuit for free verse and prose poem*’.

DIAGRAM 2: UNIFIED PAGE, DISTANCES, GEOMETRICAL CROSSROADS, SEMANTIC CROSSROADS AND FRAGMENTARY STATIONS.

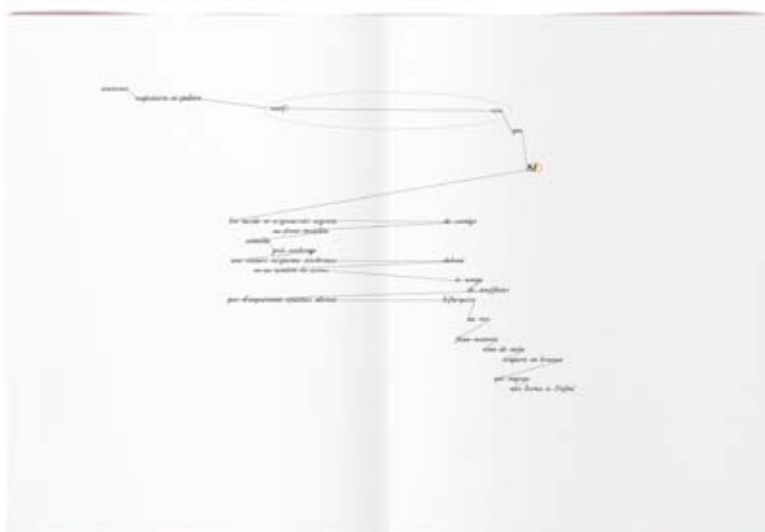


Figure 3. Diagram 2 on page 8 of the poem.

Diagram 2 [Figure 3] presents a second possible reading. The zigzag line is directed in the same manner (top-down and left-right), only the previously separated pages are treated as a single unified one. This is made possible by recognizing three properties of the printed page: 1) The blank white space surrounding the words leads the eye to mapping their distances, so that the ones that are closer are combined, revealing a **geometrical crossroad** and a shortcut. 2) The word ‘muet’ appears as the crossroad or intersection, of two paths: we either stay on the same page or we cross it breaking the conventional hierarchy of pages. 3) The word ‘muet’ acts as the fulcrum of this dilemma. It is spatially closer to ‘rire’ (silent laughs) *while also* being syntactically connected to it – adjective defining a noun. At the same time, the two words, ‘muet’ and ‘rire’ are semantically contradictory. Had we resisted their spatial connection we would be led to pursue a **semantic crossroad** while following the same direction in the progression of reading.

Next step on our path the ‘SI’ (IF) works, as Mallarmé himself notes in the preface of the print edition, as a *‘fragmentary station of a capitalized phrase’* around of which, *‘imagination flowers and vanishes swiftly’*.

DIAGRAM 3: REPETITION.

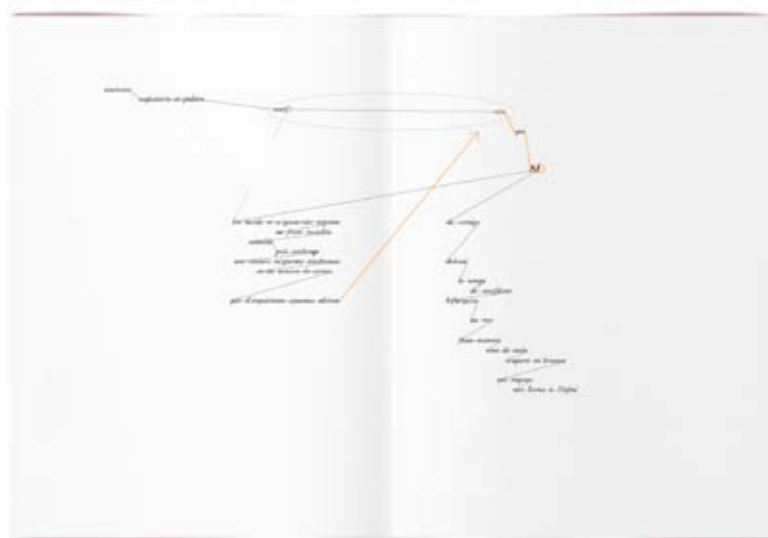


Figure 4. Diagram 3 on page 8 of the poem.

A third reading emerges if we assume a combination of the readings of the diagrams 1 and 2, always keeping the top-down and left-right direction while accepting the words ‘muet’ and ‘SI’ as intersections of paths, as **crossroads**. After reading the six scattered words, we move again towards the left articulated part and after reading it we continue repeating the 3 scattered words of the upper part of the verso. In that sense a possibility of **repetition** appears due to the fact that the free single words (*beats*) can be connected with more parts of the poem.

DIAGRAM 4: PERIPHERAL VISION AND THE FLEETING TRANSFERENCE OF MEANING.

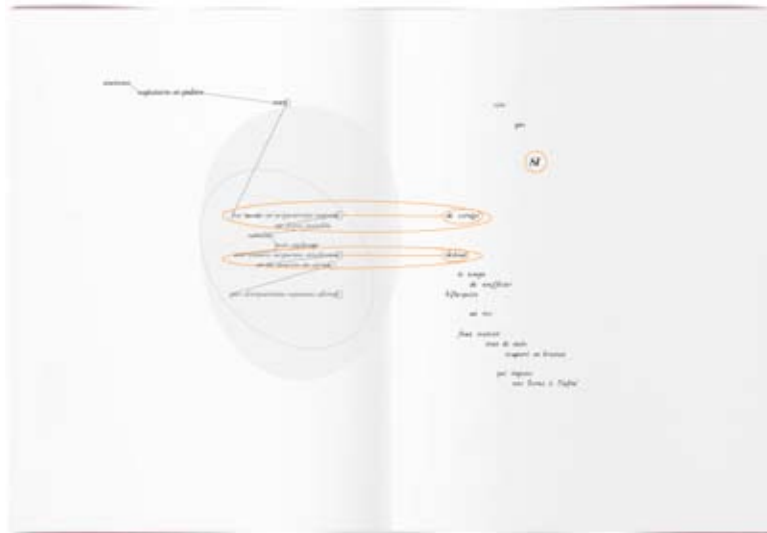


Figure 5. Diagram 4 on page 8 of the poem.

This diagram [Figure 5] corresponds to the most important and revealing potential of reading as a sensory act engaging vision. As mentioned before, due to the size of the printed page in comparison to the size of the head of the reader, one cannot readily obtain a synchronous and clear view of the page. The page as a whole can only be apprehended by engaging the **peripheral field of vision**. Peripheral vision detects shape and movement. Let's assume the reader concentrated on the 7-lined-complex of the recto. While reading 'La lucide et seigneurale aigrette' (the lucid and seigniorial plume) and moving towards the next line below 'au front invisible' (on the invisible forehead) a glimpse of something between shape and text of the two words 'de vertige' (of dizziness) appears. Since it is just a group of two words, it does not require much of an effort to almost read it. The same process is repeated while reading 'une stature mignonne ténébreuse' (a dark good-looking stature). Our peripheral imprint of the word 'debout' (up) is attached in a *fleeting* non-permanent way to the former phrase. I argue that this **fleeting imprint** also affects semantic meaning even if only in a less conscious way.

DIAGRAM 5: FLOATING SINGLE WORDS AND THE WHOLE, CROSSROADS IN TRANSLATION.

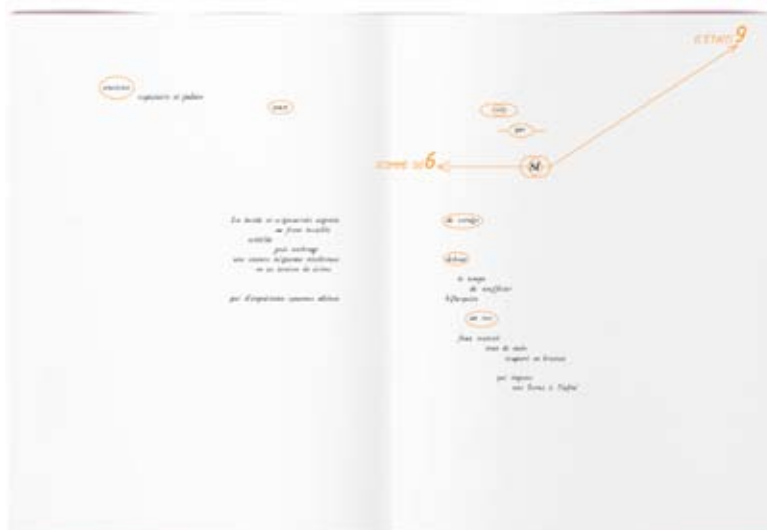


Figure 6. Diagram 5 on page 8 of the poem.

Eight single words⁹ have been scattered on the page: two of them are adjectives (*soucieux*, *muet*), providing properties to something outside them; one is an adverb (*debout*) attributing something outside it with a state; one noun with a preposition (*de vertige*) doing the same; one noun with its article (*un roc*), the only entity referring to itself; a pronoun (*que*) which can unite two phrases that are missing here but maybe can be found in the text; and finally two ambiguous words with two signifiers each: (*rire*) which can be either verb or noun, meaning ‘laughter’ or ‘to laugh’ and ‘SI’ which means either ‘IF’ or ‘YES’ in an affirmative way.

Thus, the ‘free’ scattered words are charged with syntactic and semantic properties leading the reader towards certain choices in directing the path of his reading and the conclusion, emergence of semantic meaning. What interests me, though, is especially the case of ‘SI’, which is a fragment of the ‘*capitalized phrases*’ that permeate the ‘*whole*’ of the poem, as mentioned by Mallarmé in the preface. ‘SI’ continues the phrase ‘COMME SI’ of page 6, duplicating the second part of it, and continues to the next page (9) with ‘C’ÉTAIT’: connecting them we would read, across the usual spatial continuity of text: ‘COMME SI’/‘SI’/‘C’ÉTAIT’. In this context, the reader can choose the signifier; by carrying the traces of a space outside this page. If the reader does not perceive or take into account the connections outside the page, does not perceive the repetition of the word and its relation to the next page, each of the three parts can be apprehended differently. The format of the whole printed text interferes with the very meaning of one single word, stationed in one single spot. Spatial issues of this nature are important constraints for the translation of the poem into another language, or for judging the effectiveness of a translation, or perhaps its impossibility: such features often cannot be included in the Greek translation, due to fundamental structural linguistic differences.

DIAGRAM 6: SCORE

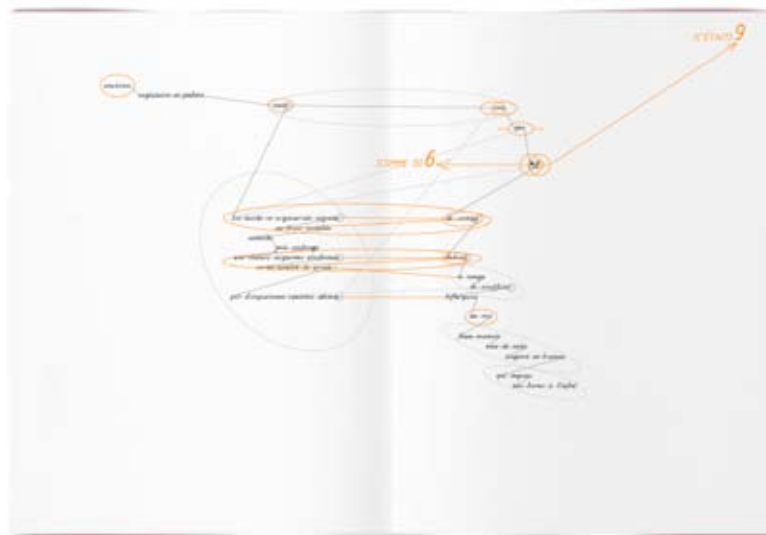


Figure 7. Diagram 6 on page 8 of the poem.

Diagram 6 [Figure 7] works like a score containing the potential readings suggested in the preceding diagrams 1-5. It also contains a synchronic notation of relational properties of the parts detected this far.

Wholeness: symmetry and differentiated sections. Prismatic subdivisions of the idea¹⁰

Aware of the intrinsic logic of reading, the linear, diachronic deployment of phrases and pages, Mallarmé introduces another spatial effect in order to further expand the potential cognitive import and affect of the whole poem, which can never be seen simultaneously. He introduces a structural ‘syntax’ which transcends the boundaries of the page or the pair of pages and covers the entire extent of the poem. We can perceive this extended syntax by virtue of the rhythmic repetitions of features and the symmetrical arrangement of the pages.

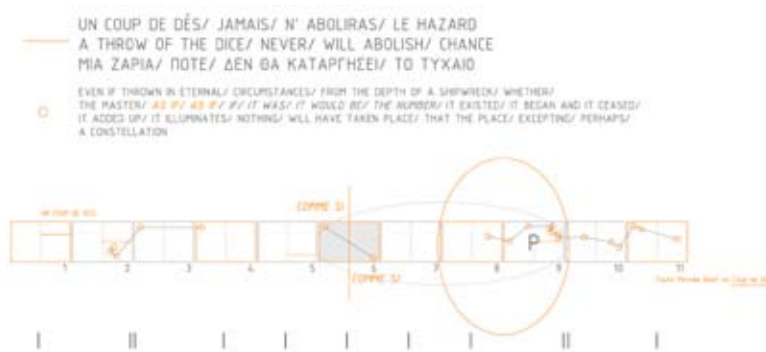


Figure 8. Diagram 7. Rhythmic distribution of the title, secondary motif and symmetrical repetitions of words and phrases, on pages 1-11.

On diagram 7 [Figure 8], we can see pages 1-11. On their surface I note the distribution of the title of the poem and that of the capitalised secondary motif in smaller size font. On page 6, the middle page of the poem, italic characters appear (to disappear again on page 9), while text begins (in a form of parenthesis) with ‘*COMME SI*’ on the upper left side and finishes again with ‘*COMME SI*’ on the lower end of the right side. The symmetry detected here, determines the printed format of the whole poem. The way it becomes explicit is very varied Pages 4 and 8, in symmetric positions relative to the middle page are similarly composed with more passages between the verso and the recto, while the first words opening the poem (UN COUP DE DÉS) are also the ones closing it, combined and depicted in modified form (Toute Pensée émet un Coup de Dés - Every Thought Emits a Throw of the Dice) to carry the poem to its concluding affirmation

The composition of page 8 includes spatial, visual, acoustic, syntactic and semantic features ‘condensed’ and **built in** all its parts in order to turn some of them into **crossroads**. I will show how the same motif is applied to the whole arrangement and how this generates another principle of potential reading, while providing us with yet another cognitive vehicle to map the poem as a whole. Every word on a page takes a spatial position that has been scanned and mapped by vision, clear and peripheral. The same happens with the pages as parts of the whole poem. Thus, the structure of the single page works as a mnemonic prompt which suggests an intuition to the structure of the whole. This, in turn, works as a mnemonic prompt to recursively explore the structure of the page.



**Figure 9. Different printed layouts of pages 5 and 9 of the poem.
(reproduced by courtesy of Michel Pierson & Ptyx, ed.)**

The configuration of each scale of syntactic relationships is different. The main title, which is scattered within several pages, intersects with the secondary motif and the rest of the text of small characters and generates *constellations*, ‘*the prismatic subdivisions of the idea*’. Our exploration of each of the different pages results in a dense sensuous mnemonic imprint. To remember, one has to remember the map. We can move through different paths if needed.

In the present study, the process of conceiving the *synchronic view*, **the ‘wholeness’ of a form is considered to be only one of the constitutive parts of the form; ‘Wholeness’ is not of a higher significance than other ways of perceiving and comprehending the form. It is merely a different way. It helps us summarize, navigate and remember.**

Parts and Properties: the glue

We are aware of the fact that Mallarmé brakes the conventional linear verse, uses the space of the paper, to do so, charges the printed text and the words themselves with instructions for oral performance, avoids narration and conventional syntax by playing with the ambiguous significance of words, plays with the *instantané* of reading - a familiar and novel notion of grasping reality in the second half of 19th century. Everything is noted down in his writings, even in the small preface of the poem. But there are too many words involved in an explanation, the outcome of which is always suspended: what does this ‘immaterial’ cognitive process clutch on? What is the glue that is able to connect and disconnect the same parts at the same time? Is it glue that we cannot see or is it a something **built in** the parts themselves. Summarising the analysis of page 8, I argue that the novelty of the poem resides in the charge of specific parts with multiple properties so that when the reading path reaches them, they act as *crossroads on multiple registers*, *geometrical syntactic, semantic, acoustic, and visual - the latter between clear and peripheral vision*. The charging process - composition - involves a consideration of what comes before and after the part, what could be near and far, what is the definition of a word in the dictionary and what becomes the charge of the word in context The same part can offer alternative connections, but not all parts do. The reader chooses the kind of connection that he/she will use, while simultaneously *detecting¹¹ the properties* of the parts. **It is a dense** (Goodman, 1976) **work to be read by the dense sensuous element of thought** (Peirce, 1998). *Density* is the glue. And

sensuous density is the distinct property of human intelligence and activity. Such is reading and such is poetic *composition*¹².

Virtuosity and Immobility: the presence of the reader and the presence of the poet

Virtuosity, then, in the Mallarmean sense, is the *exercise of density*. A simultaneous act of detection of some properties of the different parts, their common and distinct characteristics followed, in C.S. Pierce's (1998) words, '*by a hypothesis, by concluding something of a different kind from what we have directly observed, frequently something which it would be impossible for us to observe directly*'. This is how the reader becomes a poet, by bringing something into reality that was not there.

Density, as materialized by Mallarmé, in the poem, involves all the properties of it being a printed item and a literary work: it is printed, on paper, of certain dimensions, with ink, with fonts, small or big, bounded in pages, read in succession, page by page, from left to right, held in the hands of the reader, using words, singly or in arranged patterns, to be read aloud to others and produce sound which in turn can change the meaning of the words.

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Density means that the constituent parts are charged with all the above properties. *Density can only be activated by the reader, through the act of connecting any two properties at appropriate moments (successive relation)*. Changing the material form of the poem, for example by printing it compressed and punctuated in a regular page, would destroy most of the *crossroads* semantic or geometrical. If one changed the material presence of the poem there would be a probability that only some, or perhaps only one, interpretation would be concretized, thus taking other potential readings out of the poem.

In order to offer the poem to all readers and invite them to become poets themselves, according to the literary agenda of Mallarmé, (Mallarmé, 2007; Folie, 2008) one has to reproduce materially every detail of the original printing edition; one has to search for the handwritten notes of Mallarmé, conserved at the French National Library; one has to reach closer to Mallarmé's physical presence.

As the material form of the poem is 'immobile' in order to be dis-solved into its parts and be resolved again through the virtuosity of the reader so is anti-form materially fixed in order to be open to imaginative and cognitive dissolution and reconstruction by the user.

INTERLUDE

Architectural forms are immobile but people meeting within their boundaries move all the time. Making the forms more interesting, making them come alive with possibilities of use, is not equivalent to making them move literally. Since we move, and events take place, the relative positions of the objects around us change. Apart from continuous linear movement there is habitual movement, repetition and duration, long rest, and calm, with no wish for movement. These states are improvised every day within the contingencies of events.

III. **WHEN DOES SPACE AFFORD A FLEETING AND CONTINGENCY VIEW OF YOU**

The architectural project, a conversion of a domestic interior and working space in Athens, has been realized by our firm¹³ in 2006, five years before the study on Mallarmé. The analysis of the poem by reference to anti-form, is inevitably influenced by spatial ideas developed primarily in the field of architecture. Through the process of designing the apartment the first scattered ideas of the concept of anti-form appeared, but it was the intelligent reading of the inhabitants¹⁴, some months after they settled in, that defined it better: *space is like a telephone dial on which you can choose what numbers to combine in order to speak to someone.*

The diagrams that accompany this analysis have been drawn retrospectively on the original drawings, four years after the place has been inhabited. They are a response to the difficulty to put into words the non-verbal spatial concepts. Anti-formal compositional operations, on the other hand, have been studied in other projects since then.

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A work of architecture is a materially constructed spatial arrangement where occupants who engage the repetitive and contingent everyday activities of occupants give rise to embodied spatial relationships. The placement of boundaries, thresholds and connections gives rise to patterns of co-presence and co-awareness; cultural categories of use; cultural distinctions between private and public domains (Peponis, 2005). The ensuing relationships between the people are perceived and activated through movement, rest, and the recurring habits of the associated with occupancy.

Our agenda is to create spaces that can be perceived and inhabited in improvised ways mediated by architectural form. While architectural form is an immobile structure, it is open to the intelligence of the user and his/her ability to activate contingent uses of space that are not predefined. Or rather, architecture is open to freshly discovering possibilities that are silently embedded in the form.

We focus on dealing with the intrinsic properties of architecture on one hand (boundaries, thresholds, connections, use, private and public exposure) and the reading capabilities of the inhabitant on the other (movement, vision, improvisation and habit)



Figures 10, 11. Multifunctional boundaries. Views of the common space before and after it has been inhabited. (reproduced by courtesy of Vassilis Makris)



Figures 12, 13. Multifunctional boundaries. Views of the common space before and after it has been inhabited. (reproduced by courtesy of Vassilis Makris)

With reference to the idea of density as developed based on the study of the poem, we create dense architectural parts that combine as many of the generic functions as possible. A boundary/wall becomes a multi-use item: seat, light, double-sided closet, window, and door so that *if*, by chance, you stand on one side and I stand on the other *I can see you*.

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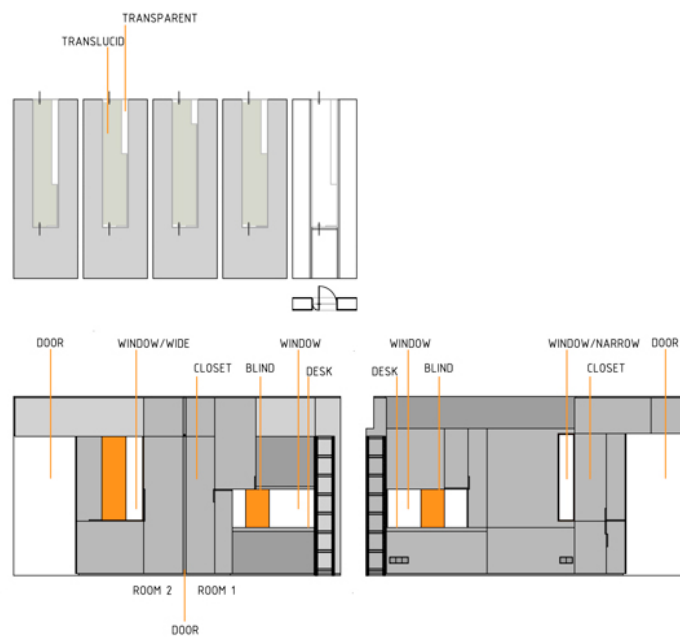


Figure 14. Multifunctional boundaries. Above, variations of windows, which can regulate views, through different proportions of translucent and transparent parts. Below, elevations of both the sides of the main boundary/wall where the different functions are mapped.

Openings are charged with more properties than just to open and close. They are shaped in such a way as to enable the awareness of the other and the sensual control of space even when they are closed in order to protect the private domain.

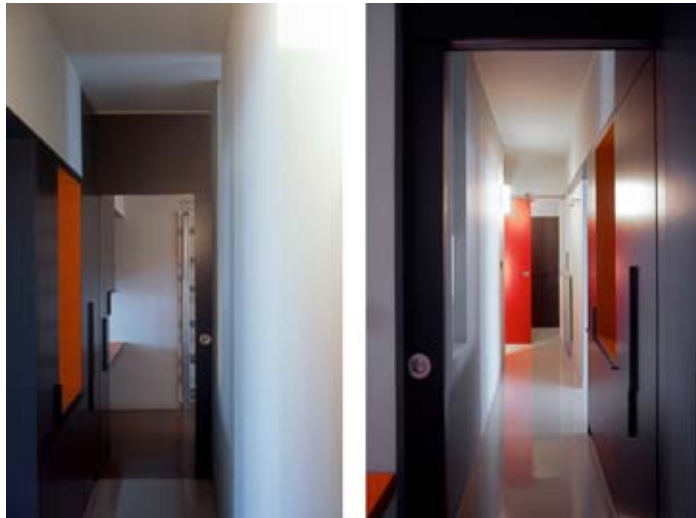
The dense parts are placed in the overall arrangement in such a way as to become *multiple crossroads* offering alternative possibilities of movement, rest, views and repeated use. An example is the interior window next to the bed, between the closet and the bedside table.



Figures 15, 16. Views through the openings (interior windows) between bedroom, workspace and corridor. (reproduced by courtesy of Vassilis Makris)

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The chances of someone being there are increased because of the multiple routine functions (opening the closet, using the bedside table, going to sleep). The view through the window, when it is open, continues through the main optical axis towards a seat in the veranda.



Figures 17, 18. Views of the corridor, in between the interior windows. Movement intersects with the main visual axis. (reproduced by courtesy of Vassilis Makris)

Another window stands in-between: that on the central wall/double-sided closet, which is aligned with the former one. My sight can catch your *fleeting* presence if *you* pass or stand in one of the three separated units of the house: the veranda, the living-room and the corridor. Our sight can catch the depth of the long axis of the house.

Reading space through vision and movement is conducted through a multiple diagonal pattern: several points at the edges of the diagonals in the rooms are designed in such a way so as to attract visual attention.



Figures 19, 20. Views of the corridor, in between the interior windows. Movement intersects with the main visual axis. (reproduced by courtesy of Vassilis Makris)

These points are also important as functional units or openings. Attention towards them leads to motivate movement or awareness of someone entering the room.

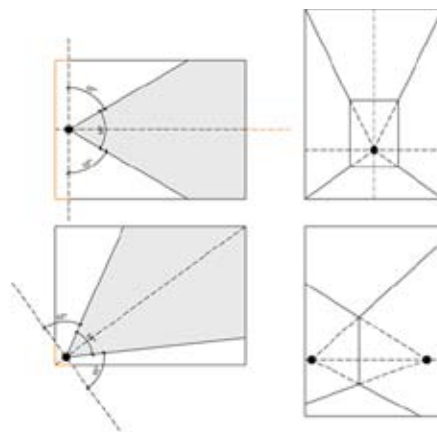
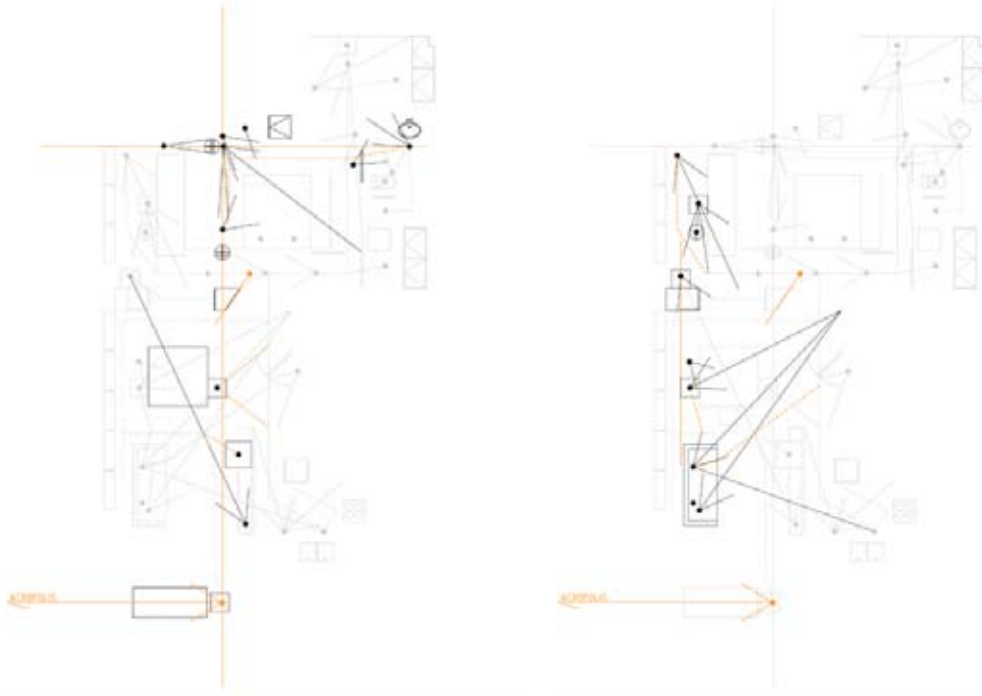


Figure 21. On the left column we can see the plan of a common room, while on the right one the perspective image from the viewing positions which are: above axial and below diagonal.

At the same time diagonals reveal two important factors for visual perception and control: we stand at the end of the longest possible line of distance realised within the rectangular perimeter of the room and we can see within our clear field of vision only 2 of the 4 vertical walls of the room while being able to control all the area of the room and the rest of the vertical walls by *peripheral vision*. The difference as compared with axial arrangements, extensively used in architecture, is that in the latter case, one might see clearly parts of the 3 out of 4 vertical walls but the rear wall, physically the crucial one, stays totally out of sight.

I described how, instead of working with predefined rules directing composition, we focus on attributing relational structure to the parts. Through a dense compositional process, the parts are combined into a larger structure. The ‘wholeness’ of a form is considered to be only one of its constitutive parts. Wholeness is a summary of the relational syntax of the form and cannot be understood without understanding the parts and engaging the architecture through situated human activity and thought.



Figures 22, 23. Diagrams of generated relations between different areas of use through vision and everyday habits.



Figures 24, 25. Evita, Vassilis and Giannis, occupying areas while Easter lunch is prepared (Spring 2007). Designer's photos.

The *virtuoso* inhabitant, 'dis-solving' and 'resolving' various parts of the space, through *sensuous living activities*, activates combinations of charged points and dense parts and thus increases the fleeting contingencies of sights, meetings and embodied meanings. The *anti-form* works like an oversized notation that cannot be perceived simultaneously. It is a spatial score of possible events, of *fleeting and contingent views of others and also of fleeting and contingent awareness of being seen by others*.

IV. ANTI-FORM'S DOMAIN

Are we fully aware *when a form is an architectural one*?

We have given a definition of anti-form and we have exemplified how it works as both a compositional and a cognitive process. It has been also stated that anti-form works as a structure that stands at equal distances between the subject designing it and the subject reading/inhabiting it.

The cross modal examination offered me the chance of taking both the roles of the reader/explorer of a work of poetry and the designer of an architectural work.

Focusing upon the medium of architecture we referred to how anti-form relates to generic functions of buildings and ways of spatial exploration. But are we fully aware of all the conditions that make a work of architecture distinct? Are we fully aware of its domain? Can **anti-form** stand in this domain as a flexible compositional structure compared to other morphogenetic practices? Is it, in other words, more architectural?

George Brecht's diagram

On page 127 of his notebook III, used while attending **John Cage's** classes of **Experimental Composition** at the **New School of Social Research** in New York City, in July 1959, George Brecht (one of the founding members of the *Fluxus* group, a chemist and a visual artist) draws a diagram. It is a remarkable graph, in the form of a pentagon and a pentagram, where the five (5) fundamental contributors in the formulation of a musical work and their ten (10) relationships are clearly mapped and defined.



Redesign of the diagram that George Brecht sketched by hand in his notebook III (July 1959), page 127

Figure 26. Graphic reproduction the diagram on page 127 of George Brecht's Notebook III.

Reading the periphery of the diagram clockwise, we conclude that the composer dealing with *composition* produces a notation, which is *interpreted* by the performer, who gives a *performance*, through which sound is produced creating the *musical experience* perceived by the listener, who can, closing the circle, *criticize* the composer.

Let's call the pentagon part of the diagram the structure of a work in classical music.

The inscribed pentagram, the star polygon, which completes¹⁵ the graph, though, forces us to engage more relationships. Brecht maps on its edges the relationships/actions: *improvisation*,

rehearsal, score-reading, playing magnetic tape. The pentagram edges/relationships provide the classical musical structure with *shortcuts*: *composer* and *performer* can be directly linked, without the mediation of *notation*, through *improvisation*. The *composer* himself can produce *sounds* without the mediation of both the *notation* and the *performer*, through *improvisation*. *Performer* and *listener* can meet through *improvisation* within the context of *rehearsal*. *Sound* can be produced directly through a *notation* which directs mechanically the *playing of magnetic tape*, without the presence of neither the *composer* nor the *performer* and his *performance*. The passive role of the *listener* can be changed if he can *score-read*. Only the *composer* has to invent a new kind of *notation* that can be easily read or *improvised*; one, maybe, which resembles to a cooking recipe¹⁶.

Let's call the pentagram part of the diagram the structure of a work of experimental music, as defined by John Cage.

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In the Cagean context the *composer* diminishes his presence and de-personifies his work by introducing compositional procedures based on prescribed *chance operations*. *Indeterminacy* is achieved by redefining the roles of the *performer* and the *listener* as sources of *sounds*, as participants of a unique audience each time, producing a performative event never to be repeated. *Notation* is a map of potential readings assigning the *performer* with the task of a puzzle reader who actualizes only some of them. 'The *virtuoso listener* is one who is able to actualize the virtual multiplicity that is the field of all sounds- performed and environmental, sound and so-called silence- within which they find themselves situated' (Branden, 2009, p. 237).

Thus, George Brecht reassembles the parts of classical musical form into a new arrangement without removing from sight the structure of classical musical form. He does this through a geometry that which places the elements of the two forms at equal distances and supports the mapping of new relationships. The same parts placed in new relationships create *experimental music*. In this sense the making of music is expanded and the definition of musical form is renewed.

Musical form, through Brecht's diagram, becomes a dynamic set of relations. It loses all its determinate characteristics and hierarchies, which reflect the historical effort of composers to assure their authority and the 'bold', 'solid' and 'permanent' nature of their musical works. By extension, we are invited to see how our ideas about architectural composition prioritize only some of the properties of material structures such as buildings.

Musical form becomes a system where all subjects and their relations contribute equally to its formulation.

Musical research through this diagram becomes clearer. We can focus more on the issue of performance or sound experience; we can focus on notation or the biography of the composer. We can identify who met whom in the audience, realising that this is only a part, specifically interrelated, with all the other contributors, of musical form.

Annoying Routines

George Brecht invents a diagrammatic structure, for defining musical form in general, either classical or experimental, in a 1) non-hierarchical and 2) plural manner, in order to involve most of the subjects and relations that contribute equally to musical formulation. Because of these two properties, which highlight the importance of human intelligence, performance and their contingent relational character, I introduce it into the medium of architecture, as an experiment in order to challenge ideas of formulation based exclusively in the determinate nature of its material 'boldness'.

I argue that through this *cross-modal reference* to Brecht's diagram, we can remap and thus evaluate fundamental contributors often obscured or misinterpreted in the theory and practice of architecture.

The obscurity in which some of the contributing dimensions of architecture are usually placed is responsible for the historical dominance of at least three notions, which have limited the descriptions and morphogenetic practices associated with architectural forms:

- 1) Neutralising architectural forms and design methods by considering them as outcomes of measurable techniques and methods that can be constantly and systematically advanced and not as inventions of the diversity of human intellect,
- 2) Giving priority to vision over habit,
- 3) Conserving a discourse, which attributes *styles* to the physical structure of the 'building' by considering it an object that attains importance by the physical and symbolic supremacy of its '*boldness*'¹⁷, in terms of scale and duration.

One consequence of the dominance of the notion of design methods is that architecture surrenders to, or rather borrows its scientific legitimization from, formal and natural sciences (geometry, mechanics). As a result architectural theory is not built from a proper consideration of architecture itself (Evans, 1995).

The dominance of the emphasis on vision limits the framework for developing targeted methods in describing and designing architectural forms. It privileges techniques of visual control over the study of the indeterminate/contingent character of events in everyday life. And yet, in everyday life, vision assumes as much importance as other sensual ways of space-use, exploration and intelligibility. It also reproduces formalistic approaches and confines architectural form to descriptive symbolism that can be easily grasped through short term visits or that can be summarised through mass media.

Finally, the single minded emphasis on the physical presence of buildings neglects the fact that architectural works are achieved through the co-operation of several well educated/ skilled human subjects, through their complex mental and physical ingenuity and not only by the development of conceptual sketches of a privileged architect.

A Draft New Definition of Architectural Form

Converting the diagram so that it refers to architecture [Figure 27], we are forced to detect the roles of the subjects and their relationships that are involved in its making. To see they are *there* and in a specific place.



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Figure 27. Conversion of the diagram on page 127 of George Brecht's Notebook III, in respect to architecture.

Beginning with the pentagon peripheral part of the diagram we read, clockwise, that the architect(s)'s work on composition is based on his(their) design brief (Baxandall, 1985) producing architectural notations, which are being interpreted in different cross-modal ways by the inhabitant(s) and the builder(s), depending on each one's main field of knowledge and culture. Interpretation results in transformations of the notations. *Builders inhabit the building/edifice while building it.* Construction lasts long and usually gives way to many changes, which have not been fully described via notations. *Inhabitant(s) builds the building/edifice while inhabiting it.* This is the most crucial morphogenetic source of a work of architecture; not only because of the fact that a work of architecture is commissioned by someone who usually inhabits it; the transformation of space is the very nature of in-habitation, in a direct and less self-conscious manner. Building is produced by the making habits of builders and inhabitants and it changes constantly through contingent every day affairs conducted with *virtuosity* and *intelligence* by them. Visitor(s) apprehend visually the concrete body of the building since the spatial experience offered by meeting people and their habits, in space, is conducted in more ritualized and self-conscious ways than that of the inhabitant(s). Visitor(s) –the word's origin is vision- stay little, have access mainly to the commonly used spaces of a building and their behaviour is mainly conducted by a visiting etiquette, even in the case of public spaces. The peripheral circuit of the pentagon closes with visitor(s)'s criticism to the architect based on visually oriented evaluation of the building, which can only reflect one of the properties of an architectural work: it can also be visually explored.

In this diagram, only describing the perimeter, an important differentiation emerges: the separation between inhabitant and visitor. In terms of etymology: the boundary between habit and vision. This makes evident the fact that, whether we like it or not, as architects, inhabitants and visitors contribute in the making of space. Actually they are the ones who live there. The very act of architectural design, our task, happens outside it.

Maybe, the rearranged mapping of our role at equal distances with the rest of the creative and intelligent subjects who actively inhabit and criticize space, might offer us a different perspective of our domain and the ways we can challenge conventional ways of composition. We should perhaps explore definitions of composition, which are not exhausted in the acts of representation and visual control.

The specific position of the building in the diagram, at equal distances from us architects, the inhabitants and the visitors and the new direct shortcut that appears in the interior pentagram, makes inevitable another substitution: since we are now the makers of the building we have to return back to words and to make another substitution, a fundamental one: to call the material structure of the works of architecture instead of '*building*' - a word which carries with it the adjective 'bold' - '*edifice*'. Edifice, coming from the word 'facere' (L. to make), factitious (artificial, artifice (art+facere), can be re-examined and define the beginning of a research for the domain of *anti-form*. For the time being, we can start by calling the converted and dense diagram of Brecht, with all its immaterial relationships, *architectural form*.

Notes

¹ Robert Morris introduced the term anti-form in an article published in Artforum, in 1968. The term exemplifies differences between minimalism and abstract expressionism in post-war art. It coincides and is related indirectly to the ideas that influenced George Brecht or the work of John Cage, which I develop in the last section of this study.

² Activity here is defined as both a physical and cognitive process concerning every single intentional affair.

³ I refer to Richard Rorty's (1989) notion of contingency in reference to language and selfhood.

⁴ For an interpretation of how *hypothesis* or *abduction* as described by C.S. Peirce (1998) is involved in design formulation see Peponis (2005) and Peponis, Lykourioti and Mari (2002).

⁵ The poem was written by the poet in 1897, and appeared for the first time in the magazine *Cosmopolis* on May of the same year. Gallimard editions keep the copyright and the typographical form of the first publication in *Nouvelle Revue Française* of 1914. For apprehending the poem I have been comparing the original French text with four translations in English, and a recent one in Greek.

⁶ A page is considered here to be the double page of the conventional text, recto-verso.

I take into account the study of Michel Pierson & Ptyx (2002), which resulted in a new edition of the poem, based on the original notes of Mallarmé conserved in the French National Library. No page indication is given in the Gallimard edition (1914). Mallarmé's own preface indirectly urges us to read the double page as a single one.

⁷ Words and phrases in italics are quotations of Mallarmé's preface of the poem. I quote the English text translated by A.S. Kline (2007).

⁸ I refer to the size indicated by M.Pierson & Ptyx (2002).

⁹ I would like to put Mallarmé's work in the context of the use of language and linguistics. In this specific period linguistics changed in a revolutionary way. It is exactly the same period that Ferdinand de Saussure came to Paris

(1880) to attend courses at the École Pratique des Hautes Études by Michel Bréal, Louis Havet and Gaston Paris amongst others. The following year the teaching position of M. Bréal, a leading French philologist, was offered to Saussure, which he kept successfully for ten years (1881-1891). Several influential linguists and philologists, of the next generation, like A. Meillet, M. Grammont, H. Pernot were amongst Saussure's students of that period. According to Lynn-George's study of that period (2006, p.967), it was 'Bréal' who 'translated Bopp's founding work for the discipline of comparative philology from German into French, a translation that Mallarmé's friend Eugène Lefébure mentioned when in 1870, he congratulated him for his choice of an area for study: 'Vous avez fort bien fait de choisir la linguistique qui est la science de l'avenir'.

¹⁰ Quoted from the preface of the poem, see note 7.

¹¹ My suggestion, which needs further investigation, is that **detection** or **observation** runs as an additional cognitive process to that of **hypothesis** or **abduction**. Referring to the science of deduction, in the first chapter of Conan Doyle's, *The Sign of The Four* (2005, pp. 21-33), Sherlock Holmes reveals that he is the writer of a treatise on different kinds of ashes. In the same context, it is also interesting that John Cage exercised **Mushroom Identification** (he was an amateur mycologist), a topic he was also teaching in the New School of Social Research in New York City in the 50s, in parallel to courses on **experimental composition**.

¹² **Composition of a dense entity can only be achieved through dense understanding of the process described here and is a dense process itself since it requires the dense 'sensuous element of thought' in order to be detected.** This is what differentiates composition in Architecture (*formulation in the strong sense* as described by Peponis (2005) resulting in anti-forms from the usual formalistic approaches. The latter often tend to be applications of predefined rules dealing with a set of problems only, and in Peierce's (*ibid.*) context are rather deductive. Explicit in design courses curricula of schools of architecture internationally is the dominance of a predefined formal concept or choice, which has to transverse the whole compositional process intact, even through multiplied differentiation. In the context of Anti-Form we can identify some summarising elements only retrospectively. They are the outcomes of understanding wholeness through the configuration of parts. Any formal rule, which mimetically repeats the form of the dominant concept only in a smaller scale, is out of question since it is predefined.

¹³ It is a collaborative work of all the members of *A whale's architects* (www.awhalesarchitects.net).

¹⁴ I refer to the couple Vassilis Makris and Evita Machaira, who are both photographers. They live and work in the apartment.

¹⁵ In the mathematical field of *graph theory*, a *complete graph* is a simple *undirected graph* in which every pair of distinct vertices is connected by a unique edge.

¹⁶ See for example John Cage's (2009) score for *Water Music*, written and performed in 1952.

¹⁷ In etymological terms 'build' is the verb form of 'bold': brave, confident, strong.

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