Deconstruction: a reaction against rational Modernism
TESIS DI LAUREA

Deconstruction as a reaction against rational Modernism

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Deconstruction as a reaction against rational Modernism
“el deconstructivismo como reacción a la modernidad racional”

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1988 is remembered in architecture as the year “Deconstruction” was promoted. A symposium about the subject was held at the Tate Gallery in London and there was an exhibition at the Museum of Modern Art in New York on “Deconstructivist architecture”. The word “Deconstruction” was used in London whereas in New York it was “Deconstructivism”. This was in part because in London most of the speakers and writers thought that the French philosopher Jacques Derrida was somehow involved, while in New York many denied any connection with Derrida at all.

In my thesis I propose Deconstruction as a reaction to Modernism, as opposition, the beginning of something new that marks the end of what was before. According to Libeskind we are in the Neomodernist period, at the beginning of something, something big.

I have decided to explore the subject of Deconstruction because I found myself very influenced by this style when making my own designs. My designs were beginning to acquire a “deconstructed image” but without my comprehending what was behind this shift: Why was I designing like this? And why did the architects I admired designed like that? I did not want to just copy an image, to use Deconstruction as a decoration on my designs, I wanted to understand it. As an image I liked it, yes, but it is more than that, what was it, was it good? I wasn’t able to enjoy completely something that I didn’t understand. I quickly found out that my goal wasn’t easy at all!

I felt a bit identified and a bit ashamed when reading an interview with Frank Gehry where he says: "Architects have never . . . called things into question. They only get a third-hand version, that of the advertising agencies or the media. A version they pick up without knowing anything at all about the original. Something similar is happening to Warhol: lots of lousy architects are designing Pop architecture without really knowing its origins nor how it came to them."

This comment touched a cord in me, I don’t want to be one of those architects Gehry talks about, so I proposed myself to learn what this is all about in order to have a personal opinion, not a third-hand vision, and to be able to decide what is of value and what is worthless.
The philosophy of Deconstruction, applications in architecture and personal opinions.

I found in Geoffrey Broadbent’s “DECONSTRUCTION a student guide”, the clearest explanation on Derrida’s thinking, which I also found to be notoriously difficult. As Broadbent points out, it’s fundamental to Derrida’s extraordinary view of the world that nothing has much meaning anyway. That’s why he struggles so hard not to communicate with us; he actually intends it to be difficult for us to find out what he says, if he has anything to say at all! Many attempts to explain or to analyse Deconstruction have been violently rebutted on the grounds that such approaches violate the very nature of Deconstruction. Its proponents insist that "it cannot be described and stated as other positions can" because it is a new form of logic that has superseded the old traditional logic in which such analyses are couched.

Derrida tends to work not so much by initiating ideas as by reacting, forcibly, to what others have written already. His targets have included many Western history's great thinkers, primarily Nietzsche, Husserl, Plato, Heidegger, Rousseau, Saussure and more. In each case Derrida aims to refute these thinkers with arguments derived from the author’s own writings, to demonstrate- successfully in many cases – that the very premises on which the authors base their cases will, if pursued to their logical conclusions, defeat the original arguments. Deconstruction, after all, is literally concerned -as Derrida insists- with written texts. His attacks are especially focused on subjects such as Metaphysics, Clarity, Logocentrism, Meaning, Binary Thinking and Phonocentrism:

Metaphysics is the age-old search for “truth” and the “essence of being” that has been the center of occidental Philosophy. Derrida despises this search through the centuries for the ultimate truth, for the reason of our existence, the idea that there should be some kind of "absolute knowledge", "prime mover" or "God". Metaphisicists believed that we could only arrive at such "ultimate truth" through pure reasoning, that in this way alone we could find the roots of our existence,
of thought. This is relevant to architecture in that, for Derrida, there is no "one best way", no "International Style", no roots from which all architecture has grown. So there are no received truths - Classical, Modernist or other. To "deconstruct" at all - programme, form or structure - is to demonstrate one's view that there are no absolutes in architecture, that attempts, such as Heidegger's (in philosophy) or Le Corbusier's, Wright's and others (in architecture) to find such absolutes are doomed to failure. This is why Broadbent thinks there are no Deconstructivist churches yet, because Deconstruction itself rejects the existence of God (with one exception; Michelucci’s chiesa dell’autostrada or Eisenman’s un-built project for the church of the year 2000 for Rome). In my opinion, if we follow this discourse until the end, we'll end up denying any essence in architecture at all. I find this a sad and empty view. After reading some definitions on what architecture's "essence" really is (some said it lies in the space within the walls, others in the walls itself, others still in the "significant detail")¹, I arrived at my own conclusions: I believe architecture's essence is determined by its two functions: As for the exterior, to protect us from external agents, such as nature or other humans. In the interior to organize our space, according to our needs, which may vary from a working to a recreational or habitational space. Any other intentions, as to embellish, symbolize or anything else is secondary to architecture, not its essence. Architecture without functionality would become art, and nothing more. If we have this two functions I would say we have architecture, but in order to achieve a good architecture, we should take more aspects into consideration, aesthetics is one (whether we like it or not, architecture is primarily image). The function always remains but the building may take multiple shapes. It is the shape of the building what communicates our thoughts, and historically it communicated certainties like the cause-and-effect relationships of Modernism. In the first decades of the twentieth century many architects consciously adapted their work to the process rationalization, because they wanted it to express the rational advance of mankind. Today, architects are concerned with the theme of transgression, with pleasure and violence, with Eros and decay, with madness and chance, with fields that go beyond the limits of a discursive reason. Their way of thinking no longer proceeds from an ideality, an
essence, or a true nature as a basis for architecture. They are anti-fundamentalist without being groundless. “In my view, says Daniel Libeskind, the best works of contemporary spirit come from the irrational, while what prevails in the world, what dominates and often kills, does so always in the name of Reason.”

Derrida is part of the Post-Structuralist movement that strongly reacted against the clarity of their Structuralist predecessors. In their attack on clarity, Post-Structuralists argued that if I try to write simply, directly, clearly and unambiguously, “it is my evident desire to insinuate my thoughts into your brain, and thus ‘colonize’ your mind! That is why they write deliberately in such an unclear, diffuse, incoherent and ambiguous way that will get you so angry that, in your struggle to understand, you will be forced into having your own thoughts.”

Deconstructivist architecture is ambiguous as a Deconstructivist text, whereas clarity is what we see when analyzing Modern architecture, simplicity in its structure, coherence in its programme. Robert Venturi, an exponent of Post-Modernism, had demonstrated a parallel kind of thinking in architecture when in "Complexity and Contradiction" (1966) he attacked "Modernist transparency". For him, the error was in the Modernist belief that the outside of a building should be molded according to its inside logic, it should be transparent in this way, to let you read, understand its functionality. If buildings were conceived in this way, the inside prior to the outside, then, there can be no such thing as urban design! Each building turns on itself and cannot integrate with its neighbors. In my opinion, there is a balance between form and functionality that one as an architect must have in mind when designing. They are related and will affect each other, the form and functionality; and the interior and exterior. The skill of the architect is to assign the due importance to one not forgetting it will affect the other. If I change something in the interior of a building, it will no doubt affect its exterior, then we will have to "repair" such exterior modification and go back to check the interior. It is a back and forth process which I find similar to the solving of an equation in physics. The equation used to find out the friction of a fluid running through a pipe comes to mind. There are two equations with two variables: friction and speed of the fluid. In the first,
as speed increases, friction increases, logically; but in the second as friction increases, speed will decrease. So what you do is to put a value for speed and obtain friction in the first equation, then this friction you put it in the second equation to obtain a new speed, which in turn is put into the first equation to obtain a new friction, which will be put into the second equation again; and it will continue like this till both values -speed and friction- stabilize. This back and forth from one equation to the other until a stable result is obtained is what I found similar to the solving of the interior/exterior relationship while designing a building.

Ferdinand de Saussure, one of the founders of Structuralism tried to develop out of language a “General Theory of Signs” which he called “Semiology.” Through semiology he attempted to get to the roots of knowledge. He believed that language is what allows us to think, so by analyzing the structure of our language we could unveil the structure of our thoughts and thus arrive at those “ultimate truths”. So he was in his own way trying to do what metaphysicians did, trying to explain existence. This branch of philosophy is called Logocentrism, that is, the belief that the meaning of a word has its origin in the structure of reality itself, in that ultimate truth. Derrida despises Logocentrism and even rejects any relationship between a word and its meaning. That is why he uses words in any way he pleases, and makes it so difficult for us to understand him. “He wants words (and presumably buildings) to literally have no single meaning.” He argues that words have many meanings, as opposed to a single meaning. He sees Deconstruction as our attempt to recover from the Tower of Babel! “The builders of the Tower sought political domination by imposing on the world their universal language and their universal architecture. Fortunately they failed, and since then, according to Derrida, our aim should not have been to find another "only absolute" view but to seek a diversity of views.” This is a view clearly contrary to that of Modernism.

Some architects took literally the notion of no single meaning and tried to create buildings with no meaning at all, organized according to pure geometric rules that would convey no meaning. I find the idea of multiple meanings, more compelling than no meaning. In fact my idea of a good building is one that would communicate with us, and the more
levels of communications it has, the more interesting the building. We may find in a building relationships to our culture, to our time, our past, to the geography of the site, or even to literature, cinema or fashion. We may find metaphors or allusions in a building, some may be obvious and others may only be appreciated by experts, like a relationship with a certain other building. It would be reading the building as if it were an onion, that the further you analyze it the more meanings you discover, the more layers you penetrate.

Derrida criticizes Saussure’s theory and bases on this criticism his own opposing theories. Saussure, like many others before him, tended to think in pairs, or "binary oppositions". Any language, as English, comprises a set of words and a set of rules - a syntax- for using them. There are also two kinds of words: Syntagmatic and Associative. Syntagmatic words stem from the role they play within the structure of a sentence, its syntax. Associative words, on the other hand, derive their meaning from words “outside” the sentence which we associate with those within it. For example, if I use the word "architect" then you might well associate it –in your mind- with other words like “architecture”, “design”, “construction” and so on.

Derrida also based his own work rather more directly on another of Saussure’s binary oppositions: his ‘Signifier/Signified’. According to Saussure we have within our brains ideas, concepts of some kind which we try to convey to other people. Those concepts are by their nature abstract, indeed ‘immaterial’ as they are in our brains. They may be about concrete things and exist physically in the brain as patterns of chemical and electrical activity. But still they are ideas, not concrete things in themselves. We pass ideas from our own brains to other people by putting them into physical form. As I speak I ‘encode’ my concepts into ‘sound-images’ which pass to your ears: your sensory organs for hearing. Saussure says they have taken sensory form. Your ears pass those sound-images towards your brain where they are decoded back into immaterial concepts. Those two very different elements, the sound image and the immaterial concept are joined, says Saussure, to form the sign and he names them the Signifier and the Signified. Whilst Saussure’s Signifieds only exist in the brain, their physical manifestations – the signifiers- may exist in many forms: as word written
or printed on paper, as diagrams, drawings, paintings, sounds of music, or forms of architecture. It is the link of signifier to the signified that gives us “sign.” We communicate with signs. As Derrida points out we read one part of Saussure's, the signifier, within Plato’s “sensible” world, while the signifier exists only in his "intelligible" world where truth is to be found. (Plato believed that what we see or sense is just a projection of reality into our sensible world)

But language offers more than communication with others: Saussure suggest that if we had no language, thought itself would be impossible because we would be unable to make any clear-cut consistent distinction between ideas. Language gives us the structure by which we think.

So what kind of structures are they?

Two kinds, another binary opposition, of course: ‘Relations’ and ‘Differences’. I have explained his ‘Relations’ already: ‘Syntagmatic’ and ‘Associative’. As for his ‘Differences’ these occur between our words in the sounds we make as we speak them, such as those which allow us to distinguish cat from mat, from sat, and so on. Saussure says that the ‘phonic substance’ contained in a sign is less important than its difference from the other signs that surround it. In other words, it does not matter so much how a word is pronounced as that it must be different from all other words for us to distinguish and understand it. So in the end in language there are only differences and relations, and as our thinking is related inextricably to our language (signifiers are inextricably related to signifieds), differences and relations are what enable us to think.

It is this relationship between signifier and signified that Derrida rejects. He says there is no such thing as a fixed meaning for a word (a limited signified for a signifier), "We shall never nail it down" as Sarup says. “We cannot find a meaning in a single sign, we shall experience, rather, a constant flickering of presence and absence (of the meaning) together". There is no stable “present” to our thoughts and if we can not fix our thoughts, we can not fix a “meaning” either. It would be like looking up a word in the dictionary, and finding it defined in terms of other words. So that if we wanted to know what the first word “really” means, we would have to look up all other words, and the words used in
defining them in some never ending consultation.

Joel Garver helpfully explains Derrida's deconstruction of "presence/absence" by suggesting that Derrida is attacking a particular view that assumes absolute presence and absolute absence. Either a thing is here or it is not, we instinctively think, but in fact in all kinds of ways absent things leave "traces" of their presence, and a thing can be present while being partially absent. In personal relations, past events are not "present" either temporally or spatially, but the past history of the relation has shaped the contours of the present relationship; the present and future history of the relationship is written on a palimpsest (see ahead) containing the faint marks of the past. This is especially the case in highly troubled personal relationships. When the absent events are intensely present, any present events are interpreted in terms of the absent events. A husband buys flowers for a suspicious wife, and that is read against the background of past betrayals. In literature, much of the meaning of a text comes from what is left unsaid, what is outside the text but faintly present, what is alluded to and so forth.

*What kind of implication can this have with architecture we must be asking right now. Well it has much. The denial of meaning from Derrida was taken by Deconstructivist architects and translated as an architecture of pure "syntax" without any "semantic" meaning. Eisenman's aim when designing most of his early buildings was this, he used extremely pure, geometric "syntaxes" with no semantic references of the kind we loosely call "meaning". These geometric rules were derived from those which according to Chomsky, we humans apply subconsciously whenever we formulate a sentence.*

The other relationship with architecture I make is the concept of the *palimpsest*. According to the Oxford English dictionary, a palimpsest is a parchment on which an earlier manuscript has been erased to make a "clean" surface for a new one. Thus, an ancient Greek text may be overlaid by a Christian one. Derrida uses it as a metaphor to explain his view that every word or concept carries the traces of many other meanings which are necessary to understand the first. He describes metaphysics as "white mythology", that is a sort of palimpsest of metaphors, and myths which are covered over and forgotten as soon as philosophical concepts are construed as pure and
univocal abstractions, as totalizing universals devoid of myth and metaphors. But there are always 'traces' of those metaphors that the violence of the concept is not able to repress. Deconstruction shows how any attempt to define concepts or meanings as self-sufficient is incoherent as it also is any attempt to determine the relationships between concepts as oppositional break downs (which we will see ahead in further detail). Anthony Vidler detects in Le Corbusier's plans a strong desire “to forget the old city, its old monuments, its traditional significance, which were all seen as being too implicated with the economic, social, political, and medical problems of the old world to justify retention. Such a forgetting would, in Le Corbusier's case, take the form of erasure, literal and figural, of the city itself, in favour of a tabula rasa (project for Paris).” So here we have the relationship, Modernist architects worked on the principles of the palimpsest, creating by destroying and forgetting. I sympathize with Rem Koolhaas' view of Deconstruction in urbanism: For him, it has more to do with the "reintegration of all the segments", than with denial, as in Modernism. Eisenman too, works with the idea of the palimpsest, not in the Modernist way of forgetting, but on the contrary, by recovering those traces of the past that remained hidden.

Derrida notices that throughout history, philosophers have always tended to think in pairs -binary thinking-, and he despises this, believing that this kind of thinking is restrictive, that it prevents us from acquiring new views. He lists some of these pairs that are repeated constantly in Philosophy: Good/evil, being/nothingness, presence/absence, truth/error, identity/difference, mind/matter, soul/body, life/death, nature/culture, speech/writing, inside/outside and includes Saussure's signifier/signified. These seem pernicious to Derrida, especially when one of the pair is seen as having some kind of precedence over the other, the second is seen as inferior to the first, a negative, corrupt, undesirable version of it. As Broadbent puts it: "absence is the lack of presence"; "evil is the fall from good"; "error is a distortion of truth". Nietzsche thought in the same line as Derrida "there are no opposites . . . and a mistake in reasoning lies at the bottom of this antithesis . . ." Derrida attacks binarity by extremely dubious processes. One of these consists in finding words that have in themselves multiple
meanings which contradict; he calls them "undecidables". He finds that the Greek word "Pharmakon" for example means "poison" and "remedy" at the same time. Nothing could be more opposed to binary opposition than a single word, which means two opposing things simultaneously. To explain what Derrida's new form of logic might be Broadbent quotes his view that: “It is . . . not simply false to say that Malarmé is a Platonist. But it is above all not true. And vice-versa.” So, claims Broadvent, instead of a simple either/or structure of traditional logic, Derrida attempts to elaborate a discourse that says neither "either/or", nor "both/and" nor even "neither/nor" Differences are never absolute, and therefore neither are identities. “Malarmé wasn't Plato and no one in his right mind could think them identical. But neither were they absolutely different; they were both human beings after all.”

This kind of "deconstructivist thinking" is again analogous to Robert Venturi's when he wrote in "Complexity and Contradiction" of "both/and" architecture: the closed-yet-opened quality of Le Corbusier's Villa Shodan, the symmetrical-yet-asymmetrical quality of the Tudor Barrington Court, the unity-despite-duality of Guarini’s Church of the immaculate Conception. I agree with Broadbent in that Venturi's 'both/ands are rather more convincing than Derrida's "undecidables". I found in Turin (especially after the 2006 Olympic Games) this same both/and quality, where the antique, the modern and high-tech, tradition and new come together. I love these contrasts! Modernism based many of its principles in binary oppositions, I quote some of its premises, "Less is more" by Mies Van der Rohe, or Le Corbusiers discourse constructed around the binary distinction of straight vs. curved: "Man walks in a straight line because he has a goal . . . The pack-donkey meanders along . . . man governs his feelings by his reason". His whole 'Our March Towards Order' discourse of 1987 is articulated on two chains of equivalence confronting each other: man/reason/order/self-mastery/sanity/nobility/straight line/right angle vs. pack-monkey/scattered-mindedness/distraction/looseness/animality/zigzag/meander. I think the Universe itself from the beginning was divided in one of the strongest binary oppositions, that of "Order" vs. "Chaos". And we can find it in architecture as well, between Modernism and Deconstruction. From reading Le Corbusier's discourse we easily
see that it is governed by the search for order and reason. Deconstruction is the opposite: There is much more importance given to feelings rather than reason and an apparent chaos is the result.

Taking the discourse of feelings, we'll see what kind of feelings Deconstructivist architects searched for. Peter Eisenman, for example, says "People have been concerned with relating themselves to their physical environment as a source of security. I believe that if the physical environment makes them anxious they might turn inward and the true source of security is internal. The physical environment can never provide that, it can provide physical comfort, shelter, but it can never provide psychological shelter." When it comes to his own building, he creates a "really (...) disturbing spacing completely dislocated and every time you don't know where you are, or at what level you are, you never know..." So Eisenman is concerned in causing an uncertainty in people that will induce people to search for security within themselves. For Heinrich Klotz, Deconstruction is "an indication of how we perceive our lives today and a good part of it is the uncertainty we feel". So there's uncertainty and acceptance of it, and it is this acceptance that brings us freedom. Klotz describes Behnisch's Hysolar Institute in Stuttgart in the following way: "It is an environment in which one cannot feel absolutely secure but in which questions remain open and in which the resolution and totality of the undertaking remains a doubt (...) things are assembled out of many individual parts which threaten to fall to pieces but stay in place, they hold together (...) it makes one feel liberated, does not constrain us into something commonplace, gives us the sense of having experienced something new (...) which has a liberating effect, does not confirm simply all that has been accepted everywhere." Klotz goes even further: for him, Deconstruction is also a "protest against consumerism, against the ready made product."

There is freedom for the user, the consumer, but Coop Himmelblau architects were also concerned in freedom for the architect when designing. In their deconstructivist factory in southern Austria, "the dancing chimneys have totally normal functions" they say. "They just simply dance. When we were designing these chimneys we felt, Why not have leaning chimneys? This gives an idea about our way of
designing, seemingly in a totally arbitrary manner, but through this arbitrariness we eliminate all the usual restrictions. It keeps us from practicing advance obedience. We design in total freedom, worry later how our designs would be built. So Deconstruction is a search for freedom and also a protest against obedience, against absolute rules.

Amongst the binary oppositions mentioned before there is one that Derrida especially dislikes and it is that of speech/writing. He sees speech has been "privileged" over writing, that language studies have been dominated by Phonocentrism, which is this idea that speaking is better than writing due to the fact that it gives us direct access to the speakers' thoughts; speech is "transparent" in a way writing can never be. Saussure's studies according to Derrida are based on this false statement, and in fact for Saussure "writing exist for the sole purpose of representing speech." Writing is merely a trace of what the writer would have spoken if he had been with you in the first place, speaking his thoughts directly. Derrida says in Of Grammatology "writing is no longer seen as a . . . derivative, auxiliary form of language . . . It is more . . . than an extension of language; writing comprehends language."

Just as Derrida saw language studies as "everywhere and always" dominated by Phonocentrism, Broadbent sees in architecture a domination of vision over other senses. "Architecture has been seen as entirely a visual matter." He argues that "seeing should be taken in context with the other senses: of hearing, touch and smell, of other less familiar senses such as those of heat and cold, of position and movement, and so on. Not that there's been much sign of such sensory, Empirical thinking in most Deconstructivist architecture, with honorable exceptions such as Tschumi's promenade cinématique, or Gehry's light shafts and framed views . . . Even these are visual but at least they are concerned with other visual arts." A true Deconstructivist view in architecture surely would challenge the prevailing Visiocentrism to redress the balance between vision and the other senses, much as Derrida tries to redress the balance between speech which he sees as "privileged" and writing which he sees as suppressed.
Architects and Movements within Deconstruction

By the early 1980s it was clear that something new was happening. Very different architects, in very different places, seemed to be placing buildings and bits of buildings at odd angles so that they clashed and even penetrated each other. This kind of work included works by Richard Meier, Eisenman, Zaha Hadid and Bernard Tschumi. But as we will see the movement’s origin is not to be found on Philosophy alone, in fact only two architects admitted to having drawn their ideas from writings such as Derrida’s and applying them in architecture: Bernard Tschumi and Peter Eisenman (the latter even worked together with Derrida on a project). The influence of Russian Constructivism of the 20’s is equally important especially on the architects grouped around the Architectural Association of London (Koolhaas, Hadid and Tschumi). And the influence from art, movements such as Cubism, Dadaism and Experimental art, are especially influential on Gehry, and also on Hadid and Libeskind.

Bernard Tschumi

I find Bernard Tschumi the best translator of Deconstruction philosophy into architecture, or the one that best explains his interpretation of it. “If in today’s world, he says, railway stations become museums and churches become nightclubs, we must come to terms with the extraordinary interchangeability of form and function, the loss of traditional cause-and-effect relationships as sanctified by modernism. Form does not follow function any more. If the respective contamination of all categories, the constant substitutions and the confusion of genres are the new directions of our times, it may well be used to our advantage.”  

We find this in Tokyo today, with its multiple programs scattered throughout the floors of the high-rise buildings: department-store, museum, health-club, railway-station, and putting-greens on the roofs. And we find this as well on Tschumi’s Parc de la Villette. He devised ways of contaminating and displacing the categories in architecture, to break any hierarchy between use and space, concept and experience, structure and superficial image. These are:
CROSSPROGRAMMING: Using a spatial configuration for a programme not intended. Example: Mario Botta's Chiesa del Santo Volto inside an old steel foundry, in Turin. (see pict. p. 11)

TRANSPROGRAMMING: Combining two programmes, regardless of their incompatibilities together with their respective spatial configurations. Example: Planetarium + Roller-Coaster

DISPROGRAMMING: Combining two programmes so that the required spatial configuration of programme A contaminates programme B and B's possible configuration.  

Like Derrida sought to destroy the classical oppositions in philosophy, Tschumi breaks with the basic "cause-and-effect" oppositions in architecture, those of form and function, form and programme or structure and economics. He tries to show that in architecture "deconstruction" of the programme challenges the very ideology on which the programme itself is based. Just as Derrida shows by his deconstruction that the writings of various philosophers contain within themselves challenges to the very concepts on which they are based.

The largest demonstration of "Deconstruction" at work in architecture is certainly Bernard Tschumi's Parc de la Villette (1982-1983).

The programme for La Villette was complex indeed. It had to include workshop, gymnasium and bath facilities, playgrounds, places for exhibitions, concerts, scientific experiments, games and competitions. Already on site were the 19th-century cast-iron-and-glass Grande Halle, Fainsilber's Museum of Science and Industry with a new City of Music also to be built. Tschumi rejected the traditional concept of "composition" like an inspired architectural gesture. He rejected "complement" as well: to take what exists and fill in the gaps, complete the text, complement what is there already. He saw this as restrictive, imposing limits, too traditional. He didn't explore the "palimpsest" either. As there was no guarantee that it would ever be realized, whoever was appointed chief architect would have to improvise during the process according to economic and ideological changes, so this would be easier if improvisation itself were the basis of the concept. Hence Tschumi, reinforced by recent developments in philosophy, art and
literature, gave a strong conceptual framework to the park, containing within itself multiple "combinations and substitutions."

Thus the programme can be in constant change, according to need, one part substituted for another, and so on. One of the follies indeed was changed from restaurant to gardening center to arts workshop; these changes could be accommodated easily, whilst the park as a whole retained its overall identity.

Tschumi, moreover, acted on "a strategy of difference". If other designers were to contribute to his park then it would be a "condition" of their contribution that their projects differ from his Folies or break the continuity of his cinematic promenade. Tschumi aimed, therefore, to present "an organizing structure that could exist independent of use, a structure without centre or hierarchy (hence the grid), a structure that would negate the simplistic assumption of casual relationship between a programme and the resulting architecture." 16 A clear statement of "deconstructionist" programming. A grid by its nature resists any sense of hierarchy or stamp of individual author: It is anonymous.

The grid of points (a folie marks each point) is only one of three systems. There are systems of lines and surfaces too: "Each represents a different and autonomous system (a text), whose superimposition on another makes impossible any "composition", maintaining differences and refusing ascendancy of any privileged system or organizing element." 17 The superimposition of one system over the other ends by erasing any trace of the architect control, in fact, the Competition conditions required that other designers be involved, and their work would only be successful only in so far "as they inject discordant notes into the system, hence reinforcing a specific part of the Park theory".

This heterogeneity is aimed at disrupting the smooth coherence and resulting stability of classical composition. Instead of conventional "composition" Tschumi presents "montage" at La Villette, which of course had been developed as part of film editing. The addition of systems, each with its own internal coherence, produces a result which is by no means coherent. So La Villette points to new social and historical conditions, as a built "reality", it is disperse and differentiated, which, for Tschumi, marks an end to "the utopias of unity". What’s more he ignored the context, subverted any notion of border to his site, so the
Parc de La Villette is quite unrelated to its surroundings. Tschumi rejects absolutely the idea that his Parc should express in any way some "pre-existing" content of some kind be it "subjective, formal or functional". So, overall, there is: "conflict over synthesis, fragmentation over unity, madness and play over careful management." 18

Just as Derrida rejects the idea that meanings are "immanent", inherent to words, so Tschumi rejects the idea that meanings are immanent to the forms of his buildings, that his architecture has a direct capacity for signifying. Hence the geometric rule-play of his grids, and of his follies intended to give an architecture of pure syntax with no semantic references at all, just like Eisenman's in his early houses. Meaning is never "transparent". It is always socially produced; the result of others making their readings of what the author has produced. Each of us will interpret this in our own way. So there’s no absolute "truth"; such meanings as the Parc may have will result from our personal interpretation. No "meaning", as such, will be inherent in the objects themselves.

Deconstruction for Tschumi takes in consideration today's social, political and cultural dissociations, in place of the Modern Movement's nostalgic pursuit of coherence.

Peter Eisenman

In many of his projects, Eisenman applies the concept of Palimpsest. In Checkpoint Charlie project for Berlin he searches for inspiration in the ruins of the past. On plan he overlaps two different geometric grids, one taken from the ruins of the old of nineteenth-century Berlin, another conforms to the part of Berlin laid out for Friedrich the Great in the 17th and 18th century with the Friedrichstrasse as its main central axis. Eisenman wished to challenge the tragic history of Berlin, the Nazi regime and rupture of East and West Berlin, which was played out on the Friedrichstadt grid by confronting it with the second grid “upon which so much Enlightenment history had been acted out” These two grids clash at 3,3 degrees and are distinguished by difference of alignment and façade treatment. Then he clads his building with other grids, of small and large squares, the latter so big that they are never completed!
Thus Eisenman makes extraordinary use of pure, geometric syntaxes to give his Appartments “semantic” meaning which you can’t read directly from the forms, in fact you can only “read” them after you have read Eisenman’s explanation! Again on his Center for Visual Arts at Ohio State University by Eisenman there’s a site-derived geometry. The city around the Campus had a grid, but the campus had another, shifted 12.5 degrees from that of the city, so he projects the axis of the Columbus city grid over the Campus grid, creating clashing angles and stretch triangular spaces that shape his buildings. History is again evoked, although this time we can read the “meaning” as it visually present. He abandons completely the idea of Palimpsest in his Research Institute for Carnegie-Mellon where he takes a piece of geometry from science, the “Boolean Cube”, a structure with an infinite number of geometries. He describes it as following:

“Each building is made up of three pairs of 4-N Boolean Cubes. Each pair contains two solid cubes, with 40 and 45 degrees members and two frame cubes with 40 and 45 degrees members. Each pair can be seen as containing the inverse of the other as solid and void. The 40 degree solid and the 40 degree frame 4-N cubes are placed in a 5-0N relationship with each other where their points are 40 degree away form each other in a parallel orientation. The 45 degree solid and the 45 degree frame 4-N cubes are placed in 5-N parallel orientation. This places the project between a reading of 5-N cubes oscillating between frame and 4-N cubes.”

And what could ever be more “syntactic” than that! Eisenman had used geometric rules derived from those which, according to Noam Chomsky, we humans apply subconsciously whenever we formulate and speak or write a sentence. He was trying to create an architecture of pure geometric syntax with no semantic “meaning” at all. “Eisenman challenges the traditional premises of Modernism, that form should follow function, site and structure. Form for Eisenman follows theory, theory about meaning and language and how to design in relationship to that theory.”

Eisenman was concerned in the psychological side of
architecture as well. Architecture till now was meant to provide physical and psychological shelter. He takes this from architecture, he believes that we should look for psychological shelter in ourselves, not in the physical environment, so in Wexner Center for Modern Art in Ohio he tries to create a “really disturbing space, completely dislocated and every time you don’t know where you are, or at what level you are, you never know.” 21 By making us feel lost, he forces us to turn inwards to search for security.

Zaha Hadid

Three dimensional clashes were carried very much further by Zaha Hadid in her scheme for the Hong Kong Peak competition (1982). She planned to excavate and rebuild the landscape to form “a man-made polished granite mountain” of vast, abstract, geometric forms. Then she thrust four enormous “beams” horizontally into this man-made part of the mountain. The “beams” are piled one on top of the other but at different angles, and each one has traces in its internal planning of the angle of the other. Her conception of the project is very deconstructivist in itself. She questions maxims and brings into architecture ideas of very different origins as we can see when she refers to it:

“Culturally, one is made of many layers and history itself is to do with layers. The fact that Americans have done a Neo-Classical building to me doesn’t mean that they have reincarnated history. Ideas filter through and become superimposed on one another. What I find interesting is metropolitan life with the constant collision between opposing activities (...) Many outcomes of observations and experiences were in the Peak and after I designed it I began to think of it as a geological condition.” 22

So geology, sociology and history all have influence on Hadid’s Peak project. And cinematography, juxtaposition and intersections also appear in her designs:

“The land is being formed like an animation and two programmes come together with the journey of the beams flying over and the geology being made there, being gyrated. Then the building is completed like a movie (...) They are
conceptual drawings; they tell a story. It’s a description of an idea rather than a framework.”

And here we find a similitude with Tschumi’s designs; he also works with superposition of layers and with cinematography. But while Tschumi drew direct inspiration on the writings of Derrida, Zaha Hadid evaded them, and even criticized them:

“The way Bernard or Peter use Derrida is legitimate, but you don’t need to quote directly. I’ve gone to two lectures of his at Harvard. There was nothing curious about them. Derrida is off-balance with the universe. This awareness of self becomes an ego-issue: you challenge issues. It’s very dangerous for creativity, this over-awareness of self.”

So there’s little or no Derridean influence on her, but there certainly is a strong Russian Constructivist influence (the most famous exponents including El Lissitzky, Lenidov, Melnikov, Malevich, Popova, Rodchenko and the Vesnin brothers). The Russian Constructivist movement of the 20’s has a similar spirit and visual likeness with the works of today’s Deconstructivist. Their vision of a new way of life, of a fr eer world and their fantasy. Hadid even called a student design, for a club, “Malevich’s Tektonik.”

Not only her, but Tschumi as well proposed to reconstruct one of the folies of the Parc de la Villette as a replica of the Pavilion which Melnikov built or the Paris Exposition of 1927. And what’s more, Rem Koolhaas went to Moscow to seek out the work of Leonidov.

Hadid’s Zollhof 3 project for Dusseldorf (p. 6) is an attempt to adapt a functional programme into a deconstructivist composition. She projected many long rectangular solid volumes, like slabs that juxtapose with slightly curved walls. These interpenetrations create a continuous common central area and the volumes that span out like fingers contain isolated areas from the traffic of the central area where she placed elevators and stairs. Similar is Eisenman’s BFL building in Bangalore.

Rem Koolhaas

Rem Koolhaas writes his manifest Delirious New York inspired by the same chaotic metropolitan reality that intrigues Zaha Hadid, its complexity, energy and miseries, accepting them as a whole. In this
book Le Corbusier is criticized for his incapability to accept this chaotic metropolitan reality of New York, and his intransigent defense of the new urban order. Koolhaas defends the Manhattism and the urban hedonism of pleasure and consumption over the reformist urbanism of healthy activities proposed by the Modernism. According to Koolhaas the first example of collage and cinematographic techniques in architecture was the Dreamland Park in Coney Island (1904), a place of liberation where twenty different spaces created different cathartic experiences sensations related to the metropolis. His National Dance Theater for The Hague (1984-87) is a rather clumsy assemblage of an inverted, truncated gold cone surrounded by disparate geometric blocks: Modernist –with horizontal windows- and, conceivably, Post-Modernist with unmatching diagonal cladding, sloping roofs, curtain walled areas and so on.

This method of assemblage and collage was invented by Cubist and Dadaist, exploring the superposition and articulation of different historical, typological or stylistic fragments in one piece of work. And then, using the mechanisms of film editing, paradigm of the twentieth century art, it was possible to articulate images in a sequence to tell a story. The point is that a new culture working with fragments displaced the Modernist conception of unity, and that new experiences from different fields like art and film editing influenced architecture. Koolhaas’s aim when designing is the reintegration of all this fragments.

Frank Gehry

Clearly, Cubism was a source for Gehry, as we can see from his description of his house that he remodeled himself. The point was to make the little old house:

“...appear intact inside the new house, so that from the outside you would be aware always that the old house was still there...some guy just wrapped it in new materials” … “I fantasised that when I closed the box (the old house) there were ghosts … that would try to creep out, and this window was a cubist ghost. I became fascinated by that and started making models of windows that looked like the ghost of Cubism was trying to crawl out”24
We find Cubist influence in Hadid’s as well. Her “artificial landscape” for Hong Kong looks like nothing so much as one of the facetted paintings –even the colours are similar– which Picasso and Braque produced in the first, Analytical, phase of Cubism.

Gehry arrives to his own version of Deconstruction through experimenting with different cheap materials of construction, as in his own house. He uses metallic mesh, undulated metal sheets, laminated wood, laths, etc. On bigger commissions were he has to build with more durable materials, this freshness is a bit lost. He thinks buildings are more beautiful on construction than when finished, because they loose their “spontaneity”, I feel this way too sometimes, the work on progress has a power, a kind of potential that is lost when completed. But it’s his spirit of experimentation that I find most Deconstructivist, his refusal of standards, his search for new experiences.

Daniel Libeskind

His world acclaimed Jewish Museum in Berlin is a fine example of Deconstruction. The irrational was the starting point of his project. Libeskind evaded starting his design from a grid, or with a square, or a module. He marked on a map the places where some famous Berliners lived, people who he thought carried the spirit of Berlin and plotted on a map a hexagonal figure (a deformed star of David) uniting these points. The second source of inspiration came from music, Schoenberg’s unfinished opera *Moses and Aaron* and thirdly from a book containing all the names of the deported Jews from Berlin during the Holocaust. The lightning shaped building is cut by a straight axis in which intersections he left void spaces, and where the names of all the Jewish Berliners deported during the Holocaust are written. “The idea, says Libeskind, is to build the museum around a void that runs through it, a void that is to be experienced by the public”.

Physically little remains of the Jewish presence in Berlin, this void evocates their absence. In this way he provides with meaning a deconstructivist composition. He is very effective as well in creating the tortured atmosphere required by way of the twisted, tortured lines of the building and the outer surface slashed with openings as if they were whip marks on skin.

So we find many of the deconstructivist resources in Libeskind’s
museum, apart of the juxtaposition of systems, distortions of figures (the star of David), inclined walls and clashes at small angles he works on the psychological side and with irrationality. Lastly, we notice analogies as well between his abstract compositions and projects from the El Lissitzki of 1920, a Russian Constructivist.

**Coop Himmelblau**

Coop Himmelblau could be described as “structure deconstructors” Their Roof Space in Vienna, for example, “gains its ‘deconstructed’ form from the twisting, skewing, bending of its actual structure. It presents a complex interaction of superimposed frame systems, all these irregular of course.” Its final aspect as Broadbent describes is “as if an insect had settled on the roof made of leaves, eaten but the stalks and the veins” Wigley’s description is less poetical but equally strong “a skeletal monster”. He says that apart of the structure, what Himmelblau deconstructs is aesthetics, by the violation of the form.

In another project, the Funder Factory, their design was based in deconstructing the site into its architectural elements: the energy centre and its chimneys, the median bridge, the terrace roof and shed, the office and laboratory sections, and the entrances. They treated each individually. Coop Himmelblau applied “playful deconstruction” of the elements. They gave the energy centre its “dancing chimneys”, exploded-frame canopies to the entrances; they even put red “combs” on the roof of the production shed.

The dancing chimneys are the best example of their way of questioning everything, which is fundamental to Deconstruction. Do chimneys need to be strictly vertical? Of course not, their inclined chimneys are just as good, functionally, as any vertical could have been. Coop Himmelblau are attacking the precision of the machine, its repetitions, its sheer mechanistic perfection. They are attacking the chilling precision of “High-Tech”. Foster, Rogers or any other High-Tech architect would have envisaged a repetitive, regular structure, such as the Sainsbury Centre.
Postmodernism anticipation on Deconstruction

James Stirling
Some judge him as a Postmodernist rather than a Deconstructivist, and that’s because he is in my opinion a little of both or because both Deconstruction and Post-Modernism share equal concepts. His Staatsgalerie in Stuttgart is, as he himself describes, is a reunion of “the monumental and the informal, the tradition and high-technology” as it clearly verifies on the project. We find references to all kind of periods, Egyptian columns, Classical, Modern and even High-tech elements. But even though the project is full of contrasts and a multiplicity of diverse elements, it is very well contained and it incorporates itself to the surroundings very well. I found deconstructivist about the project that he works with fragments, historical and typological in this case and how, in a small scale, he deconstructs pure forms, like the cube cut by an oblique curtain wall and his Eisenman–like rotation of volumes.
So Postmodernism has points in common with Deconstruction, apart from the violent reaction on Modernism. In fact Venturi, the father of Post Modernism, anticipates much that is in Derrida or his translators into architecture.

Robert Venturi
Venturi demonstrated a parallel kind of “deconstructive thinking” when in Complexity and Contradiction (1966) like Derrida, he analyzed and refuted numerous esteemed historical architectural masterpieces starting from the works of Michelangelo and noticed that Mies' motto (less is more) was mistaken. It was the other way round: "Less is a bore", said Venturi. He also wrote of “both-and” architecture that is very similar to Derrida’s “Undecidables”, were he spoke of words with two contradicting meanings. Venturi spoke of buildings with contradicting qualities, such as closed-yet-open quality of Le Corbusier’s Villa Shodan. Another analogy between Deconstruction and Venturi is found in the attack also mounted in Complexity and Contradiction on “transparency” that is crucial to the Modern Movement. Buildings according to Modernism, had to communicate the author’s intentions. It was important that the buildings themselves were
transparent, that you could see the inside from the outside, that you would understand structure and space; that there would always be a point of reference and a sense of security, of order and comprehension. In the same way Derrida attacks the transparency of speech, he wants words not to communicate, to mean much at all. He doesn’t want the authors’ thoughts to be explicit, but secret, so that he won’t be imposing his thoughts onto us, but on the contrary we will end up having our own fantastic interpretations.

In my opinion, there’s no superior one, buildings are like people and they can be more or less open, introverted or extroverted. And you can be more sympathetic with one kind or the other. Buildings that show all their logic at once may strike you at once, but they become boring more rapidly than those that don’t reveal all their secrets at once and that you need to study before understanding them completely.

According to Venturi, architects have always pursued contradictory aims and it is exactly this tension that creates the final enjoyable, exquisite result. It would be too trivial to follow simply and logically just one goal, for example, the clarity of construction, as the structural school of architecture did. On the contrary, many famous architects (especially in Deconstruction) have wanted to show their skill by hinting that all the rules are there to be broken. Historical examples are the Baroque columns in the sketches on top (from Siegel 1960 p. 9).

It strikes to see how much Venturi’s thoughts are similar to Deconstruction’s philosophy but in anticipation. He says:

"I welcome the problems and exploit the uncertainties. By embracing contradiction as well as complexity, I aim for vitality as well as validity." "I like elements which are hybrid rather than "pure," compromising rather than "clean," distorted rather than "straightforward," ambiguous rather than "articulated," ... redundant rather than simple; inconsistent and equivocal rather than direct and clear." ... "I am for richness of meaning rather than clarity of meaning ... A valid architecture evokes many levels of meaning ... its elements become readable and workable in several ways at once."
Art Influence

The relationship between art and architecture is a really close one, some even consider architecture as a branch of art led by painting. This is a view I do not share and that does not coincide with reality, it is a vision of those who are only interested in the formal aspect of architecture. Architecture is independent from painting and in some cases it has even preceded it. Though, the cases I’ll analyze next are previous to Deconstruction and they generated this rebellious spirit Deconstructivist architects share.

L.M. Farrelly, in her book *The architectural Review (1986)* saw many movements in architecture and art forming an emergent “tendency” which she called “new spirit” that infected Deconstructivist architects. She saw her spirit concerned with the “openness and honesty” with “the thrusting imagery of Constructivism … and Futurism’s savage beauty”. Above all she saw a Dada “state of mind” out of which “Surrealism, arte povera, Pop art, Action Painting, Conceptual Sculpture, Performance Art, 60’s ‘happenings’, the Situationist and Punk, New Wave” were all generated. The architects of Farrelly’s “New Spirit” have “a resurgent spirit of enquiry, a renewed interest in space and movement, in the use of real materials – steel, concrete, timber, stone, even plastic appearing as itself … and most important, the dynamism of asymmetry, the very genesis of freedom”. I see Gehry more than anyone in this trend, with the use of cheap materials such as plywood, corrugated metal, and chain link metal fence as sheathing or screens, and by breaking volumes into incomplete geometries and partial objects, for his home in California.

This process of putting different materials together into a collage and different fragments into one composition was widely experimented in modern art. The fragmentation of the image discovered by the cubist anticipates the fragmentation of Deconstructivist architecture. Analytical cubism had a sure effect on deconstructivism, as forms and content are dissected and viewed from different perspectives simultaneously. A synchronicity of disjoined space is evident in many of the works of Frank Gehry and Bernard Tschumi.
With its tendency towards deformation and dislocation, there is also an aspect of expressionism associated with deconstructivism. The angular forms of the UFA Cinema Center by Coop Himmelblau recall the abstract geometries of the numbered paintings of Franz Kline, in their unadorned masses. The UFA Cinema Center also would make a likely setting for the angular figures depicted in urban German street scenes by Ernst Ludwig Kirchner. The work of Wassily Kandinsky also bears similarities to deconstructivist architecture. His movement into abstract expressionism and away from figurative work, is in the same spirit as the deconstructivist rejection of ornament for geometries.

Dadaism also pre-echoes much that Deconstruction was to say. Its fundamental tenets were described in many manifestos of which the most significant was Tristan Tzara’s of 1918. Tzara says:

“Does anyone think he has found a psychic base common to all mankind?... How can one expect to put order into the chaos that constitutes that infinite and shapeless variation: man? … Dada was born from a need for independence, of a distrust towards unity. Those who are with us will preserve their freedom. We recognize no theory…

Some people think they can explain rationally, by thought, what they think. But that is extremely relative… There is no ultimate Truth. The dialectic is an amusing mechanism which guide us, in a banal kind of way, to opinions we had in the first place. Does anyone think that, by a minute refinement of logic, he has demonstrated the truth and established the correctness of these opinions?

… Logic is a complication. Logic is always wrong. It draws the threads of notions, words, in their formal exterior, towards illusory ends and centres. Its chains kill; it is an enormous centipede stifling independece.

Let each man proclaim: there is a great negative work of destruction to be accomplished. We must sweep clean… Without aim or design, without organisation: indomitable madness, decomposition”. 
Deconstruction also identifies itself with this rejection of reason, logic, clarity and truth, this rebellion and search for freedom seen in the Dada Manifesto.

One example of this irrationality and chaos in Deconstructivist architecture is Coop Himmelblau’s Open House (1983). It is a project initiated with a sketch drawn with the eyes covered. With this process they aimed to evade the mechanisms of reason starting from an instant automatic drawing, making all the energy hidden in our subconscious surface and condense itself. Another example is Libeskind’s Jewish Museum. The starting point of the design process in this case was a figure traced on a map unifying different points representing the homes of famous Berliners. The resulting figure was used as the base from which the building took shape.

This irrationality was present in the artists of Farrelly’s “new Spirit”. Duchamp, exponent of the Cubist movement, was pioneer in using random events as generators of forms in art. He would fire a match stick dipped in paint from a toy gun to get random points for holes in his glass; or he would drop a one meter thread from a height of one meter and fix the curve it took on the floor to provide “a new image of the unit of length”. Others like Dadaist Hans Arp and Abstract Expressionist Jackson Pollock would use similar techniques on their own paintings.

Hans Richter describes Arp’s process:

“Dissatisfied with a drawing he had been working on … Arp finally tore it up, and let the pieces flutter to the floor … Some time later he happened to notice these … scraps … as they lay on the floor, and was struck by the pattern they formed. It had all the expressive power he had tried in vain to achieve.”

Dada was “a revolt against a world that was capable of unspeakable horrors.” Reason and logic had led people into the horrors of war; the only route to salvation was to reject logic and embrace anarchy and the irrational.
Modern Physics

We have seen that many fields of study, other than philosophy, influenced deconstructivist architects. But there is one field of study not mentioned by any of them and that I find worth mentioning: Quantum Mechanics and Relativity, studies carried on by two of the greatest physicians of modern times; Werner Heisenberg and Albert Einstein. Even if it had not actually exercised any influence or inspiration, I find there is a relationship between Deconstructivist thought and physics which is worth investigating.

Simply put, quantum mechanics is the study of matter and radiation at an atomic level. Classical physics did a good job explaining everyday things, which are much larger than atoms and much slower than the speed of light, but it appeared flawed when dealing with atomic particles. In 1690 Christiaan Huygens theorized that light was composed of waves, while in 1704 Isaac Newton explained that light was made of tiny particles. Experiments supported each of their theories. However, neither a completely-particle theory nor a completely-wave theory could explain all of the phenomena associated with light! So scientists began to think of light as both a particle and a wave.

“The idea that something can be both a wave and a particle defies imagination, but the existence of this wave-particle duality is not in doubt. … It is impossible to visualize a wave-particle, so don't try. ... The notion of a particle being everywhere at once is impossible to imagine.”

We see how in this case scientists proved that binary thinking is restrictive, that it prevents us of acquiring new views, just as Derrida insisted. “Light and matter are both single entities, and the apparent duality arises in the limitations of our language” says Heisenberg.

“The most difficult problem … concerning the use of the language arises in quantum physics … the only thing we know from the start is the fact that our common concepts cannot be applied to the structure of the atoms. Fortunately,
mathematics is not subject to this limitation, and it has been possible to invent a mathematical scheme - the quantum theory - which seems entirely adequate for the treatment of atomic processes; for visualisation, however, we must content ourselves with two incomplete analogies - the wave picture and the corpuscular picture.”

Language itself is restrictive, so they turned to mathematics instead. Eisenman does this as well; he turns to mathematics in order to create a pure-syntax-no-semantic project that would convey no meanings to us.

The deconstructivist principle of no absolutes is paralleled by Einstein’s Relativity Theory. This theory postulates the lack of an absolute reference frame against which speeds or events could be measured. In other words, there is no fixed or motionless thing in the universe. It’s consequences meaning that even things like time are not absolute (e.g., the twin paradox which concerns a twin who flies off in a spaceship travelling near the speed of light and returns to discover that his twin has aged much more rapidly), the lack of absolute simultaneity (two events that occur simultaneously to one observer may occur at different times to another observer) and that even measurements are not absolute (the dimensions -e.g., length- of an object as measured by one observer may be smaller from the results of measurements of the same object made by another observer). What’s more, the theory excludes the possibility of the exact validity of Euclidean geometry in our universe, thus the search of pure forms, according to Einstein is futile. Pure forms had been the inspiration of Classical and Modern Architects because they reflect perfection. For deconstructivist, the violation of such perfection is their inspiration and aim.

To finish I’ll quote Heisenberg, on a discourse about our modern world which is surprisingly similar to Tschumi’s view:

“The world thus appears as a complicate tissue of events, in which connections of different kinds alternate or overlap and thereby determine the texture of the whole”. 30
Conclusion – Personal view

First of all, I would like to start my conclusion focusing on the negative part of Deconstruction. Although the movement became popular so rapidly, and the media in general favored it, it had many detractors as well. It was criticized for many of its flaws; an important one is the problem of translation from philosophy to architecture. Only in some aspects it was possible and gave good results, like in some of the attempts by Tschumi and Eisenman, but in others it didn’t. Some of the theories posed by Derrida are difficult to sustain on philosophical grounds, even before translating them into architectural forms.

For example Derrida’s attempt to take meaning away from words based on his discovery of undecidables (words with different opposed meanings) I find poor. And Eisenman’s attempt to translate it into architecture is poor as well. It is impossible for architecture not to communicate, a door will always invite us to go through, a stair will always indicate us to climb it, a corridor to walk it, these meanings are immanent to them. And then other meanings are to be learned, for example in seeing a building by Eisenman, I would immediately associate it with Deconstruction, Derrida, and so on. To me it would communicate, to others it may not, but it is just until they learn. So there is no way a building won’t communicate and I don’t see what would be the contribution of such a thing.

I also find absurd the “Deconstructive interpretation” of certain texts by Derrida and other fellow Post-Structuralist. Broadbent calls them paranoid readings. In some of his analyses of texts Derrida tries to find “hidden” meanings in the author’s words, in some cases making connections which are far from those intended by the author. Fortunately such deconstruction of texts, taken into architecture by Tschumi with his deconstruction of the architectural programme have a happier conclusion.

Other critics focus on the loss of a social orientation, as Modernism had. The egocentric attitude of deconstructivist buildings that in the search of striking image for the media and popularity don’t take into account their context and do not assimilate to it, sometimes ruins it.
More see Deconstruction as running out of inspiration since the original tendencies of the 1988 exposition when architects incarnated a true search for a new aesthetic. Today many architects are slaves to fashion, designing deconstructivist projects that in some cases have become products of merchandising, without any critic value.

Lastly, there’s the opinion of people who find the architectural experience of a recreated chaos exceedingly artificial. It is undoubtedly a controlled chaos, which has been studied, it’s contained and logic. It is very far from the real chaos of natural disasters, wars and third world urban monsters.

One cannot generalize. There are beautiful and admirable deconstructive buildings, and others that are not. One thing is for sure, behind deconstruction there is a lot of amateurishness (because many contractors don’t know how to build properly) and leaving colorful tubes at sight can be a way of hiding untidy executions.

Apart from its formal values, architecture answers to functional requirements, this is what differentiates it from pure sculpture, and so it takes into account the techniques and technology available at that precise moment, and tries to stay within reasonable costs. Deconstruction is certainly distant from a rational constructive thinking; it looks for freedom and fantasy in its designs that end up having a difficulty of execution and cost well above “conventional.” But it is precisely here that we find its attractiveness, in the fact that it is above conventional. As usual, virtue lies in the mid-point, in knowing how to build esthetically beautiful and economically feasible buildings.

Derrida says:

“Deconstruction either in philosophy or in architecture doesn't mean destruction, it's not negative . . . It means the undoing of the axial principles on which a discourse is built. Traditional architecture was depending on layers of meaning which were not on themselves architecture, for example that architecture should be useful, functional, or depending on religion . . . or on political monuments. So what architects have to do is free architecture of what is not architectural on itself, not in order to reconstitute an architecture of purity, but on the contrary, once architecture is
I like the idea of relating to other arts, but I don't see why we should as well free architecture from its usefulness or functionality. For there to be architecture, there must be a program, and a program replies to a function, as I said before functionality is the essence of architecture, you can not take that from it.

Therefore, I do not agree with Derrida's view about pure architecture. Good architecture should take into consideration many aspects, connections, that I find essential to it and Derrida seems to find superfluous. In his book Observaciones sobre la Arquitectura Cesar Pelli numbers 8 connections: time, the technology of construction, the site, the purpose, culture, the process of design, our public and oneself. These connections limit our designs, but they can help us reinforce them as well. Freedom of action in architecture is an illusion according to Pelli, and it can be harmful for our profession. I think new connections with new arts and other fields of study can be made without canceling those others, even if some are Modernist, such as function, or social conscience.

You can ignore some connections, but in doing so architecture is harmed. Chalet style houses are being built in platforms cut out in hill slopes, this ruins the site. English and colonial style houses are built negating their own time. “Historical changes were the consequence of the efforts to correct the effects of accumulated disconnections. This type of efforts gave birth to Modern Architecture. By mid nineteenth century many architects were looking for a new architecture that would replace the predominant Classicism, even though this style had produced a great number of good buildings and cities.”

But this style hadn’t been able to adapt to a new reality and many thought it wouldn’t survive as a live art if it continued to be so disconnected. It seemed to them that Classicism was disconnected from the contemporary technology of construction and thus Modernism emphasized the importance to structure, adopted a preference for industrial materials and placed function above all in the designing process.

This is what is happening with Deconstruction today, the reality
of the Modern period has changed and so should architecture change as well. As we have seen, philosophy evolved, Metaphysics was attacked violently and the search for “truth” that had been the center of Occidental philosophy was abandoned. Art changed deeply; it became more abstract and psychological, experimental as well. Chaos lost its negative image and some started seeing it as an important part of the universe, and finding it beautiful as well. All this added up to the social changes, the developments in science, computing and construction technology had to reflect in architecture. Deconstruction was the answer. Some architects are better at reflecting some aspects of today’s life than others. Eisenman, for example, represents very well the psychological side of it, the way his buildings make you feel anxious reflects the uncertainty in which we live today, and only by accepting it we will feel liberated. Himmelblau does this too, theirs is a rebellion against rules, against order, an attitude of questioning everything, Tschumi takes the heterogeneous view of our culture. Hadid seems to reflect the speed of modern life in her designs and to show the achievements of construction with her buildings suspended in the air with almost no support. Gehry seems to transmit fantasy in his work, a shout against rationality. And if we look at all of them together and see how different they are, even though they belong to the same period in time, we understand the deconstructivist view of a fragmented reality, a no-absolutes view.

Thom Mayne (Morphosis studio) says: “architecture cannot escape an active engagement in the issues and conditions of our contemporary society. We cannot stand apart from or above these issues, be they social, ethical, cultural, technical or ecological, because it is only by facing them that we may find a significant subject for our art.”

It used to be modern to emphasize the way a building was built, not any more. To enter a building whose immediate message is “Look how I am made, look at my fine frame, my fine piping,” is to receive a very weak message.

Venturi’s thoughts reflects what I think of architecture as well, a building with many meanings, sources of inspiration, relationships is more interesting, more fun than a building that pursues just one goal, like “functionalism” and nothing else. But this demands a lot of the spectator: if the spectator is to read the message of architecture in several parallel
ways, he should know the conventional interpretations, i.e., the main points from the history of architecture, in advance. Architecture becomes thus an art which can be fully appreciated only by other artists and educated critics, not by laymen - a deplorably usual case in modern art.

“If the spectator is up to his task, he has expectations of the object of art. He relates the work to known references: to other comparable works of art and historical styles. The "competent" observer is also able to estimate if the work obeys these styles or if it deviates from them on purpose; and if there is such a deviation, he knows that he is supposed to find out the purpose and the message of the deviation. Finding this kind of clues, especially if it is not too easy, is conducive to the feeling of ‘eureka’ which is one of the basic factors of aesthetic pleasure”. 34 This I find for example on studying Gaudi’s Sagrada Familia, which bears so many biblical significations. But on the other hand, in some cases the beauty lies in the simplicity of the building. Tadao Ando’s minimalism for example; you get a sense of peace in his buildings that you’ll hardly find in a deconstructivist building.

This last personal comment together with the no-absolute point of view is reflected clearly in Robert Stern’s comment:

"You can be deconstructivist for breakfast and classical for lunch, just try to be a good architect all day long".35

For each project there might be a more appropriate solution, call it classical, deconstructivist or modernist, you don't have to fix to one movement in order to survive or be relevant as an architect. This is deconstructivist thinking as well, not an absolute point of view, but acceptance of diversity. Jean Nouvel personifies this attitude. He took this “dangerous attitude”, for it meant rejecting the concept of style that is usually accorded to the artist or the architect who makes a particular language his own and repeats it, always using the same materials and the same vocabulary of forms. “In short, the idea of contextuality led me to very different projects”, 36 which soon caused his critics to label him an eclecticist.

But the spirit, the essence of Deconstruction, what all these
different architects have in common, probably the only thing, is their attitude: an attitude of rebellion, of search for freedom, of questioning everything, an irreverent approach to the wisdom of ages, the things which most people gave took for granted. The important thing, as Jean Nouvel perfectly said, “is to make that reaction positive, for ultimately it is not enough to be against something, one also has to be for something.”

I believe some of the best examples of Deconstruction represent architecture at its highest point, and its popularity may be due to the offence it causes on those that prefer architecture as plain as a hot dog.

So when we ask ourselves, which are the sources of Deconstruction or the reasons for it to exist, in the first place I would place the dissatisfaction over the Modern movement, that has not changed its old formulae, and the Post-Modernism which hasn’t offered a solid, viable alternative and is slowly dying away. It is the need for an architecture that is more related to our time. Secondly it is the philosophical discourse of Deconstruction that has contributed much as well as the Russian Constructivist discourse that has been readapted. Modern art too plays an important part. And finally, the simple rebellion, the will to disobey, to annoy the old architects with a narrow view and break with tradition and in doing so, to achieve their own promotion.

As a last observation it is important to mention that the latest evolutions in architecture and its manifestations are difficult to classify. “Without the necessary distance in time, one cannot see what will remain and what will pass as an ephemeral fashion.”

What I wish for Deconstruction is that the movement will keep an open mind and won’t try to impose its principles as Modernism did. I wish for a plurality of movements in the future, a chaotic architecture such as Deconstruction may perfectly coexist with other less chaotic, more rational, ordered architectures, as the Modernism of Meier, the purism of Ando’s Minimalism, the rationalism of Botta or High-Tech of Foster and Piano. One architecture may be more appropriate in some circumstances; another may be more in other. An architect or client may find a chaotic architecture more appealing, more in concordance with his character while a simple rational architecture may appeal more to another. None is superior to the other. And of course in between the two extremes their may be infinite positions.
Art & Technology Museum Buenos Aires

I find very true what Broadbent says, that all this incomprehensibility in Deconstruction has encouraged people who care about clarity, to analyse what makes it so obscure, difficult, so as to try to be even clearer themselves. This is true for me as well, I feel more confident now and I can engage my projects with more clarity in my ideas. This does not mean I refute Deconstruction, on the contrary I admire much of it, I’ll just try to find its logic and evade what I find nonsense.

The programme for the project for an Art & Technology Museum to be built in downtown Buenos Aires, next to the Retiro train terminal included an exhibition area, a cinema and a conference room, a commercial area (restaurant, café, bookshop, giftshop, etc.), an education centre, a library, an administrative area, a service area for the personnel, a deposit area, machine room and parking.

We organized these areas in 4 different levels of irregular shape that spin around a central void, high all the way to the glass roof. It would resemble the organization scheme of Hadid’s The Peak project for Hong Kong, where she left a central void containing the public activities, and beams flying away from it with private apartments, sports facilities and so on. But we did not use rectangular beams, ours is a play of volumes derived from the shape of a mineral rock, those that seem like many little diamonds grouped together.
Everything is organized into only one big building with a marked axis which is parallel to Libertador Avenue that runs adjacent to the site. This way when passing by, the building presents its profile along 115 meters, so that one can appreciate it not from just one point of view, it’s rather a succession of views, a kind a promenade cinemathique as Tschumi’s Parc de la Villette.

The public entrance to the Museum is located visibly on the biggest volume that faces the stream of people coming from Plaza San Martin and the train terminal. The entrance is very evident, due to its proportions, orientation and demarcation on the floor, by difference of level and materials. We hope that this would act as an inviting gesture, or at least it would pose people the question, do we go in?

The building is attached to the ground by a succession of elements that create the effect that the building is rising from under the earth rather than it had fell from the sky, but as it gains in height, it seems to reach for it as well. Smooth slopes of grass emerge from around the building and lean on the low rocky platforms that make up the first floor and produce the effect of a solid base. Above this, sharp volumes of glass and steel rise to the sky, reflecting it on their smooth surfaces. This way the building seems to relate both to the earth and to the sky. The lines of the volumes are continued on the ground around the museum, separating different pavements or marking changes of levels to create a stronger relation between the surroundings and the building.

**Materials**

The materials used reflect what it is: a Museum of technology. We used modern, shining materials, aluminum and glass. They will shine, glitter and sparkle inevitably attracting passer-bys’ attention. The base instead is made of heavy rocky blocks giving a sense of stability and security, a base of old wisdom upon which is constructed modern technology.

The pavement outside is of the same material as the walls of the building, thus achieving a serene homogeneity at the base, the technological scream remains above our heads in the heights.
Language

The language used in a project of such characteristics had to be more than modern, breaking with tradition because this is not a museum to display things from the past, but from the future. This rupture is literal, the building seems to have exploded leaving nothing of the language of the past, walls are not vertical anymore and neither are windows rectangular. It is a play of irregular geometric volumes: Although the volumes seem off-balance and falling apart, we succeeded in keeping them structurally and visually stable. It is a system of opposing forces that as a sum appear equilibrated, unified. Achieving this was a challenge, and that’s just what we intended, to challenge tradition.

The internal spatiality is a breaking of traditional spatiality in architecture as well. No more enclosed definite rooms, but a unified, open space with many more interesting perspectives. The whole museum is organized around a central atrium whose altitude is that of the whole building. There are almost no walls, only the platforms that make up each floor cross the space at different heights like balconies over the void. We tried to break with the limits between interior and exterior too.

We achieved this effect by using the lightest curtain-wall system possible and by some elements that have a continuity in the exterior diminishing the sense of separation and making the limit virtually disappear. For example the interior ceilings continue outside, on the other side of the curtain-wall, without any columns of support that would create a limit.

Before writing this thesis the idea I had of deconstruction was what I saw on architecture magazines, photographs of popular buildings such as Gehry’s Guggenheim Museum. Lots of pictures with little analyses. So when we designed our museum and tried to give it a modern Deconstructivist look we did it superficially, not knowing in depth the strategies of deconstruction nor its basic concepts. I wouldn’t compare it with the type of deconstruction carried by Tschumi in his Parc de la Villette, which is extremely conceptual, it is nearer to a Gehry deconstruction, without such a philosophical framework - It is more a reaction from our guts rather than a cerebral one, as Tschumi’s.

Analyzing a posteriori, I found many similarities between our
project and other Deconstructivist projects. Tschumi “deconstructed” the programme of his project for the new National Theatre of Japan using music notation devices. He drew music-like eight-line staves (the five lines and four spaces between them on which musical notes are written) as bases for his notations and on these he strung symbols representing “auditoria”, “stages” and so on. His “staves” of course had parallel lines and spaces which gave him plans “banded” inwards from the façade to give a glazed avenue of entrance lobbies, multi-storey foyers, auditoria, a service strip, stages, backstage areas and a multi-storey artists’ concourse with dressing rooms. And then as Tschumi says the: “deconstructed elements can be ... according to conceptual, narrative, or programmatic concerns.” We did something similar when designing our museum. We cut irregular pieces of cardboard that represented each floor and placed them at different heights, only concerned of leaving the central atrium, we then thought of distributing the various parts of the programme and lastly we designed the wrapping.

Tschumi aimed at a structure that would negate the simplistic assumption of a casual relationship between a programme and the resulting architecture, a clear statement of “Deconstructionist” programming. Initially our project bore no relationship between programme and architecture, but of course we had to adapt it so that eventually each part could be housed in it.

In his Parc de la Villette Tschumi saw each part of the programme as a separate building, a fragment of a single structure designed within an “integrated policy”. We saw our project in a similar way: each part is a fragment, not from a different building, but a part of a single building.

We can identify different types of deconstructions. Broadbent identifies four: Mass deconstruction, Plate deconstruction, Frame deconstruction and Skin deconstruction and I would add one more, Space deconstruction.

Mass Deconstruction takes place in our building if we take as “masses” the volumes that although hollow inside, from the outside have a solid appearance. Their deconstruction consist in destabilizing them so that they lose the tectonic aspect that pyramids have for example, and
they seem to be in a delicate balance or even better, frozen in the moment of falling apart.

Plate deconstruction does not take place in our project, but to mention one example, Hadid’s scheme for Berlin are curved plates with the aspect of “sails” that have this plate image. Frame and structure are not deconstructed either, even though it is not an orthogonal structure the one it has, but the rows of columns are at odd angles, they still are vertical and the floors they hold are still horizontal. It is a simple system of concrete columns distant of a real deconstructed frame as Coop Himmelblau’s Roof Top in Vienna.

The skin on the other hand is the one that gives the deconstructed image to the whole building. The curtain wall is hold by an complicate system of beams that is visible from the outside through the glass and it generates a net-like design of triangles and rhombus that could be compared to a cubist design or a Mondrian drawing. The roof as well is made of glass and is hold by an equal system, but in addition there is a superposition of another system of sunshades, parallel lines very close to each other. The other volumes not in glass have a skin of rectangular metallic sheets placed in rows which are not horizontal, producing a diagonally banded surface. This is intended to destabilize the volumes even more and accentuate their deconstructivist aspect.

Space, in traditional architecture, was defined by its limits, generally with orthogonal walls. We aimed at breaking the limits and giving more dynamism to the traditional static space. The interior space is not well distinguished from the outside; the limits between them in glass almost disappear as elements like the ceilings have continuity in the exterior as well creating an interior/exterior visual continuity. The interior is a continuous space. There are no divisions, the totality of the space is perceived as soon as one enters and reaches the lobby from where he has a view of the whole complex. The space is therefore one, but there are many different perspectives. The angles and turns of the space generate these different perspectives and give a sensation of fluidity.

To finish, I’ll like to quote Derrida. Derrida said of Peter Eisenman: “(He) does not only take great pleasure, jubilation, in playing with language...He also takes this play seriously.” You could say the same of us, I took great pleasure in designing this Museum, and I took it seriously as well. I would say the playing part was at the beginning, when giving shape to the Museum, at the end it was hard work trying to give functionality to that shape. But I took pleasure all the way to the end.
Notes

1. Broadbent, *Deconstruction, a student guide*. p. 64
4. Idem
5. Broadbent, *Deconstruction, a student guide*. p. 93
7. Peter J. Leithart, *Derrida on Presence and Absence*
8. Richard Kearney, *Dialogues with Contemporary Continental Thinkers*
9. Kate Nesbitt, *Theorizing a New Agenda for Architecture*
10. Interview from *The deconstructivist*
11. Idem
13. Idem. p. 93
14. Tschumi, *Theorizing a New Agenda for Architecture*
16. Idem
17. Idem. p.70
18. Idem. p.84
19. Interview from *The deconstructivist*
20. Idem
21. Hadid, *Theorizing a New Agenda for Architecture*
22. Broadbent, *Deconstruction, a student guide*. p. 89
23. Idem
24. Libeskind, *Theorizing a New Agenda for Architecture*
25. Broadbent, *Deconstruction, a student guide*. p. 89
26. www.uiah.fi, *Thematic Theories of Architecture*
27. Davies, *Intro to Quantum Mechanics*
28. Heisenberg, *The Tao of Physics*
30. Interview from *The deconstructivist*

32. Mayne, *Theorizing a New Agenda for Architecture*
33. www.uiah.fi, *Thematic Theories of Architecture*
34. Interview from *The deconstructivist*
35. Koolhaas, *Theorizing a New Agenda for Architecture*
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