In early 1956 Colin Rowe concluded his article titled literal and phenomenal transparency written in collaboration with Robert Slutzky . Then he began, in the same year , a new article titled Neo- Classicism and modern architecture, published in two separately parts. Both are two of the most celebrated Rowe's articles, although it was not announced until long after its writing. Transparency was not published until 1963 at number 8 of the journal Perspecta¹.

For the publication of the second article we will have to wait another ten years , until it appears in the first issue of the magazine Oppositions in 1973. Despite the difference in years between its writing and its publication , the timelessness of the issues has allowed not to resent the interest of the writings. What however could happen, due to the lapse of such a long time, is that cultures that orbited at the time Colin Rowe decided to write it has become blurred.

In 1944 Gyorgy Kepes² published what will undoubtedly be his most influential text, Language of vision. Kepes develops an analysis of the grammar and syntax of vision, that is, a study of all physical stimuli that make up the phenomenon of vision and how they manage to come together and coordinate to form more complex expressions . Its purpose is to provide the reader with tools to deal with the art as a purely visual experience, devoid of any literary, semantic or emotional burden . Among all the concepts that Kepes reels perhaps the most crucial of all is the one known as dynamic equilibrium. The term³ is set out in this work for the first time and achieved verbalize something that was in the air, flying around all the modern plastic but so far only been explained empirically. According to the two-dimensional surface Kepes no articulation is a empty experience . The basis of all life processes is the internal contradiction, the conflict between opposing elements . Thus implies for an artistic experience, to be a living one, that inside it should be a latent but balanced tension produced by the dialectic between optically equivalent elements while not identical result is found: a new notion of equilibrium that rejects the classical mirror symmetry as the only strategy to achieve a harmonious experience plastically.

Maybe Kepes 's book illustrations have as much explanatory capacity as the text itself. At the end of the day , Kepes is a painter who reflects on art and his natural means of expression is graphic rather than verbal. So his ideas on the dynamic equilibrium are magnificently represented in the graphs showing a balanced scale with elements of different size and condition but with equal visual weight . That analogy between the optical weight and physical weight is perhaps what let Kepes approached so closely to architectural world, where dynamic equilibrium bounces from plastic canvas game to gravitational space⁴.

Once published Kepes 's book , the idea of dynamic equilibrium concept began to be handled among the intellectual circles of the discipline. Its impact was immediate and several authors echoed him, proof that Kepes had hit the target. It was a major influence for books written on the following years on the same subject like Thoughts on Design (1946) Paul Rand , Vision in Motion (1947) by László Moholy-Nagy , and Art and Visual Perception later (1954) by Rudolf Arnheim . Without going any further Sigfreid Giedion employ exactly the same term, dynamic equilibrium, to conclude his essay Mechanization Takes Command, a contribution to anonymous history, trying to explore an expanded notion of anthropological and social bias The coincidence is not casual at all since it was precisely Giedion himself who four years earlier had prefaced Kepes essay with a text written entitled Reality means Art in New York on June 12, 1944.

Both two Giedion and Kepes appear as article citations in the Literal and phenomenal Transparency from Rowe. Kepes also is specifically cited in the beginning of the text when it borrows its *magnificent*[°] definition of transparency, demonstrating that reading texts Kepes was still fresh when he started writing his next article Neo - *classicism* and modern architecture. It is in this article where Kepes have a more veiled, buried but latent presence, as it is under the employ of his notion of dynamic equilibrium as Rowe discusses the evolution of plants in the modern movement, as if Kepes had lent him , with their ideas, a very special lens to look old projects and extract new readings.

At this point , it is strange at first sight, the choice made by Rowe of a fellow traveler with no a priori kept many similarities . Rowe, British-born, twenty years younger, linked to a new generation of architects with innovative airs and strong ties to the Anglo-Saxon academic world. Kepes, twenty years older, Hungarian-born painter, member of the American experiment that New Bauhaus and linked to the generation of Giedion, Gropius, Breuer or Nagy made possible the movement whose precepts Rowe just tries to disassemble. However it is much more understandable when it is viewed globally the entire trajectory and objectives of Rowe's critic work from his early texts as Mathematics of the Ideal Villa in 1947 until the introduction to the monograph of Five Architects, in 1972. The latter could be considered surreptitious synthesis of one of their most important research pathways. He introduces the work of the Five with a text as a preemptive attack that intercepts which was expected to receive the New York architects and their work contained apparent contradictions regarding the theory of the heroic age which was paradoxically trying to honor . To Rowe, the text ,rather than a compliment on the work of the Five , which defends his intentions more than their achievements, was the way to delve into one of his most heated argument : the negation of the principles theoretical foundation of the modern movement. With the institutionalization of modern architecture, and its transmutation into international style, it lost, during the trip much of its original meaning as a form of utopian revolution. This fact had already been highlighted by many critics, but where Rowe puts the focus and what makes his work reviewed a distinct voice, is to point out the contradictions since its inception, from its theoretical construct.

Rowe begins by delegitimizing it all when exposed the contradiction of a principle on which the ideologues of rationalism had placed so much emphasis : the building had been released from its iconographic and historical burden to become the strict realization of functionality through constructive technique. Thus, if these buildings were meticulously capture the huge concrete conditions the formal match between very different use buildings belied in practice what the theory was sustained. A movement that does not recognize any formal problem, *just building* was suspiciously coinciding precisely in their volumetrics as we will see later. Rowe also shows us how the modern movement takes side between the two most powerful school of thought of the nineteenth century, science and history. Modern architecture sides with scientific positivism, by faith in a purely objective architecture. The purpose of the discipline is to improve the living conditions of man so an artistic conception of architecture as satisfying the desires and tastes of the author has no place. This clashes with modern beliefs that reject the repeating patterns in the manner of treaties in time of the Enlightenment, but seeks a renewed originality of the proposals. The merciless repetition produces convention and insensitivity to the specific conditions of each project, modernity stood as a continuous flow of events and changes. While you can argue that the modern movement tried industrialization of housing as a reproducible object in series, each architect was just always willing to admit it if his model was the one to be played. It is not conceivable

Colin Rowe and ' Dynamic Equilibrium' Pablo López Marín

that before a custom housing, for example Le Corbusier received, he used a model made by one of his colleagues as it was done in the time of the treatises. Thus, as Rowe points out, the exaltation of change precludes the idea of order produced by the establishment of unchanging and reproducible models. If the terms of a problem is continually redefined it is impossible to reach an ordered state.

With all these evidences Colin Rowe draws a clear stance. The modern theory can no longer be considered a useful theoretical framework. Actually its true purpose was to appease the guilt architect for being too intellectual, too bourgeois, and ultimately too artist. However Rowe, although the theoretical model sentence of 20 years as escapist myth recognizes that led to a fruitful creative period, leading to great visual and compositional redeemable contributions in future use⁸. For a decidedly declared ahistorical movement based on the positivist confidence in science and fascinated by the functional determinism, the parallels of his most outstanding works with examples of classical architecture proved devastating. This precisely explains the constant in the critical work of Rowe by these unusual comparisons between the most outstanding works of modernity with classical architecture, like in Mathematics of the Ideal Villa which brings out the parallels between Villa Foscari , the Malocontenta, from Palladio and the Villa Stein from Le Corbusier . Or when in Mannerism and Modern Architecture takes Villa Schwob to point out the similarities between some of its features (that white wall) and the ambiguities of the mannerisms of the sixteenth century. This is the way in which Rowe brings out its real content and composition and purpose plastic modernity refused. In a movement that refuses any artistic subjectivity Rowe precisely tries to emphasize that in his opinion were the most valuable findings: its compositional ties, plastic or art devoid of any moral or dogmatic load, linked to modern plastic . It's at that precise point where the figure of Kepes becomes useful to the British critic. If rationalism was unable to recognize shape problems, since they went against to its basic creed, Rowe detects the unrecognized presence of a predisposition towards certain compositions that seek to establish a sort of visual tension. This process will begin to avoid the symmetrical composition and centripetal bias as the first manifestation, opting for compositions which disintegrate into different parties seeking to occupy the periphery. This statement is easy to understand if you think about its physical correlate. To literally tense an item, such as a cloth, it is essential the presence of various elements to set it in the perimeter and thus the center of the canvas, materially vacuum is filled by crossing it with all the arising tensions . The object balance is evidenced precisely through that tense state product of balance of forces on it are given. The dynamic equilibrium is to the pressure as the classical equilibrium is, through symmetry , to the static strain. This latent tension of forces is which Kepes translates as a new form of balance in modern plastic and creates a new form of view on the world. We said that Kepes'merit was verbalizing and analyzing this concept since the idea had already been noted by other authors such as Rowe himself tells us in his article. So van Doesburg rescues the following quote:

It is very important and essential renewal composition method . Center Gradual Abolition of all passive and emptiness. Composition develops in the opposite direction , instead of moving toward the center moves to the entire periphery of the fabric , it even seems as if it were to continue beyond 9

Or in the architectural field when Gropius notes the emergence of a new aesthetic of the horizontal: While the symmetrical relationship of parts of a building and its orientation towards a central axis is being replaced by a new conception of equilibrium transmute that dead symmetry of similar parts in an asymmetric but equal balance.¹⁰

This group of compositions will be easily recognizable. Keys , tells Rowe¹¹, borrows Giedion when he l identifies fondness for centrifugal plans with *no intention to contract on themselves* and to *expand into pinwheel* or, as Johnson would point when he says that Mies¹² design unit is no longer the cubic room , but a raised wall isolation that comes from under the roof and extends into the landscape. They are , to cite some examples, the brick and concrete houses of Mies, Gropius draft for the Bauhaus School of Engineering Hagen or project for Gymnasium Thun of Mart Stam.

In this sense, Mies exemplifies precisely the inverse of the kepesian evolution, and to explain it Rowe devotes much of its second installment of Neo-classicism and modern architecture. The interest of the german architect by the spatial power reaches its zenith in 1931 with the building plan for Berlin Exhibition pavillion and the models for cantilever chairs, pure expression of a diagram effort. From there the peripheral composition and spatial tension created by a balance between equal parts but including a dialectic that makes them equivalent, to fade at the expense of increasingly rigid, concentric and symmetrical compositions is set up . In the years after the Barcelona Pavilion and the courtyard houses the perimeter becomes more recognizable and scheme fluids and walls extended outward schemes that made him so close to the schemes used Kepes in his chapter on space forces were left behind . These were illustrated with graphs for which a Mies' plan, such was the identification of concepts, would have done the same work.

However, the evolution of Mies would precisely the opposite way. Mies begins to show interest in the structure that directly involves a process of loosening of the architecture. So far, the structure is kept hidden under a continuous roof which allowed the internal partitioning to flow outside the order of the structural grid - see Barcelona Pavilion and Tugendhat house. On the flat surface of the roof, columns appeared to float ambiguously and partitions were not bound to preset positions for the structural axes. However, in his American stage Mies denude his buildings in an attempt to reach the literal transcription of their logic. The consequences on the space will be decisive. The partitions were now forced to align with the grid system of the beams implying a progressive stiffening of the architecture, exemplified in the trip from the brick house to the library and administration of Illinois Institute of Technology in Chicago, 1944, with its plan, compact centralized, and even symmetric, opposite pole from kepesian approach.

But where the voice of Kepes is definitely more evident in Rowe is when he talks about how this notion of equilibrium survives even in the second generation of modern architects and he specifically remarks one example, the one he considers one of the most representative American buildings, the Robinson House by Marcel Breuer in 1947. The example by Rowe does not seem chosen at random. Breuer and Kepes had an almost identical biography, both Hungarian immigrants in the U.S., peers and friends, to the point that it was Breuer who designed to Kepes a weekend cottage on Cape Cod that was built close to the one Breuer built for himself. On the death of Moholy-Nagy, Kepes left the New Bauhaus in Chicago, where he headed the Department of Light and Colo, because there was no sense since the death of his master. In 1946 he joined the MIT in Massachusetts where he met Breuer among other prominent architecture figures such as Gropius, Charles Eames or Buckminster Fuller. By then, he

had already published his major work in 1944, The Language of Vision, whose fees were intended precisely to cover the house payment that Breuer had built. The theme of the phenomena of vision and visual tension was booming in academic circles at the time, so it does not seem unreasonable to think that in one way or another influence had just by Breuer, either through the writings circulated or through direct contact with Kepes . This occurred in the years precisely Breuer was busy with the order from Robinson family to build their house in Williamstown, Massachusetts. Rowe argues that, while under house planning theory is a product of its functional analysis diagram, binuclear schedule so often employed by Breuer, this time was not only a matter of use but a way to build a spatial tension. The link between both sides is certainly narrow in proportion to the parties binds, but according to Rowe, do not take these proportions only to express their subsidiary condition but its real vocation is to establish a compositional tension between the parties. Collin Rowe gives the key when describing the intentions of Breuer pointing to the idea of give rise to a series of visual stimuli that have to be discovered on the edge of the composition.

Language and tuning of ideas could only lead to those expressed by Kepes in his texts. Notice how in Rowe 's words there is little .analysis on the building. Tension is not shown, as in Gropius, directly on the volume and hence in space, but directly on their planimetric demonstration. Rowe talks about the Robinson House strictly as the representation of an object and its plastic effect. And indeed, the proceeding on this house dues to an attempt to compose a plan as purely visual object that operates independent of its architectural manifestation. The graphic language used for the plan is misleading to emphasize on other elements to balance the composition, although this hierarchy has no real counterpart in the constructed building. So all these perimeter walls that extend to the landscape has great graphics but very little impact on the actual perception of the house, as Rowe points out:

So , finally , we see that these are peripheral incidents that give the building its unique containment , give it an air of modernity and determine our feelings of pleasure .

There are inescapable similarities between the floors of this house and the brick country house by Mies , highlighted by critics as Joachim Driller in his book Breuer Houses. The similarities lies in the plans, in its general appearance, its graphics and those peripherals incidents such that Rowe gave a definite importance. Their volumetries, however, don't let you link them , so it emphasizes the idea of two buildings that resemble in everything that concerns them as plastic object and not the object paradoxically they are trying to produce. Both draw a contour difficult to apprehend, full of accidents that prevent establish a clear perimeter. However it is posible to distinguish a composition formed by two bodies of very different sizes which creates a visual tension between them emphasized by the thin link that binds them together and helps run the composition of any centrifugal temptation. A center is not sought, but a balance between two unequal parties to be understood.

However, when this plan appears the career moment of each architect are completely different. In Mies, it appears at the beginning of his career, or rather, in the restart of his career when he leaves behind a past filled of academic cliché and embraces modern architecture as a new creed . In his atonement he derives five theoretical projects including this brick house. Here he began his interest in generating plans, under the direct influence of the De Stijl movement, creating a spatial tension by breaking the classical balance to be redone later through new artistic strategies. However, his subsequent interests led him to the construction of increasingly compact and concentric work, as noted . Breuer 's case is exactly the opposite way. If we look at his early work CPA :

his interests were focused especially in research on methods of industrialized building ready for mass production. Therefore her beginnings in the discipline were closer to neutral containers that allowed standardizable solutions. So were such small metal house or a youth project for Bauhaus teachers called Bambos, closer in its configuration precisely to projects by a mature Mies in his American period. However, since his time as a manufacturer of tubular furniture, perhaps as a reminiscence of his training in Russian Constructivism, Breuer showed an interest in a new equilibrium expression through a premeditated tense situation which shows the forces that maintain system stability . So, with his famous cantilevered chair model B32, which dispenses with rear supports, starts a research Breuer maintained throughout his career about cantilevered structures following the paradigm of the tree, minimal support for up space development through a constant tension structure ¹⁷. This research is mainly transferred through the section of their projects, such as the initial home Bambos with those bodies flown subject to tension. their own homes in New Canaan, whose structural experiments endangered the stability of the building, or the cottage located in Cape Cod -one of them precisely made for Kepes - and at the beginning of his American stage . Also at the end of his career with large concrete cantilevered structures as Ariston hostel in Mar del Plata or Begrisch Hall of New York University, a building completely cantilevered, symbol of the realization of a stubborn youthful fascination. Plastic Kepes game turns into gravitational game in Breuer. But Rowe choose among all possible examples, the Robinson house, one in which new notions of equilibrium are manifested on the plan, showing the pure compositional game that gave the modern movement not only at its founding period but also in the second generation of masters. Rowe puts them face to face illustrating the two parties he divided his article Neo - classicism and modern architecture. They seem to embody opposite paths, but Rowe gives us another way to read it as a circular motion. The Brick House 1923 is the starting point for Mies and the climax to Breuer in 1947 and vice versa in a peripheral continuous plastic drive, in an incessant and cyclic movement of systole and diastole, from centripetal concentration to peripheral dispersion under which historically has moved architecture and modern precepts deterministic explanation had no answer for.

Any reader could identify as one of the most distinctive and recurring Rowe's feature in his texts the idea of establishing unusual parallels as the mentioned between the Villa Foscari , the Malcontenta by Palladio and Le Corbusier's Villa Stein, or between Villa Rotonda and Villa Saboye by the same authors ¹⁸. Also established between the Altes Museum and the Assembly of Chandigarh, that other between Casino dello Zuccheri¹⁹ in Florence and Villa Schwob, or finally , that between the Sforza Chapel by Michelangelo and the brick cottage by Mies . This article tries to be, in a way, a tribute to that way of operating when Rowe s lending itself to an unexpected association with someone like Gyorgy Kepes, with which, in appearance only , not shared research fields.

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KEPES ROWE DINAMIC EQUILIBRIUM PLASTIC VISION TENSION