A RETURN TO HUMANISM IN ARCHITECTURE

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I

Both the theory of architecture and the architecture of theory can provide numerous examples to back up view that language and architecture have become so intertwined that they seem to be a single indissoluble unity. From example, in Vitruvius' legend about how architecture came into being, the people gathered around the fire to warm themselves discovered both language and building in one act, since the fireplace represents the beginning humankind's settling in one place and forming social groups; it represents the need for a dwelling place and communication. Thus, for Vitruvius, architecture and language belong to the same stage in humankind's evolution, almost as in Heidegger's rule of three "Building, Dwelling, Thinking", Vitruvius saw the path from the primitive hut as proceeding "by degrees to a knowledge of the other arts and sciences" and thus to humankind's cultivation, its evolution "from a savage to a peaceable, civilized life". Heidegger's remark that it is impossible to say which is older "sentence structure" or "structure of things" simply expresses in different words the anthropogenetic parallels between building and speaking. People use language to "build" an intellectual house for themselves, to construct their theories and moral codes. For Heidegger, the home of thought was language and essentially comprised "learning to dwell [in it] through use of language"1.

Vitruvius prescribed three fundamental criteria for humankind's house, which he summaries in the term *firmitas* (firmness), *utilitas* (commodity) and *venustas* (delight). All architectural theoreticians since Vitruvius have based their work on this triad, which works in any configuration. These three basic words cover architecture as a complete entity. Similarly, the history of architectural theory can be understood as a continual process of reinterpreting the interplay of meaning between these three terms, -a process that can never be concluded. Rather like in a game of billiards with three balls, each individual term can bring the others into play, touch them directly via astonishingly circuitous routes, and set them in motion. The constellations of this intricate interrelationship have neither been exhausted nor definitively explained. The whole secret of architecture now, as at the time of Vitruvius, lies in combining solid materials to form a stable, functional and attractive building, even if architects -depending on their intellectual predilection, be it for Mannerism, "the Romanticism of ruins" or Deconstructivism- sometimes like to make their works look as if the opposite were now true, once and for all.

These criteria *firmitas*, *utilitas* and *venustas*, can also be applied to the "house" occupied by the architecture of theory. An intellectual house must not collapse like a house of cards under the first breath of criticism. Here, too, the laws of architectonics must prevail: if it is to fulfil a rational purpose, it must be a solidly constructed, coherent whole. The architecture of theory has the purpose of giving human beings -creatures endowed with reason- security and intellectual orientation in the world. The purpose of this building is to organize the systematic conditions that will facilitate the comprehension of conceptual symbols. We also expect the architecture of theory to have a pleasing appearance that also uses the aesthetic argument of beauty to convince us of the correctness and efficiency of the rational constructions. The elegance of a mathematical solution or a structural connection can be as captivating as its abstract logic is compelling. In the structure of human consciousness, logic and aesthetics, concept and intuition, are realities that are related to each other, just as they are related to each other, just as they are protective and symbolic functions of our sense, based structure of needs

Language, with its words as building blocks and syntax as its structural system, is a system of signs that we can use to refer to something in reality. Perceiving, speaking, thinking and building are events in sign form. The fact that architecture is also an art form and, like language, is dependent on the capacity to express meaning and to understand was taken for granted even by Vitruvius. In the very first chapter of his treatise on architecture, he emphasises that: "In architecture, as in other arts, two considerations must be constantly kept in view; namely, that which is signified and that which signifies".

Architecture, like language, is a way of expressing meaning, its success depends on the extent to which that which is to made explicit and that which is being spoken of are in harmony with the linguistic tools of representation. Speaking is an act of expressing thoughts, of conveying meaning, just as a drawing predetermines and anticipates a building in reality. But that measure, a successful symbol is that which, like a successful building as defined by Vitruvius, is functional and delightful and therefore possesses qualities of truth and fulfilment. If it has logical qualities, as well

as expressive and representational powers, intuition and concept become one in the valid symbol. At that moment, we think that we can see the thought itself in the symbol -the sensory manifestation of the thought.

We see buildings -if they work- as successful expressions of something beyond themselves, as works of art that convey particular feelings and attract meaning to themselves, which they store and seem to be able to transmit. We feel something extraordinary and meaningful, without always being able adequately to articulate what it is that is meaningful in any given case. In this respect, historical monuments are the most plausible examples of the manifest symbolic function architecture. They collect historical moments and concentrate them into a succinct form. Once they have become a firm part of collective identity these "moments" become inalienable icons, surviving time and the need for change that goes with it.

How does architecture carry meaning, to what, as an art of signification, does it refer? What is the "real thing", the counterpart in reality to the symbol? Or what does the capacity of an architectural language to signify consist? This questions on the reality of architecture, on the subjective and objective meaning carried by its creations, on the connection between meaning and interpretation, have influenced the formulation of theories throughout history in very different ways.

As a mirror on the world, architecture has acquired the status of a paradigm, a model that gives access to the architectonics of Being. It was for that reason that Antiquity regarded architecture as an exemplary art and model science. As far back as our minds can stretch, the structure of knowledge and knowledge of structures have been linked, and consequently architecture has tended to seek a model in logic, and logic likewise in architecture. Without its capacity to "point beyond itself", architecture would hardly have been able to take on this metaphorical function and play the epistemological role assigned to it by philosophers: Plato's "world building", Kant's "architectonic of pure reason", or Nietzsche's "architecture for thinkers".

Thus, the history of architecture can also be seen as history of the objectification and sensory representation of cognition and knowledge. This view can equally well be applied to numerology in the Antiquity and Middle Ages and to the modern orientation towards the natural sciences. The obvious life-preserving significance of a building in the physical sense that it is a container for people, along with the power of architecture to create community, has obviously given credence to its metaphysical function of expressing a "great" existential truth. Modernism also follows in the wake of this idea, seeing architectural as a medium for manifesting progress and architects as the executors of the *zeitgeist* of the day or of a scientific theory, be it grounded in Newtonian physics or chaos theory. The fact that the complicity between architecture and metaphysics was used as a justification for abandoning "old" architecture in favour of what was misguidedly seen as "new" building is one of history's little ironies. Similarly, in the act of imbuing architecture with symbolism, it makes no fundamental difference whether, in the process, the old absolutism of the extreme of "radical relativism" (Nelson Goodman).

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If we look at the role of architecture as a medium for making cognition manifest and as storehouse for knowledge and experience, it is striking that architecture has primarily been called upon to exemplify logical relationships connected with the nature of *physical objects*, about which it is also possible to make precise statements through language. Seen from this perspective, architecture can be understood as the exemplification of the idea of structure just as our concept of system is an exemplification of the "architectonic" itself. The interpretation of architecture as the objectification of the "grand" system of divine reason or universal harmony was based primarily on the visible logic of loads and load-bearing elements as expressing a physical relationship of component parts which make up a solid and self-contained whole.

The meaningfulness of architectural form, in which loads and load-bearing elements are in the same relationship as cause and effect, has become a model for thought. According to Descartes everything is rational and well founded if we proceed step by step as if we were building a house, Kant sees "architectonics" as the very "art of the system" per se. Science is the structural system underpinning reason. That is why science is -one could add: just like architecture- is "also merely" the art of building, Kant's famous key proposition: "The whole is thus a well-structured organism (articulatio), and not an aggregate (coacervatio)" defines a concept of structure that corresponds to the idea of a well -ordered and well- proportioned organic building. Architectonics is thus an abstract symbol of structure, and denotes systematic forms of knowledge and cognition that have been expressed in conceptual terms. Its ele-

mentary logic is part of the aesthetics of all built objects. The architectonic of reason thus also takes its legitimation from the symbolic power of its built order, or, to put it another way, from the "aesthetic" power of the system.

The other possibility for storing architectural experience, which cannot be so unequivocally and cannot be imagined in terms "truly" physical *things* such as three-dimensional bodies, but relates to the *realm of the probable*, is, by virtue of its nature and form, decidedly more difficult to give a name to, namely space. It is impossible to speak of space in terms of a "logical" structure, as being concrete and tangible, and thus in terms of objects (or three-dimensional bodies) that can be put into words and described. "All" we can possibly do with regard to space is tentatively *point to* and describe it in approximations, in an attempt to do justice to this phenomenon as a form that inhabits realm of imagination and perception. Our ability to imagine space is subject to limits in two senses: firstly, our powers of imagination are limited when it comes to space since they are usually fixated on things, and secondly, it is only through limits that can be perceived by the senses that space takes on a manifest form

If, as Kant maintains, space, like time, is not an empirical given but one of the imagined forms that exist a priori in the human mind, pre-existing all perception and experience, it would follow that architectural space is also nothing other than the objectification of this inner form of intuition that is inherent in human consciousness. How does a work of architecture express this idea of space that is peculiar to human beings and deeply rooted in them? We are all familiar with images of the body, the well-proportioned naked person is the oldest image and evidently still the highest image that stimulates the human capacity to imagine a body of any description. The organisational aesthetics of the limbs, copied from the model of the well-proportioned human body, has, since Vitruvius, been a model for the well-constructed whole that is a building. As long as we continue to speak of a building not as a machine but as something organic like a body, the Eros aspect of this model the whole that "bears a greater resemblance to a unified body than a dissipated and scattered collection of limbs" remains intact. Tectonics is thus the art of logical construction based on the proportions of the body. But how does this apply to the construction and design of spaces? Do they also follow an inner logic, in the way tectonics does? What about our spatial fantasies? We have sublime images of the infinite -the starry firmament, the horizon or a labyrinth- but do we have images of architecturally limited space that move us emotionally?

This automatically leads on to other questions. How should we envisage the process by which imagination of *space* is successfully signified, something for which we do not have a convenient metaphor comparable to Kant's architectonic of pure reason? Applied to space, the statement about the whole being a well-structured organism and not an aggregate makes little sense. But does that mean that, because it cannot be apprehended using organizational aesthetics of the "structural" logic of solid three-dimensional bodies, space is an amorphous unbounded entity? Is it not possible when referring to space to still talk of a certain *firmness*, precisely because in the Kantian sense the "inner intuition" as the reality in which all physical experience first of all takes place a an experience "in space"?

The unambiguity of space lies in its fixed quality. By contrast with time, space is not a 'river'. The expression "fluid space", which is used to describe spaces that give the impression of being semi-open, and semi-closed (as we know from Mies van der Rohe's works, for example) makes this natural law of perception clear. The moment spatial boundaries lose their unambiguity, our idea of space itself is shaken, and we even feel physically motivated to explore the true nature of the space around us. But it is not the space that has started to move, as if it were a fluid material that can be poured into any mold, but the observer. The term "fluid space" contains the idea of consecutive physical movement in time, which the observer carries out in space, transposed to the non-material entity that is space, in order to describe this as a "reality" in the sense a real object. Space is for us a problem of signification, our mental capacity to name attempts to solve this problem using the tried and tested pattern of anthropomorphic logic, i. e. the transposition and projection of the characteristics of the body on to the external objects in our environment.

This metaphysical process can, however, be envisaged as working in the opposite direction: not as a characteristics of the body on to space but as a process of being drawn back on to ourselves through space. Architectural space throws us back on to ourselves. This theory would mean that the physical projection would refer back to us as a self-reflection, as the starting point and finishing point. Associated with that would be a shift from external to internal perception, which would no loger involve naming the *object* of cognition but the *process* of cognition itself, which is tanta-

mount to the transition from the conceptual objectification of the name to the act of naming itself. Seen in the light of a philosophy of interpretation, this step towards space could translate into the insight that "every object is always an object in cognition and *in* its interpretation"⁴.

To back up this idea of a self-reflective *architecture for thinkers*, in which, through heightened self-perception, a person can recognise their own face as if in a mirror and gain self-awareness, because with the gentle power of its spatial effect the architecture forces him back "into himself", I shall cite two great thinkers as sources. This idea of architecture occurred to both of them as they travelled through Italy.

In 1786, Johann Wolfgang Goethe was utterly amazed in the Palazzo della Ragione in Padua which -in view of the gigantic dimensions of its *Salone*: 27 metres high and wide and 82 metres long- is no surprise. This space, which at the time was the largest covered space in the world, its walls decorated with a fresco in over 300 sections, depicting the astrological cycle, originally studded with painted stars, prompted him to think about space *per se* commented: "And there is no question that the gigantic domed space creates a peculiar sensation. It is infinity enclosed, more akin to man than the starry firmament". But the actual point of this experience of space is to be found in what he then concludes: "The latter tears us out of ourselves, whilst the forces us in very gentlest way, back into ourselves"⁵.

The fact that architecture can convey an experience of space that makes us relate back to ourselves is something which Friedrich Nietzsche also felt in Italy, some one hundred years after Goethe. In Nietzsche's case, it was the arcades and church interiors that inspired him to imagine the possibility of "Architecture for thinkers" -the title of one of the aphorisms in The Gay Science which says:

An insight is needed (and that probably very soon) as to what is specially lacking in our great cities -namely, quiet, spacious, and widely extended places for reflection, places with long, lofty colonnades for bad weather, or for too sunny days, where no noise of wagons or of shouters would penetrate, and where a more refined propriety would prohibit loud praying even to the priest: buildings and situations which as a whole would express the sublimity of self-communion and seclusion from the world... We want to have ourselves translated into stone and plant, we want to go for a walk in *ourselves* when we wander in these halls and gardens. (Book 3, section 280)§.

The encounter between inner and outer in an "empty" urban space that is free of ideological "programmes" and "events" of all descriptions, in which the individual can communicate with himself on the same level, is Nietzsche's idea of an *Architecture for thinkers*. Implicit in it is the postulate of an architecture with a singular kind of *space* that reflect our nature as conscious beings.

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Providing a space-time framework is for Kant a feat of the human imagination that precedes sensory experience. Thus experience does not move in a chaotic state of diffuse impressions but in an ordered fashion that is divided *temporally* into change and duration, the consecutive and the simultaneous, and *spatially* into under, over, in front of, beside and behind one another. Without this basic framework for interpreting architectonics in space and time, whose coordinates underlie all perception and cognition, we have no possibility of understanding ourselves or the world. The three dimensions are framework that enables us to imagine spatial expansion and limitation based on our own physicality. The arrangement of our limbs above each other results in height, their symmetrical arrangement beside each other in width and their directed movement in a consecutive sequence in temporal and spatial depth. All imagination and perception of shape is subject to this interpretation process and it is at this point that we can take the first step into the spatial interpretation practice of architecture far thinkers, in order to take a walk "within ourselves".

As the three-dimensional framework of human beings who live in community with others, architecture also gives life a form peculiar to it, a form that has its own meaning and iconic power. It is the symbol of one of humankind's cultural achievements - the space- time order they created for themselves. The extent to which we go for a walk within ourselves as a result of architecture's determining our image of space, is demonstrated by the architecturalisation of vision itself. The visual image, which is organized on the basis of a central perspective and which we regard as the "true" image, provides the best proof of this. In the Renaissance, the architectural nature of vision was recognised as a fundamental law of optical perception and theoretically framed. It was universal artists such as Brunelleschi and Alberti who had the first

insight into the architectural way the human eye sees. Perhaps it was their work on this that made both men become important architects.

But decades before his tract on architecture, Alberti published his theory of perspective in a treatise: *Della Pictura*. In it, he defines the role of the painter as being: "to describe with lines and to tint with colour on whatever panel or wall is given him similar observed planes of any body so that at a certain distance and in a certain position from the center they appear in relief, seem to have mass and to be lifelike". As an architect who used pilasters and half-columns to create an architectural image on the wall, Alberti pursued the same aim in three dimensions. This is clear from his comment that the purpose of pillars and columns depicted in a pictorial two-dimensional manner, was to "create the illusion of a portico" in other words, to make it look possible to walk out of plane of the wall into the room.

The pictorial representation of architecture is a topic which architecture itself is concerned. It depicts itself and creates its own image in the abstract relationship between the lines and in the relief of the edges. In this way, a wall can be thought of as a depiction of space and the pictorial space that appears to our eye to be true-to-life, can be regarded according to Alberti "like an open window" in a wall. The analogy between pictorial and architectural vision is self-explanatory for Alberti. Architectural metaphor is a fundamental component of this theory of perspective, in which the picture plane is the cross-section through the "cage" which "[is called the] visual pyramid]"9. This cage is an architectural creation of our imagination. It transfers two fields of vision that are actually conical, in which the image is upside clown and in which there are no right angles and straight lines but only curved lines, into the orthogonal system of a single pyramid. Why? Because we evidently want to see "reality" like that and in no other way.

The architectural inventory of our visual apparatus is thus inconceivable without camera obscura and visual pyramid, window and framework. It has become part of our flesh and blood as our optical system. Architectural imagination controls our perception of space, which enables us in the first place to create a systematic "image" of an arrangement of three-dimensional bodies in space that appears to us to be true to life. This logic of the "architectural" interpretation of space is the basic intellectual framework that underpins vision when we optically perceive an object as an object.

Architecture gives rise to the law of vision that states space is visually fixed. For Alberti it follows that the abstract system of rules governing lines, planes and three-dimensional bodies is also the characteristic tool used to create an effect with architectural form. As the *theatrum mundi*, the perspective box is the space in which all sensory events take place before our eyes and which is at the same time the anatomical terrain of architecture. This model seems to eliminate the world as the space in which things happen and to adapt it to the observer, who, as the "one perceiving" takes on the role of putting things in their place within the whole.

Like no other art, space-creating, space-defining architecture expresses a reality that is both logical and aesthetic, a reality we relate to not only as an observer but also as a participant. In the same space, which the architectural work of art creates as an aesthetic experience, we are also physically present in a space-time. We can enter the space depicted by a painting only in our imagination; in reality we remain outside this space. In architectural space, we *are* present in the reality of our existence, not just in our imagination. It is precisely this aspect of direct unmediated experience that made modern painters such as Mondrian or Doesburg envious of architecture, with whose help alone the unachievable "great dream" can become reality, namely to finally "place the person not *in front of*, but *in* the painting" 10.

"Architecture for thinkers" refers to the art of placing a person into his own image through spatial enclosure. This happens when we succeed in creating a separate spatial sphere around ourselves and, based on the ideal forms inherent in human intuition, in giving that space corresponding form through a "symbolizing" phenomenon in reality. This would then produce powerful architecture which, as Goethe so beautifully put it, would force us back "in the gentlest possible way into ourselves", because -we could add, following Nietzsche the great unmasker of humankind's ulterior motives- it flatters our artistic "instincts". Alberti probably had something similar in mind when he said of the relationship between convention and innovation: "For battling against the habitual in many respects does bring gratitude, conforming with it is also of benefit and very advantageous.

Nietzsche called the "desire for simplicity, intelligibility, regularity and clarity" a powerful "instinct", which "is at work in a all sensory activities and reduces, regulates, assimilates etc., the wealth of true (unconscious) perceptions and only *presents them to our consciousness* in this pre-prepared form. This 'logical', this 'artistic' activity takes place incessantly"¹¹.

Using fixed forms to reflect a vital human instinct that is concerned both with our physical awareness of stability and with how we experience is part of architecture's representational power. And the desire to deliberately unsettle these impressions, or even turn them upside down, is directly connected to this power. Deeply embedded in human nature is a trust in the elemental stability of mass, a feeling for weight, pressure, and resistance as part of our experience or our own bodies. For that reason, architecture can trigger a very lively invocation of our memories of physical security and strength.

It is exactly the same with space, which enters our awareness and our memories as an experience of free movement of our bodies. The "pedestrian-friendly city" is a comment on the potency of this capacity for memory. No matter how much we love our cars, we are not willing to sacrifice the urban spaces that allow us unhampered physical movement. The "living quality of space", which August Endell spoke of in 1907 in his Schönheit der Stadt, is created by people, because "open space is divide up by moving bodies, [and] distance and size take on a new meaning"12. The way we experience space through our own bodies enables us immediately to adapt to space and in our imagination to fill it with our movements. Thus, for example, a long space, such as the nave of a church, suggests forward movement; a symmetrical space constantly brings our thoughts back to the enter and vice versa letting them drift in all directions. Also the distinction between a broad urban square and a sunken square, which depends on the siting of the buildings dominating the square and capturing the eye, ultimately follows this pattern. Because squares that are not accessible to this act of the imagination five us nothing to go by in terms of size and shape, we experience them as being without scale and therefore desolate

IV

Enclosing and forming space is the aim of all architecture. Architecture is a spatial art, which, through the artistic arrangement of planes and three-dimensional bodies, produces a usable space as its work of art. This in turn is part of our reality: buildings and towns are second nature to humankind. The built environment, as a more or less artistically designed reality, cannot be escaped. This aspect of totality alone may inspire of omnipotence in architects, feed their desire to create a *Gesamtkunstwerk* that is fit for a "New World" or "New Home" or even "New Man". Architecture has the status of the unavoidable and thus the universal and therefore has an almost overbearing presence. Even the ancient world's idea of a cosmos that is influenced by architecture says something about how humanity seems to share a common fate with architecture, for example when Plato talks of the "world building". Even today's virtual world is inconceivable without "microchip architecture".

Architecture has the capacity to signify the universal. This is far Kant the *sine qua non* of a "valid sign". An "empty" sign is one that has become empty due either to the lack or loss of one of the senses, or to an obvious lack of meaning, or both. The obligatory avant-garde discourse on the crisis of architecture in the age of modern science and the "End of the Classical" (Peter Eisenman, 1990) has repeatedly questioned the "validity" of architecture as a representational system. Since the XIXth century, people have lamented the failure of architecture as a cyclically recurrent, virtual "classical" phenomenon of Modernism. The questioning of architecture itself of the logic of its meaning (Deconstructivism is still labouring away at this) and its language is itself only the sign of an architectural sensitivity or "habit" that has been lost, and thus targets an aesthetic deficit in the perception of architecture.

The logic of modern functionalism has tried to make us forget that the signifying function of architecture, in other words its aesthetic side, plays an at least equally important role in its success. *Firmitas* and *utilitas* together neither replace nor produce *venustas*, just as reason alone does not necessarily give birth to something reasonable.

In the name of what it misguidedly seen as objectivity, and influenced by the Machine Age, Modernism was bent on eliminating the whole meaning factor from architecture. According to Adolf Loos, the only elements of architecture that should be classed as art were the tombstone and the monument and everything connected with the purpose of a building should be banished from it. The decisive question "How architecture means", which the American philosopher Nelson Goodman asked, did not reappear until after modern architecture's loss of meaning had become obvious. It had subscribed to a new ideology of "What architecture should mean", namely technological "progress", and paid for it with its loss of all sensory quality.

A building, says Goodman, "can influence and reorganise our entire experience through different channels of meaning. Like other works of art -and scientific theories it can open up new insights, improve our understanding and participate in our constant recreation of a world". Architecture finds its way into "how we as a rule see, feel, perceive, imagine and understand" and is thus an integral part of a coherent interpretation of the world and of ourselves. This intellectual and physical "experience" that is stored in architecture, its abstract logical and sensory aesthetic legacy, is a creative potential, which irrespective of whether it has been suppressed or recklessly abandoned -can and must be rediscovered and reacquired as something "unfinished". This can be seen in the history of revivals and Neoclassical movements in the European art tradition that stretches back through the centuries -all of them as convinced by their right to lay claim to the future as they were by the possession of the past as their own creative resource.

With its utopian messianic ambition to transcend the world in its current condition, Modernism set out with the aim of renewing humankind and redefining our spiritual, intellectual and social existence. The ultimate aim behind its overturn of values and radical break with tradition was to completely redefine human beings themselves and their environment with the help of technology. The logically consistent overcoming of interiority and the systematic and dynamic opening to the world was intended to mark the "intellectual" revolution of the "New Man" of the Machine Age. The renunciation of old instincts, emotions, and quite definitely comfort was part of the heroic adaptation that had to be achieved joyfully in the name of progress. The taboo on ornament applied not only to the excesses of sumptuous form, but, as the *International Style* proclaimed in 1932, to all things sculptural, be they materials, structural elements or architectural profiles. It was not until the gay abandon of Postmodernism's "anything goes" attitude, its promise of a new era without boundaries or limitations of any kind, that a line was finally drawn under this mulish puritanism with its worship of abstinence.

Technological and aesthetic Modernism was not concerned with changing architecture but with redefining its very nature, with creating an architecture that would reflect people's new relationship with the world. The revolution in architecture laid claim to a new understanding of the building and a new understanding of how to organise space. Nothing less than the phenomenal nature of architecture, that is the peculiarity that its logical and sensory nature, was up for discussion.

Confident that the laws of perception of three-dimensional bodies and space in architecture, and the physiological and psychological premises on which they are based, could be changed at will, if one only went about it with enough good intentions and the apposite emotive rhetoric, a new interpretation of space was proclaimed. The "New World" turned on its head perceptual psychology's theory that space can be imagined only in finite terms. "New Man" moves in a "New Space", in a romantic continuum, in which only interpenetration and boundlessness exist and isolation and interiority have no place. Giedion's model of the modern single space, in which everything that belongs together comes together, is in a sense a form of late baroque turned outwards in an attempt to reinterpret its aesthetic means of illusion as part of the building's inherent logic. In the same way as baroque dome structures interpenetrate each other or merge to form a continuum on the border between interior and exterior space, engulfing both the space and body of the building, Giedion sees in Modernism nothing other than a "fluid transition of things", blurring "the self-important border between them".

During the Baroque age, modern mathematics' infinitesimal calculus was the logical counterpart to the transcendental longing for infinity in art. Giedion, who in 1922 published the dissertation he wrote under the supervision of Heinrich Wolfflin "Late Baroque and Romantic Classicism", linked the religious experience of redemption created by the continuum -the idea of humans as earth-bound creatures being as close to heaven as possible- to the engineer's modernist steel frame structure. Giedion's creed "there is only one single indivisible space", in which relationship and interpenetration prevail instead of delimitation, is a eulogy to the open-plan house, in which "the original conceptual polarity-space or sculpture" no longer applies: "That is no longer of any use in capturing phenomena!".

That kind of ecstatic removal of boundaries between Self and Other was only achieved by Baroque architecture in ideal cases with the help of stagecraft such as sculptural ornament and tromp-l'oeil paintings. By contrast, the new phenomenology suggests transparency, in which a three -dimensional body is no longer an entity by surfaces that give it shape and delimitation, but can also be a place in space which it shares with other bodies. The supernatural possibility that two bodies can interpenetrate each other and occupy the same space was something that Aristotle in his *Physics*

would only grant to angels. Contrary to perceptual psychology's received wisdom, the illusion is created that true existence and perception of things are only possible without any kind of limitation.

The liberation of architecture logically took place in dazzling white angel's robes. The translucent floating cube, white both inside and out, which should preferably establish its earthly abode on green virgin land, represents a deeply metaphysically tinged, if not even religious experience of redemption. The transparent building that leaves behind all earthly things and is released from the weight of its architectonic body, is floating and transparent, is a manifestation of that "dematerialization of the confined space", which also captivates the observer and which, as Giedion said of Le Corbusier buildings, "when you walk through them makes you feel as if you were walking on clouds" Only in airplanes did mortals come closer to heaven, which Le Corbusier had already hinted at with some of the illustrations in his Vers une architecture. In this counterpart to "architecture for thinkers", people do not go for a walk "within themselves" but hover, waiting for a new definition that goes beyond themselves. Goethe testified to the star-studded sky producing a similar experience of ecstasy in the Salone in Padua, when he said, it "tears us out of ourselves".

The naked cube -white both on the inside and outside- could survive as the ideal form of a utilitarian dwelling place for "New Man" only as long as he firmly believed *Neues Bauen*'s promises of emancipation and was prepared -in the name of progress- to let himself be proselytised by objectivity and hygiene and become an architectural ascetic. In return, he was allowed to count himself among the avant-garde brotherhood of a heroic New Humanity, which at best could muster sympathy for the past and its culture. Only the devastating results of the new architectural gospel with its wonderful intentions, whichws preached the abolition of boundaries and indeed with cities themselves, revealed the downside of the vertiginous vision of humankind freed from the gloom of tradition with its dusty old art forms and dark tenements. In the hollowness of the white kitsch and the dreariness of the concrete blocks that had been built to conform to the standards of social and machine-based aesthetics, the flight of lcarus came down to earth with an unceremonious crash.

The philosopher Ernst Bloch, who was receptive to matters of faith, admonished modern architecture very early on for being "far-removed [...] from true human nature" and "decidedly soulless". The fact that a town or city consists of more than just a sequence of free standing rows of houses on a greenfield site and that a room needed to be dressed in more than a clinical white overall covering the naked skin of its walls if it was to feel lived in, gradually began to dawn on even the most dyed-in-the-wool functionalists. The loss of urbanity in modern urban design and of a house needing to be a home, decried by many, has also been described as the degeneration of architecture's ability to create a place for the soul. The modern loss of interiority has, by forcing buildings to worship the god of the machine -both in functional and aesthetic terms- cut architecture off from its own language with the result that its capacity to exert a symbolic function that goes beyond material and utilitarian requirements and intervenes in the world of our imagination and feelings has atrophied.

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Regaining architectural form on the outside and inside of buildings, the formal principles governing the design of buildings as enclosed space, sculpted volume and interplay of surfaces that go beyond empty abstraction, but also beyond a new machine aesthetics based on modern media technology of sensation-hungry aestheticism is a task which today will seem disconcerting only to architects who have become alienated from architecture.

Architecture is lost to those architects who are in love with images, who regard the wall as a no man's land and offer it as an advertising space for rental to any media that can generate "images" and messages, because they are no longer capable of mastering the architectural categories of surface that are needed to generate an image of architecture" with these means on the wall. Architecture is lost to those architects who are in love with objects and who place their buildings in space as sculptural objects, which then spread out into the space in a spectacular way, but cannot themselves create space because those objects are no longer able to generate space-solid figure. Architecture is lost to those architects who are intoxicated with space and cannot see architectural space as an encounter between inside and outside, the self-contained and the expansive, and who will not accept the idea of an urban square as being a genuine architectural symbol and creative experiential dimension, because they have lost the feeling for the peculiarities of the border that defines space and the structural categories of a pictorially fixed architectural form of space.

Architects who belong to the school of "architecture for thinkers", architects in other words, who are not unfamiliar with architecture, to whom architecture is not something alien, because they are convinced by the idea that architecture offers us the opportunity to go for a walk within ourselves, will not insist on the need for architecture to enrapture in the name of higher powers or theories that always appear in the name of some *zeitgeist* or other new "medium". The humanistic idea of enclosing ourselves in built space, which in turn enters into a lively relationship with perception and imagination, has no need of greater glory, nor of aesthetics that are rooted in sensationalism, because it does not need to be "mind-blowing" or "enthralling". The idea of having the real possibility of taking up a "standpoint" in the world through architecture is utterly sufficient. "Architecture for thinkers" once more needs architects who are still in touch with the cultural awareness of humanity in architecture; in other words architects who do not want to want to "tear architecture out of itself" but who, to borrow Goethe's wonderful words, want to "force it back into itself" in the gentlest way.

FROM COHERENCE TO CONTRADICTION, AND FROM CONTRADICTION TO PARADOX: OR WHAT TO DO WITH THE ARBITRARINESS OF ARCHITECTURE

Luis Rojo de Castro

Architecture is supported, as a discipline, on the concept of necessity. This might be programmatic, climatic, aesthetic or of another nature. Arbitrariness, on the contrary, is thought as alien and incompatible.

However, in all architectonic problems there are a number of open or even imprecise variables, whose determination can only be the result of a superimposed construction.

Domesticated in perspective construction, hidden behind geometry, or exorcise by functionalism, arbitrariness and its manipulation is a fundamental component in architectonic problems. Paradoxical thought, capable of questioning the liking of coherence that we believed co-substantial to architecture, nowadays puts arbitrariness in an exceptionally visible position.

ON COHERENT THOUGHT

The mark of rationalism, and the concept of function associated to it, was treated with a stroke more faltering than firm in the ideological origins of the modern project. Through the French route of the constructive rationality of Viollet-Le-Duc, or the Anglo-Saxon route of the systems associated with the industrial production of Paxton, modern thought built on the pillars of technological development and the functional specificity part of its program of renovation.

The objectionable relation between cause and effect, as well as the principles of inner coherence and systematization, were obviously found in the root of this thought. The mechanization of productive systems brought with it not only the desire to overcome aesthetic and composition problems through, and as a consequence, of technological rationalization -but also left behind the concepts and techniques of craftsmanship and ornament.

The proposals of architects like Hannes Meyer or Karel Teige finally gave a radical slant to the rationalist discourse, orientating it towards scientific models of thought. The introduction of concepts such as efficiency and productivity, as well as universality, categorization and standardization derived directly from the central nucleus of the New Objectivity.

The rationalization of productive techniques and the objectifying of architectonic problems through economy and technology allowed them to propose the substitution of the concept of architecture as a work of art for architecture as a tool. This fact was manifested, literally, in the words of Teige when he said:

"Instead of monuments, architecture creates instruments". N1

Architecture was not understood as and end in itself anymore to become environment for a purpose. In short, and as a consequence of technological rationalization, architecture lost the autonomy to integrate in the new economic and productive system.

From the techniques of aggregation of programmatic increments of the first functionalism, still depending on the strategies of planimetric organization, to the meshed

and homogeneous structures of the containers, alien to planimetric and functional order, an arch whose geometry tends to close on itself has been travelled. A circular drift that takes us back, in a way, to the original problem: how to confront the arbitrariness of architecture.

For many this drift meant not only the end of an architectonic program, but also the end of a way of thinking, marked by the subordination of character over function, and by the identification between ends and tools.

In the particular field of architecture the manifestation of this crisis allowed making the differences between the two fundamental ways of production of the vanguards evident. Not the most literal differences between rationalism and expressionism, but the more complex ones existing between rationalism and surrealism.

ON CONTRADICTORY THOUGHT

The decade of the seventies was characterised by a considerable intellectual confusion. In the middle of that eclectic and inter-disciplinary agitation, baptised as "post-modernism", there was a fundamental crisis in the historical conscience, resulting from the loss of legitimacy of the ideals of progress and overcoming that had characterised the first half of the XXth century N4. It was, therefore, a crisis so pessimistic in its critical analysis of the modernist project as eclectic in the proposed mechanisms to dismount it.

Modern orthodoxy, with its tendency to abstract sublimation, was substituted, in the particular case of architecture, by a procedure capable of recognising the singularities arising in each case. A long series of countered concepts, operatives in the modern thought of architecture, definitely lost their validity: new/old, present/past, right/left, progress/conservation, representation/abstraction or kitsch/vanguard. In its place the ideas of pollution and ambiguity in the thought of architecture were introduced, as well as instability and heterogeneity.

In this intellectual and productive context each thing can exist in its place of origin, associated to a stable meaning, but also be displaced to any other place, taking advantage of the alterations produced in reaction to a new environment or new circumstances. The movements in space and time, outside of their historical or physical contexts, imposed themselves as basic mechanisms in the production of meaning

However, this was only the first step towards the more radical concept of 'autonomy of architecture'.

A way in which an understanding radically anti-instrumental of architecture was based, devoted to the autonomous development of the discipline, alien to functional or social programs precisely in the name of arbitrariness and its explicit manifestation for the first time.

A way that, in coherence with its structuralist roots not only put into a crisis the linear concepts of time, history or thought. In dissolving the disciplinary limits to propose not only the proliferation of inter-disciplinary contamination, but also movements or transgressions between them, was, in fact, a further step taken. And, as a consequence, in the debate the notion of 'thinking one discipline with the tools of another' was introduced.

ON PARADOXICAL THOUGHT

At the end of the century, to the extent in which it is liberated from identity and difference synopsis, architecture conquers one more level in the freedom of form and in the manipulation of structure. The geometric machine 'working the other way round' annuls identities, imposing, in their place, continuity. Finally we face a scenario dominated not by contradiction or arbitrariness, but by paradox, in which the object, or architecture, does not aspire to a coherent identity but to a figure with no contour.

Today we find ourselves immersed in an even more complex intellectual environment, the product, in great measure, of inter-disciplinary movements. Of the promise of an endless multiplication of meanings, not the result of generation of ideas, concepts or objects, but of the multiple relations that with them or between them established the critical discourse.

In application of this intellectual program, we have proceeded to de-contextualising architecture as a whole, re-situating its thinking in a different and alien environment. An environment situated half way between the theory of games and post-structural-

ism philosophy, in which all reflection must be done in the light of the relationships between language and subconscious.

The subconscious is the place of paradox; this is understood as the overcoming of the limited concept of difference and contradiction. In the subconscious, as in Alice's world, the Platonic duality that opposes sensible to intelligible, matter to ideas, bodies to ideas about bodies, is not operative.

In the subconscious the techniques that allow movement from reality to dreams, and from bodies to ideas, are activated, without interruption. They enjoy a continuity equivalent to the one that operates on a surface whose lineal border, belonging to both sides of the same, allow us to go through from one to the other without interruption. The relation between beam and underside is of continuity, overturning the differences and putting the identities in crisis.

In the history of architecture of the XXth Century there is a progressive approximation between the concepts of order and freedom, finally they are equivalent in our thought. Such direction is parallel to social and economic development, and allows us to see the transcendence of ideas over the disciplinary limits.

In architecture such direction has manifested itself, among other forms, with the irruption of the concept of arbitrariness. This concept is articulated in the sequence that take us from surrealism and the theories of the subconscious to the notion of contradiction as a generative system and, finally, to the paradox as a tool of analysis capable of reflecting the complexity of realty and of our advanced description of the same

Liberated of the imposition of a built superstructure that hides it, the concept of arbitrariness allow us to recuperate, paradoxically, the trust in the disciplinary techniques of architecture, because through them the complexity of architectonic problems can be described precisely without shading or despising its dependence on physical reality and its measurable parameters.

ON THE CURRENCY OF THE SIMMELIAN CONCEPT OF THE METROPOLIS

Jorge Francisco Liernur

In the sixties, the "urban and regional sciences" and the ideologies of "comprehensive city planning" were at their height. The "impressionist" and even metaphysical approaches characterizing Simmelian analyses were diametrically opposed to that technocratic objectivism that, especially under North American influence, had given rise to the major planning agencies of Latin America.

Inherited, as an indirect consequence of said influence, through the works of Robert Park and other representatives of the Chicago School, Simmelian analysis was but a prehistoric precedent of the modern, "scientific" way of tackling urban problems. Simmel's thinking is dense and intricate enough to allow for opposed interpretations, but through the Chicago school his ideas were interpreted in the United States along the lines of balance at regional scales.

Yet those who at the time held alternative positions themselves took no interest in "understanding", much less in acknowledging the productivity of the complex, contradictory, real processes of metropolitan shaping. In the United States as well as in Great Britain, existing metropolises were still regarded as sick organisms. A long antiurban tradition prevailed that opposed urbanisms of regional balance, taking the stand that the shaping of the metropolis, especially of its denser areas, constituted a chaotic and undesirable anomaly.

In the sixties it seemed reasonable to consider that civilization was entering the "Post-City Age", and to join Lewis Mumford in thinking that, unless the process of bureaucratization and technocratization reverted, the dawn of the era of the "post-historic man" would ensue.

Obviously Simmel was not the most appropriate reference for an interpretation of this "new era".

In the second postwar period the debate on the metropolis was enlarged by ideas circulating in the urbanistic field from the stand of architectural culture. Some modern

architects still upheld the formulations that had been made in the interwar period. For them, too, the city that was a legacy of the XIXth century was a huge disaster, and the solutions they presented ranged from partial remedies to large-scale demolitions. And, where possible, they worked for the *ex-novo* creation of perfectly organized cities like Brasilia and Chandighar.

In opposition to this form of radical criticism, which the young architects considered schematic and reductive, the sixties saw the proliferation of approaches that, while admitting metropolitan clichés like high density, also put forward *ex-novo* alternatives, which were flexible but no less corrective of the real metropolis.

Of course there was no room here, either, for the problematic Simmelian approach.

It was around 1968 that Simmel's writings began to be reconsidered in Europe, specifically in circles of the Instituto Universitario di Architettura di Venezia, by Manfredo Tafuri and Massimo Cacciari, and also in the United States through figures like David Frisby and Richard Senett.

That the Venetians were at once appreciative and critical of Simmel lent legitimacy to their approach, which tried to understand both the apertures and the obstructions of a historically determined line of thought. It is this kind of attitude that the title of this essay is about.

Indeed, the ideas elaborated by Simmel are so rich that to a large extent they continue to help us reflect on urban phenomena, this despite the limitations that were imposed on them by the specific conditions in which they were gestated.

And it is hard to fathom this rediscovery of Simmel coinciding with the re-upgrading of spaces for consumerism and those same urban infrastructures that were so harshly lambasted in previous decades, and with the most highly concentrated moments and the most spontaneously intense experiences of as central a figure as Rem Koolhaas, and in his wake, of the brilliant young generation of Dutch architects and urbanists

Nevertheless it seems to me that there was something that Simmel did not have before his eyes and could not have foreseen: the question of limits.

The Simmelian metropolis has a fundamental physical attribute that distinguishes it from the metropolis currently being gestated: an open-scheme structure where streets, parks, and even the closed, inviolable precincts of the old aristocracy offer themselves for use by everyone. Particularly in the central areas, but also in the peripheries, it is the open scheme of streets and squares of that metropolis that allows, accommodates, and conducts the flux of differences.

As for the metropolis in the making, if we observe its formal tendencies, it seems that it is moving in the opposite direction. Instead of an open scheme it offers us a variety of containers separated from one another by function and social constitution. In the gestating metropolis, differences are eliminated, and the clash that is a characteristic of the Simmelian metropolis tends to disappear. Moreover, the dynamics of globalization is such that the same urban landscapes are repeated throughout planet. What Rem Koolhaas calls the "Generic City" endeavors to offere more certainty and security, clear-cut limits and internal coherence, but with their absolute separation from the territory they are inserted in, the new urban containers are like islands of an archipelago.

And Simmel was particularly hard on the city of islands.

Similar are the huge decorated boxes that, not too different from one another, contain movie theaters, car showrooms, offices, motels, and the like on the edges of our highways. Behind the luminous facades of Venetian palaces hid "a dark, powerful, irreversible impulse toward appearances".

$\ensuremath{\mathsf{R.M.}}$ Schindler and the radical reintegration of interior and exterior space

Judith Sheine

In the mild climate of Southern California modern architects found opportunities to explore new ways to blur the boundaries separating interior and exterior space in res-

idential design. Southern California, far removed from the traditions and harsh climates of Northern Europe and the eastern United States, became an ideal testing ground for designs in which living outside was as important as living inside. One of the pioneers of this architecture was R.M. Schindler (1887-1953), who arrived in Los Angeles in December 1920, as project architect of Frank Lloyd Wright's Hollyhock house, and lived and practiced in Southern California until his death. Schindler's architecture was influenced by his teachers in Vienna, Otto Wagner and Adolf Loos, and by Frank Lloyd Wright, but he moved beyond their ideas, developing his own Space Architecture, first fully displayed in his Kings Road house (1921-22). Schindler produced a body of work, both writings and buildings, of startling originality that went largely unrecognized during his life but should now be acknowledged for the major place it holds in the development of twentieth century architecture.

Schindler's background and career path did not point inexorably to Southern California. Educated in Vienna at the Polytechnic University (1906-11) and the Academy of Fine Arts (1910-13) under Otto Wagner, Schindler, like many young architects, was also drawn to Adolf Loos' informal school. For Schindler, the connections between theory and practice demonstrated in the teachings of both famous architects were models that he would follow throughout his career. He was particularly influenced by Loos' rejection of architectural ornament and his focus on three-dimensional space as well as his fascination with America. But it was Schindler's introduction to the work of Frank Lloyd Wright in 1911 that most profoundly influenced the young architect and eventually helped to bring him to Chicago in 1914 and into the employ of Wright in 1918. Although he had visited the American West on a trip in 1915, with stops including San Francisco, Los Angeles and San Diego in California, the Grand Canyon, and Santa Fe and Taos in New Mexico, Schindler expressed no desire to settle there or anywhere in America. But during Wright's frequent trips to Japan to work on the Imperial Hotel he left his office, as well as his most important American commission, a house and theatre complex on Olive Hill in Los Angeles for oil heiress Aline Barnsdall, in Schindler's hands. After working for Wright in Chicago and Taliesin, Schindler, by then married to an American, Pauline Gibling, was sent to Los Angeles by Wright in December 1920.

By September, 1921, work on Wright's Barnsdall house was substantially completed and Schindler was thinking about his future. Plans of Wright's to bring him to Japan had failed to materialize and Schindler's correspondence with European colleagues, including Richard Neutra, convinced him that economic conditions in Europe would not allow him to develop a career there. In Los Angeles, with the expanding oil and film industries, a period of growth had begun in 1920 that would continue essentially unabated throughout Schindler's life. Schindler made the decision to stay and build his house in Los Angeles while on vacation in Yosemite National Park in October 1921. Schindler felt that Yosemite was "one of the most marvelous places in America. I camp at the shore of the Tenaya, sleep on a bed of spruce needles under a free sky and bathe in the ice-cold waterfall". After much debate, perhaps the grandeur of Yosemite helped to convince Schindler to stay on in California.

If settling in Southern California was not inevitable for Schindler, it was an ideal place to work out a number of his ideas about the relationship of a building to its site that he had been writing about since 1912. In that year he wrote a manifesto called "Modern Architecture: A Program", in which he rejected the idea of construction as a source for architectural form, declaring that technological advances in steel and reinforced concrete had now freed the architect to work in the "medium of his art: SPACE". Here, he departed from the Wagnerschule's faith that new materials and methods of construction would lead to new architectural forms. He went on to write about the characteristics of the new architecture and departed even from Loos, arguing against the house as a protection from the outside world. His ideas here are more closely aligned with those of Wright, as expressed in the illustrations of his work and in his introductory essay in *Studies and Executed Buildings by Frank Lloyd Wright*, known as the *Wasmuth Portfolio*, published in 19103. For Wright, the American, a citizen of a democracy.

has an inalienable right to live in his own house in his own way... This is a condition which...Europeans, facing towards traditional forms which they are in duty bound to preserve may well stand aghast. An American... is more completely committed to the machine than any living man. It has given him things which mean mastery over an uncivilized land, comfort and resources.

No wonder Schindler was ready to leave for America. Democracy and a lack of tradition meant that the technological advances admired by Wagner and Loos could have a direct expression in architecture and he could see that expression in Wright's work. For Wright, whose work incorporated these technological advances which made it

possible for his buildings to be integrated into their environments, rather than act as a protection from them, the building was to be "a background or frame for the life within them and about them"⁵. Schindler restated Wright's ideas at the end of his Program, but in what would become characteristic of his treatment of Wright's ideas, he extended them farther than the master.

The man of the future does not try to escape the elements.

He will rule them

His home is no more a timid retreat: The earth has become his home.

The concepts 'comfortable' and 'homey' change their meaning.

Atavistic security feelings fail to recommend conventional designs.

The comfort of the dwelling lies in its complete control of: space, climate, light, mood, within its confines.

The modern dwelling will not freeze temporary whims of owner or designer into permanent tiresome features.

It will be a quiet, flexible background for a harmonious life.

Schindler continued to develop his ideas about space architecture and its relationship to its site. His use of the term 'organic' comes straight from Wright. For Wright, this term does not mean that buildings resemble nature, but that they could be "organic forms, -an outgrowth, in other words, of conditions of life and work they arose to express". In the notes for a series of lectures Schindler gave at the Church School in Chicago in 1916, in Part VII, "Location", he wrote of the influence of the surroundings on the design of an organic building, and also of the influence the organic building had on its surroundings, in that its garden would be subject to the same laws of composition as the building.

In Wright's work, Schindler felt that he was seeing the first space architecture. Wright's compositions, as seen in the Wasmuth portfolio, barely contained space in abstract geometric forms with thin screen walls -although Schindler did disapprove of their ornament, however abstract and organic. The buildings spread out on their horizontal American sites in asymmetric plans that embraced the outdoor space. But Schindler was to take Wright's principles of integration with the site, horizontality, dynamic and asymmetric planning and extend them much farther than Wright had, to that date, imagined.

Schindler and his wife Pauline purchased a piece of property that had been part of the Dodge Estate in Hollywood, on a relatively flat, 100 foot by 200 foot plot that had just been made available for development by the introduction of water. The Dodge house(1914-16), across the street on Kings Road, was designed by architect Irving Gill, who Schindler had probably met through Lloyd Wright, Wright's eldest son, who had worked for Gill first in San Diego and then in Los Angeles. Gill had worked under Wright in Louis Sullivan's office (Adler and Sullivan) from 1891-93. Schindler was interested in Gill's experiments with concrete in houses of geometric simplicity, with asymmetric fenestration, that must have reminded Schindler of Loos' contemporary work in Vienna. Pauline's friend from Smith College, Marian Chace and her husband Clyde had moved to Los Angeles the previous summer and Clyde Chace worked for Irving Gill. The two couples teamed to build Schindler's unusual design, which he hand completed in November, 1921. The program was as radical as the design, including a studio for each of the four adults, a rooftop 'sleeping basket' for each couple, a common kitchen, a guest studio and a garage (fig. 1).

In order to secure funding, Schindler wrote to Pauline's parents, the Giblings on Nov. 26, 1921, describing the design for the new house and studio. "The rooms are large studiorooms -with concrete walls on three sides, the front open (glass) to the outdoors- a real California scheme". Schindler later described the house as inspired by a "campers' shelter: a protected back, an open front, a fire place and a roof". He was clearly thinking of his recent experience at Yosemite and in this house created a space where the interiors just barely contained the inhabitants (fig. 2).

Although the form of the house was influenced by Schindler's education in Vienna and his time with Wright, Schindler synthesized these influences, and those of the Taos adobes and the Japanese house (which he had been exposed to through Wright) into a wholly original design. It represented an advance from the work of all of Schindler's mentors in every way that could be thought of as modern. Although Schindler had rejected construction as the source for architectural form, the space architecture of the house was expressed in its constructive materials, both inside and out, more directly than anything in the Wagnerschule. The design was free of ornament, and took the notion of the complex interior section and continued it out into the changing levels of the garden, far beyond Loos' work. As for Wright, Schindler carried the integration of interior and exterior space, the horizontality of the design, clerestory windows, diagonal planning, and flat roofs farther than anything Wright

had attempted to date or for years to come. The massive adobe walls of Taos, New Mexico, were radically transformed into separate concrete slabs tapering in profile from bottom to top, with long slots of glass between them, rendering these walls almost screen-like (fig. 3). The Japanese house, with its lightweight translucent sliding screens and geometric discipline was reconstituted to allow the greatest flexibility not between interior spaces, but between interior and exterior spaces (fig. 4).

The house combined exposed redwood framing with tilt-up concrete slabs, a variation on a technique used by Gill. The raw materials emphasize the minimal nature of the spatial enclosure, as does the site plan. Schindler joined a pair of studios, each with its own fireplace, to form an L-shape; this simple shape, with nearly solid concrete walls (arranged in L and U shapes) facing the outside world, neatly defined an exterior space, also with its own fireplace, open to the interiors through glazing and sliding canvas screens. The two pairs of Ls and a third L, formed by the kitchen, guest studio and garage, were combined to form a pinwheel, making a dynamic figure on the ground, a site plan unprecedented in modern architecture. As much as the structure formed a distinct figure in the landscape, the definition of the garden spaces, by building edge, changes in grade and strategic plantings, also made the outdoor patios strongly defined figures against the ground of the house. And Schindler heightened the perception of these garden spaces by hiding them from the exterior; the entrances to the Schindler and Chace wings, both at the knuckle of the Ls, opened through glazing to a long diagonal view of the private patio.

The section of the house also emphasizes the connection to the outdoors (fig. 5). The L of the plan is echoed in the L of the section, with the concrete rear walls and floor forming one L and the redwood-framed ceiling and patio walls forming another. Schindler used Wright's low horizontal datum to tie the spaces together, and , particularly through the low roof overhangs, to direct the eye towards the patios. Schindler also used Wright's device of entering into a small space with a lowered ceiling to make more dramatic the entry into the public spaces, but here that included the patio. Schindler used changes in ceiling level not only to establish hierarchy, but also to incorporate clerestory windows which brought light into the studio spaces from three or four directions and opened views to the sky. The concrete studio floors were continued out to the gardens, to emphasize the interior's continuity with the exterior, and to serve as paved walkways connecting the studios. The concrete wall slabs, separated from each other by glass slots, infilling the space left by the form work, also allowed light in the studios. The rooftop sleeping baskets were covered, but open-air, providing minimal protection from the elements.

Here, Schindler had not just broken open the box of the house, as Wright had before him -he had destroyed it entirely. The radical nature of the site plan can be deduced by the comments of Louis Sullivan, to whom Schindler had sent a site plan in the summer of 1922. Sullivan wrote back: "Some weeks since I rec'd from you a blue print purporting to be the plan of a dwelling. But as no letter came with it I was unable to make it out". Much of what Schindler introduced here -a figure/ground balance in the site plan between house and garden, the house closed to the street and open to a privatized rear patio defined by an L-shaped structure, interior continuity with exterior spaces, diagonal, asymmetric planning, sectional manipulation to create spatial hierarchy and to allow light to enter into interior spaces from unexpected directionset the pattern for Schindler's future work in Southern California. It also set a precedent for the work of many other architects, including Frank Lloyd Wright.

Although other fairly radical concrete structures that Schindler designed in the 1920s were published in the architectural press, the Kings Road house was not. Editors appeared to have a reaction similar to that of Louis Sullivan when presented with drawings and photos. When the Kings Road house was finally published, in February 1932, it was because Maxwell Levinson, the editor of *T-Square*, wrote to Schindler requesting that he submit material for publication, on a topic of his choice¹⁰. Schindler wrote back, enclosing photos and a description of the Kings Road house:

Although the house was built ten years ago, it is of special interest just now. It initiates a development in residence building, which was recently furthered by Mies van der Rohe in his model residence at the German Building Exposition. Although my house is speaking in different materials a different language, it says essentially the same thing¹¹.

Schindler's house was finally published, along with articles by Wright, Le Corbusier and Buckminster Fuller.

Wright had visited the house in 1923, but its reappearance in 1932 gave him a new chance to appreciate its achievements and potential. As Schindler had borrowed

much from Wright, Wright apparently borrowed the forms and principles of the Kings Road house for his Usonian houses. The first of these simple, relatively inexpensive, flat-roofed, L-shaped houses was designed in 1933¹². And what were the features of the Kings Road house that Wright adopted for the Usonian model? Schindler pointed out a number of them in a letter he wrote to Architectural Forum, which was published in August, 1947. This letter was addressed to the issue of the dates that had been used in their outline of contemporary architecture in the May issue. Schindler pointed out that his Lovell Beach house of 1926 predated developments in 1929 that the journal had illustrated (Neutra's Lovell Health house and Le Corbusier's Villa Savoye) and that in 1922 he had built his own house which had:

become the prototype for most of the now fashionable California houses. It introduced the following characteristic features:

A cellarless, rambling, one-story building, low on the ground, the floor extending without steps into the garden.

A full-height glass wall with large sliding doors on the patio side, under ample overhangs.

A flat shed roof with clerestory windows.

A solid back wall for privacy, and movable partitions for flexibility.

The wall construction uses a prefabricated standard concrete wall unit... 13 .

Schindler could have just as easily been describing the Usonian house except for the concrete walls. These features, along with a construction system employing natural materials for both interior and exterior and an L-shaped plan with plumbing at its knuckle, all appear in Wright's first built Usonian house, the Herman Jacobs house of 1936

The Kings Road house was also, as Schindler had pointed out, a precedent for the work of many modern architects in California, including those who participated in the famous Case Study House program sponsored by John Entenza in his magazine Arts and Architecture form 1945-62. The flat-roofed, L-shaped houses, closed to the street and open through glazing to private patios, designed by Neutra, Craig Ellwood, Pierre Koenig and others, clearly refer to the Kings Road house. And Schindler again explicitly noted this in a response to a questionnaire about his work from the School of Architecture of the University of Southern California for their Directory of Contemporary Architecture, dated Oct. 10, 1949:

To illustrate my principles I built my own house...It was the first house to break with Eastern tradition and to respond to the climate and living conditions of Southern California. It introduced such characteristic features of the present contemporary house as merging of outdoor and indoor space and living,...

As Schindler implied in this letter, it is pretty clear now that the Kings Road house was a serious precedent, not only for International Style pre- and post-war modern residential development, but also, as a precedent for the Usonian houses of Frank Lloyd Wright. It has just been a generally unacknowledged precedent. When Schindler was excluded from the 1932 exhibition of International Style architecture held at the Museum of Modern Art (MoMA), curated by Henry-Russell Hitchcock and Philip Johnson, the rejection of his work by the Eastern critics was established, leading to its lack of inclusion in histories of modern architecture. However, both Kathryn Smith and Lionel March have made arguments establishing the Kings Road house as not only pre-dating other modern houses, but also directly influencing their subsequent development. Smith claims that the house is actually the first built modern house anywhere in the U.S. or Europe¹⁴. Lionel March took this argument to the next step, suggesting that the blueprints for Schindler's house may have been in Berlin in 192215. Schindler's friend from Vienna, Richard Neutra, was working for Erich Mendelsohn in Berlin, and the two Viennese architects exchanged news about their work and about the possibility of Neutra coming to America. It is likely that Schindler sent Neutra a blueprint of the plan in a letter dated June 16, 1922, in which Schindler described his newly finished house to Neutra, emphasizing the construction system. of "slab-tilt" concrete walls¹⁶. March suggests that if Neutra did have this blueprint, he could have shown it to Mendelsohn as well as to other progressive architects that Mendelsohn knew in Berlin, including Bruno Taut and Mies van der Rohe, and that he might well have done this as the project was so radical. If this had occurred, then Southern California would not only have a modern house that pre-dated any in Europe, but could actually have influenced the European development. This new revisionist history puts Schindler at the forefront of twentieth century modernism.

Schindler did not only demonstrate these principles in his own house and studio; he showed that he could deploy them in a variety of ways. In the Pueblo Ribera Court (1923-25) Schindler demonstrated that the direct connection to the exterior, the fig-

ure/ground balance of the site plan, could be maintained in a multi-unit complex. The site plan cleverly arranges 12 essentially identical U-shaped unit plans to use the back walls of units and plantings to create private outdoor spaces; rooftop terraces with their own fireplace provide a view of the ocean. At the Wolfe house (1928-29) on Catalina Island, the small steep site did not allow for garden space. Instead, Schindler stacked three independent, large, multi-purpose rooms on top of each other, with a roof terrace with its own fireplace on top. The rooms opened through corner glazing to corner terraces with spectacular views of the ocean. Both of these projects were for vacation residences with somewhat flexible programs, but even within a more conventional program, Schindler managed innovative planning. At the How house (1925), built on a steeply sloping site, the square plan, organized around a diagonal axis, has a terrace at the upper level which turns the plan into an L-shape (fig. 6). Along the diagonal axis, corner windows link the outdoor patio, the living room and the terrace; a low roof extends over part of the terrace, covering an open-air shaft that connects the upper level to the hall for the bedrooms below, extending the exterior space deeply into the interior (fig. 7).

Schindler did not stop with merely these principles, however. He extended his analysis of the Southern California climate to include the particularities of its light and colors. In an unpublished article called "Notes: Modern Architecture" written in 1944, Schindler writes about the specific qualities of his adopted home:

Southern California is a completely unique corner of the U.S.A. Although in a tropical latitude, its climate is definitely not tropical. Its flora is not tropical nor has it real desert characteristics. Its slight seasonal variations lead to a relaxed outdoor life of especial ease. Although its sun is strong, it is controlled by morning fogs. The resulting character of light and color are unique. Instead of the opaque material coloring of the east, we have here the subtle transparent shades created by the light on greyish backgrounds.

When Schindler, forced by economic necessity, built in wood-frame and plaster, he employed a natural color palette, both inside and out, derived from the materials of the site, which further integrated his designs into their landscapes. And he experimented with siting, planning and building forms, particularly on steeply sloping sites which did not allow a simple L-shaped plan. On very steep lots, if a connection to a usable open space at grade was not possible Schindler found ways to connect the interior spaces to the views, often through corner windows, and to the exterior directly with raised terraces and balconies.

For the Oliver house, the first of his designs to exhibit his full "plaster-skin" vocabulary, his own version of wood-frame and plaster employed largely in the 1930s, Schindler designed an L-shaped plan, but rotated it 45 degrees to the lot lines, to maximize the usable outdoor space and to orient the house to the views of the Silver Lake reservoir in one direction and of the mountains in the other (figs. 8 and 9). The house is painted a warm tan color to make it part of its hilltop site. Schindler took advantage of a required pitched roof to create large clerestory windows; a diagonal axis and corner windows connect the indoor space to the exterior ones and to the view (fig. 10). Circulation to the children's bedroom occurs through the master bedroom or outside, on a covered concrete walkway which also led up to a roof terrace. At the Walker house (1935), built on another steeply sloping site overlooking the Silver Lake reservoir, Schindler painted the house, inside and out, a robin's egg blue, to make it part of the view of the lake. The required sloping roof descends with the site, creating multiple clerestories; terraces and balconies are carved out of the volume of the house, extending the space towards the lake and view (fig. 11). In other houses, Schindler rotated two geometries to create distinct volumes and to open up views. In the Southall house (1938), an all-plywood house, he rotated three volumes at 45 degrees, which project out from the house in plan and section; they create three glazed corners facing the view.

In his post-World War II work, Schindler made use of a modified form of wood frame and plaster construction, which he called the Schindler Frame. In it, the wood studs were cut to door-height and ceiling heights varied widely above that. This provided spaces for clerestory windows and more continuity between interior spaces as well as between interior and exterior ones. The roof was made out of two inch thick wood decking, which could span up to ten feet over larger wood framing members, eliminating the need for roof joists and allowing a very thin and flexible roof. Schindler took advantage of the possibilities created with a wide variety of roof forms. In the Roth house (1945) he tipped up a portion of the roof running the length of the house, creating a long clerestory window. This house also had the unusual feature of a grass-covered wood-framed terrace over the garage, which seems utterly continuous with the grass on earth. The Kallis house (1946) combines slopping roofs and walls with a

variety of textures of green-stained wood to make the house blend into its sloping site covered in oak trees (fig. 12). The butterfly roof allows a central hall, which displayed the client's artwork, to be lit by clerestory windows on both sides (figs. 13 and 14). The roof also created multiple clerestory windows which gave views of the trees and sky.

Schindler was particularly interested in the space-forming properties of light, which he wrote about a number of times. In an article he wrote on furniture and interior design published in 1935-36, under the last subheading, "Light", Schindler made clear that for the space architect:

... his power will be complete when the present primitive glass wall develops into the translucent light screen. The character and color of the light issuing from it will permeate space, give it body and make it as palpably plastic as is the clay of the sculptor. Only after the space architect has mastered the translucent house will his work achieve its ripe form.

In 1927 Schindler had designed a new house for Aline Barnsdall on the Palos Verdes cliffs overlooking the Pacific Ocean. He called it the 'Translucent house' and it can certainly be seen as a commentary on everything that disappointed him in Wright's Hollyhock house for Barnsdallis. Schindler took the heavy battered roof forms of the Wright house and turned them into sloped translucent glazing; he also opened the U-shaped plan to the ocean view and moved the living space to the corner, facing the ocean. With its numerous outdoor terraces and central swimming pool, this was a house for Southern California living. Unfortunately, it was not built and Schindler had to wait until the late 1940s to realize his first translucent house, which employed 'Alsynite', a corrugated translucent fiberglass material, available after the war.

The Janson house (1948-49) was a tiny house built on an extremely steeply sloping site. The client, Ellen Janson, later recalled her discussion with Schindler about the design of the house:

I had always wanted to live in the sky. Then I came to know a Space Architect. The architect asked me, "how would you like a home made of cobwebs?" "Yes, I should love it, for they wouldn't shut away the sky at all. But how would you hang up the cobwebs?" "On skyhooks", he said¹⁹.

In this house, structure truly disappears, leaving translucent space visible. Schindler minimized the foundations, cantilevering the house out from a small center and extending its space through terraces. The rear and side walls of the house were largely made of blue 'Alsynite', hiding the road and neighbors, while the spaces opened through clear glazing to the terraces and view. Schindler extended both the metaphor of the sky and the blue translucent material to the Tischler house (1949-50). Here, a gable roof runs the length of the house, largely covered with a custom-dyed deep translucent blue 'Alsynite' (fig. 15). The house is sited at the northern edge of its lot; the living and sleeping spaces are all on the upper level, which is open on the south to a large garden. Like the Janson house, the structure drops away, and the spaces seem to be part of the trees and the sky. In a third project, the Skolnik house (1950-52), Schindler used 'Alsynite', this time without color, on half a gable roof. Here it covers a hallway separating service and private spaces from the living space. As well as bringing light to the center of the house, the translucent roof makes this hallway feel like an exterior loggia, heightening the sense of the living space as being an indoor/outdoor room, further emphasized by a circular fireplace that served both interior and exterior spaces.

If Schindler's early work had been used as an unacknowledged precedent by mid-century modernists, his late work has come to be recognized as significant for later developments only much more recently. The experimental use of forms and materials, although consistent with Schindler's principles, were largely viewed as eccentric. It was not until 1971, in the preface to David Gebhard's book Schindler, that Henry-Russell Hitchcock finally came around to an appreciation of Schindler's work, and this appreciation was partial, at best²⁰. Hitchcock quotes from his own 1940 assessment of the architect's work in his article "An Eastern Critic Looks at Western Architecture";

The case of Schindler I do not profess to understand. There is certainly immense vitality, perhaps somewhat lacking among many of the best architects of the West Coast. But this vitality seems in general to lead to arbitrary and brutal effects²¹.

In his re-evaluation, Hitchcock mainly recognized the achievements of the Lovell Beach house and noted the role of architects of European origin -like Schindler and

Neutra- in the development of American architecture. As for the rest of Schindler's work, he did admit that given the direction of some of the post-war architecture, "Schindler's work, already from the beginning of his productive career in the midtwenties, was by its very variety premonitory". But this was, at best, faint praise.

Schindler did not feel that his work was, in fact, arbitrary; he felt that it was classical, and as tied to Southern California as Classical architecture was to its setting, as he pointed out in a letter to Esther McCoy towards the end of his life. In February of 1952, he wrote to McCoy from the hospital, finally having

enough energy now to argue with you on classicism. ...Yes the Romantic writer fastens onto a few traits of life and balloons them without sence of balance and reality into a world of his own. The Classiker lets say like "Proust" however carefully digs into the mass of life material until slowly and painstakingly some of the woof and warf of reality starts to reappear shining through his canvass²².

Schindler wrote further that both Wright and Neutra were romantics, with their imposition of foreign forms, "So finally there is only the classicist left 'me'". He described his attempt at building a California architecture with his own house and continued: "And unless I failed it should be as Californian as the Parthenon is Greek and the Forum Roman. In fact the beginning of a new "Classic" growth drinking California sap".

But it was also clear that Schindler felt that his work had continued to develop in Southern California and he thought that in his late houses, particularly his translucent houses, his work as a space architect had reached its ripe form. Schindler had carried on an educational campaign for space architecture with the public, editors and authors, and with MoMA. In 1952, Arthur Drexler wrote to ask for material for an update to their 1944 "Built in the USA" exhibit and catalog²³.

Schindler wrote that he was sending photos of the Kallis and Lechner (1946-48) houses and that he had recently completed two houses with translucent walls and roofs, but had no photographs yet. But first he explained why he was sending the photos of the two houses, in a final attempt at educating MoMA about space architecture.

In 1921, with the impact of California fresh on my mind, I built my own house, trying to meet the character of the locale. About that time several attempts were made to develop an architectural expression for California. Frank Lloyd Wright tried by introducing modernized versions of Aztec details. This was a superficial attempt, completely false historically, climactically and functionally, and died at birth. Later (1928) Richard Neutra imported the international style, which he himself admits, belatedly, violates the local character.

In my own house (1921) I introduced features which seemed to be necessary for life in California: an open plan, flat on the ground; living patios; glass walls; translucent walls; wide sliding doors; clerestory windows; shed roofs with wide shading overhangs. These features have now been accepted generally and form the basis of the contemporary California house.

The two houses I am sending you represent each a final development of some of these features.

Both of these houses are constructed of the "Schindler Frame", a structural scheme which is being increasingly accepted in California²⁴.

Neutra's post-World War II houses, such as the Kaufmann house in Palm Springs of 1946, had taken a different approach than the houses of the 1930s which had been pristine objects contrasting to the landscape. These later works had L- shaped and pinwheel-shaped plans which extended into their landscapes, and glass walls and natural materials to further emphasize this connection. Schindler may have felt vindicated, but he had also moved on; as he was pointing out, he had accomplished all that in 1922. But when he referred to these late houses as 'a final development' it didn't necessarily mean that he had stopped experimenting. Schindler had been diagnosed with cancer at the end of 1951 and had an operation, spending weeks in the hospital and emerging without his former energy early in 1952. It was probably clear to him by this time that these houses were to be his final efforts at space architecture. But his educational efforts still proved unsuccessful with MoMA; his work was not included in the 1952 show. European-influenced modern architecture was still favored, and Schindler's late works must still have been difficult or impossible for the Eastern critics to understand.

Schindler created an architecture which was an expression of the culture of which he found himself a part, an architecture of space, climate, light, mood, an architecture for which the site, climate, and the landscape were all to influence the form of the building. His work had enormous, if largely unrecognized influence on several

generations of modern architects, particularly in his adopted home of Southern California. In 1949 he wrote: "I believe that this climate and character, together with a further true development of space architecture, will make Southern California the cradle of a new architectural expression"25. In contemporary Los Angeles, it appears, perhaps, that his prediction has come true, but not necessarily in the way he meant.

The architects who came to prominence in Los Angeles in the 1980s, largely in the wake of Frank Gehry, perhaps more directly acknowledged Schindler's influence. They had made complex forms fashionable, after Robert Venturi's rejection of reductivist modernism in Complexity and Contradiction in Architecture (1966). Gehry's own house in Santa Monica (1978) took the notion of breaking open the box quite literally, by removing finish materials from an existing house, exposing its formerly hidden structural materials, and invading it with twisting intersecting volumes. The asphalt driveway became the floor of an interior kitchen, thus integrating interior and exterior spaces in a new way. The forms have some connection to Schindler's work of more than 40 years earlier, particularly the De Keyser house (1935), in which Schindler exposed the wood framing inside and covered the upper living room exterior in green roofing material, making its volume distinct from the rest of the building (figs. 16 and 17). However, Schindler might have argued that the Gehry house was a step backward in space architecture development. Except for additional glazing, the house, although no longer a box, had not been broken to make additional connections to the exterior, to extend the space past its physical boundaries, to connect the inhabitants with the garden, terrace, trees or sky, or to become more a part of its specific site and landscape. For Schindler it is not the forms themselves which are the most important, but the space, extending into and becoming a part of its site. Schindler would have wanted his work to be appreciated as much for its principles as for the buildings - the content as well as the form. Possibly, it is a lesson we can continue to learn from in Southern California.

DRAWING-OVER: UNE VIE DECANTÉE. LE CORBUSIER AND LOUIS SOUTTER

Daniel Naegele

It follows that an absolute can be reached only by an *intuition*, whereas the rest of our knowledge arises out of analysis. We here call intuition the *sympathy* by which one transports oneself to the interior of an object in order to coincide with its unique and therefore ineffable quality.

Bergson, Introduction to Metaphysics

In 1936, *Minotaure 9* featured as frontispiece a photograph by Brassaï titled "Troglodyte", a view taken from inside a cave looking out through two elliptical openings (fig. 1). Seemingly innocuous, this photograph is nevertheless beguiling. There is something curious, perhaps even slightly, sinister about it. We, the viewers, are the cave dweller to whom the title refers. Brassaï has placed us inside this ancient dwelling looking out. But perhaps because of its actual size on the printed page, the photograph implies much more than that. As we look at it, it in turn looks back at us. The ellipses are eyes complete with lower lashes, acute 'veining', and heavy lower lids. Yet the concavity of the image denies this reading of the cave as an object opposed to us .The cave surrounds us. Surely we are not looking at eyes; we are inside, looking out *through* them.

The cave is us: its rounded openings eye sockets in the mask within which each of us must dwell. The cave is our skull, the 'helmet' that we must inhabit as a troglodyte inhabits his hollow. As cave becomes skull, Brassaï calls attention to the limitations placed on our perception by our own skeletal frame; and ill enlarging the human corpus, he awakens in us an awareness of our own interiority. We are beings separate from, but dwelling inside the physical construct of a body. This body, this corporeal architecture, both filters and frames all that we see as we look out on the world.

Ш

Perhaps by mere coincidence (and so much the better if this is so), "Troglodyte" captures the condition described in the opening lines of an article published in this same issue of *Minotaure*. Titled "Louis Soutter, l'inconnu de la soixantaine", the article begins with a quote:

"...La maison minimum, ou "cellule future", doit être entièrement de verre translucide. Plus de fenêtres, ces yeux inutiles. Regarder dehors, pourquoi? Complications et coups à la beauté de l'Uni. Mes dessins n'ont aucune prétention, sauf celle d'être uniques et d'idée imprégnée de douleur".

The lines are from the writings of Louis Soutter, a violinist turned visual artist. After having, in the words of the article's author, "relinquished all the joys of a bourgeois life" to passionately pursue art, Soutter was confined to a mental institution in Ballaigues, Switzerland in 1923 where he was to spend the remainder of his life². His six drawings accompanying the article are of numerous nude figures melded together in the space of the sketch (fig. 2). The figures are anguished, their bodies flowing and contorted, the space between them webbed with nervous, erratic scratchings.

Soutter's drawings could be understood as automatic writing, pouring forth directly from inside to outside without the filter of logic or reason to alter their formation. *Minotaure* was an appropriate place to present such 'private' works. The most prominent of many Surrealist journals, it championed unknowns, madmen, eroticism, confessional material of all sorts, and visual manifestation of the unconscious mind. The author of the article -his first and only article to appear in this or in any other Surrealist journal- was Soutter's younger cousin, Le Corbusier.

Soutter greatly admired Le Corbusier, communicated with him regularly and often sent him his drawings and paintings³. In touching letters, Le Corbusier encouraged Soutter, supplied him with reading material which included his own books, and vigorously promoted his art in both Europe and America. On his first trip to the United States in the autumn of 1935, Le Corbusier organised an exhibition of Soutter's work at the Wadsworth Athenaeum in Hartford, later shown at the Galerie Vallotton, Lausanne⁴. On the same trip he managed to sell a few of Soutter's drawings, one to Henry Russell Hitchcock⁵.

Le Corbusier's friendship with Soutter is important, for it is one of the rare instances in which we find the architect personally devoted to another -and sympathetic to the frail and tormented human condition which Soutter's work represents. This, coupled with the architecture metaphor of Soutter's own statement, as well as the spontaneity of his creativity, and his own particular 'pictorial' rapport with Le Corbusier, make Le Corbusier's short article on this unknown artist worth considering. For Soutter clearly is presented as a 'condition', the condition of the sensitive 'interior' artist as he faces a hostile 'exterior' world. This condition has a certain resonance with Le Corbusier own, for it is at this time, in the mid-thirties and at the height of the Depression, that Le Corbusier began again, after some twelve years as modern architect, to portray himself as a painter.

Ш

Soutter drew anonymous figures, repeating them over and over again. His paintings (most done after 1936) often are of singular, enormous heads with tormented facial expressions (fig. 3). These naive, child-like paintings are not unlike the 'primitive' color nial art so coveted by French avant-garde artists and critics. In their spontaneity and lack of sophistication and calculation, an authentic and sincere emotional outpouring is recorded (fig. 5). Soutter painted in a crude, direct manner, often not with brushes but with his fingers. He brought to the fore the material itself. Like Van Gogh he made manifest the paste-like quality of paint. In his work, paint is not just color, but a malleable material. It records the impression of the hand of the maker. Moving, disturbing, always 'primitive', Soutter's painting was labeled "*l'art brut''*, (brut meaning coarse and crude, but also ill-bred, rude, and unfashioned) a label English critics would later adhere to Le Corbusier's postwar architecture of in equally malleable paste, concrete.

By contrast to Soutter's art, Le Corbusier's paintings were, pre-meditated, calculated and honed. "Je ne peux pas improviser. Je me refuse à improviser immédiatement", Le Corbusier declared categorically. "Je fourre tout en moi-même pendant des mois et puis à un moment donné ça sort". As he stated in 1920, a painting should be "solidly built upon directives imposed by the format of the canvas, co-modulated by the intervention of a unifying agent", and the exact play of densities and the values of light and shade" should be precisely determined. Habitually, he would plan his paintings in a series of preliminary sketches, employ regulating lines to order the work, and apply the paint with great accuracy. There were but few exceptions to this approach, one having occurred in 1935 when a plaster cast of a Greek sculpture made for the Carré exhibition of primitive art to be staged in his apartment arrived unpainted (fig. 4)8. Outraged, Le Corbusier phoned the Louvre for specifics regarding its colors, then painted the cast literally by hand, without the benefit of a brush. "Two palms were pressed on the palette, steeped in colour and applied to the contours of the bust", he later wrote. "A poem in polychrome was the result, sparkling with life, brilliant. The palms, the thumbs, the finger tips had been enough to define the coloured surfaces to perfection; the sculpture had clearly been created for this"9. One senses his delight and pride in the spontaneous and expressive sensuality of direct and primitive creation.

I٧

"Décantation, après la vie, à la fin d'une vie" was Le Corbusier's telling description of Soutter's drawings. He recognized this personal and emotive spilling-out as the antithesis of his own cool precision and rational regulation. The contrast is evident in the very private 'drawing-over'. Soutter had done earlier on each page of four of Le Corbusier's books: Une Maison-un palais, Croisade, L'Art décoratif and La Peinture moderne'. Soutter's figures cleverly, lovingly modify the illustrative text of Le Corbusier, humorously setting his benign personality beside the aggressive calculation of his famous cousin, gently satirizing the architect's precision with flowing, child-like innocence which both indicts and enriches (fig. 6).

Soutter understood the picture plane as well as Le Corbusier. His 'drawing-over' delights in -reframing Le Corbusier's illustrations: reversing their orientation, enlarging or diminishing their scale, altering their content, and, of course, finding hidden faces, then elaborately adorning them with wild accourtements. The figures he added time and again to the foreground and to the sides of Le Corbusier's perspectives (figs. 7 and 8). Parallel figures found in the somewhat Surreal composition adopted for certain photographic images of Le Corbusier's architecture (fig. 9)". And his transformation of illustrative text into 'physiognomic declarations' anticipated similar conversions made by Le Corbusier later.

In La Peinture moderne, for instance, on opposing pages, Soutter drew over illustrations of paintings by Picasso and Gris, metamorphizing both into large heads replete with wavy hair (figs. 10 and 11). To the already physiognomic disposition of a Picasso cubist painting he added another eye, a definite chin, a mouth of sorts, and a head of hair which seems to derive its curls from the motifs lound in the painting. Above and to the side of this head he wrote "Le sort La Mort". On opposing pages he transformed the 1919 Gris still life into a complex double portrait with one figure contained within the other. The smaller, more apparent figure is that of a woman sitting reading a book, her face, hands and bare breasts very evident. Behind her is what appears to be foliage of two distinct varieties, one to the left, the other to the right. Within this composition a second figure can be found; a large head comparable in size to that made of the Picasso. In this large visage, the breasts become crossed eyes, the blackened leaf of the open book suggests a nose, and the black triangle scratched below the book contributes the mouth. The foliage now becomes hair, bundled behind this large head. The whole ensemble resembles a figure in a Japanese portrait print. Soutter titled his creation Chinoise LA VIE.

There are other examples where Soutter finds faces and articulates them: for instance, in the three-point disposition of another Picasso (fig. 12), or in the inherent abstraction of a high contrast photograph (fig. 13), or on the lower torso of a native girl in a Braque painting (fig. 14), -the torso-face, discovered here anticipating Le Corbusier frequent use of this ancient motif in his later paintings and in his Modulor Man¹². And recognition of these overt facial declarations necessarily leads to speculation about far subtler compositions; for example, with his modification of the photograph of the interior of the Villa Stein shown above, Soutter transformed the right half into a cross-eyed visage with braided hair, a chair for a nose, an a caption across its lower lip (fig. 7).

The light-heartedness of Soutter's gestures should not belie their profundity. Even the poetic and very pregnant notion of 'décantation' itself may have been provoked by Soutter's drawing, for on the title page of "Esprit de vérité" a chapter in L'Art décoratif d'aujourd'hui, Soutter pictured 'vérité' in a decanter, bottled as a 'spirit' to be imbibed, with a glass of the stimulant shown spilled across the bottom of the page (figs. 14 and 16).

Soutter's annotations are intelligent pictorial comments which speak not only of the content of the page they Cover, but of the nature and structure of representation itself. Clearly Soutter read Le Corbusier's text -both written and illustrative- in a manner Le Corbusier himself, master of ambiguity, could not have anticipated. In so doing, he offered the architect not only an insightful understanding of his illustrations as text, but a new means of achieving a complex, inherently dialectical signification.

Soutter's pictorial 'writing over' was a subtle way of evoking a sense of deep meaning through layering. Others had done work of a similar nature. In the early part of this century, for instance, the American commercial illustrator Charles Norman Sladen adorned his albums of vacation photographs with pen and ink drawings that united his many diverse snapshots into a 'continuous landscape' by "extending their lines as whorls or tree rings or spiderwebs or long grass". Picabia experimented with such layering in numerous 'paintings over paintings' done from 1926 to around

1931 (fig. 15)¹⁴; and in the mid-thirties Yves Tanguy modified encyclopedia illustrations in a manner very similar to Soutter's, though with far less exuberance and a much more calculated wit (fig. 18). Picasso, too, had employed 'drawing-over' in 1923 when he modified the front page photographs of the newspaper *L'Excelsion*¹⁶ (fig. 19), and later when, according to Brassaï, he covered the manuscript of Apollinaire's *Bestiaires* "with drawings of animals of all kinds". And in the mid-thirties, Picasso produced some of the most wondrous and profound images of this kind by fusing original engravings with original photographs (fig. 20)¹⁸.

So with his unselfconscious scribbling, Soutter enriched Le Corbusier's texts with a kind of 'double vision' in which image interrogates image. A dialectical condition results in which all becomes *effervescence permanente*. Le Corbusier understood this and described Soutter's drawings as "un écho profond du texte dans lequel ils s'inséreront". Soutter's decantation, his 'spilling out' across page after page of Le Corbusier barking, served to 'draw over', to metamorphose the master, and in more ways than one.

V

On at least two occasions Le Corbusier adopted a 'drawing over' technique similar to Soutter's. In the 1948 special issue of *L'Architecture D'Aujourd'hui* dedicated to Le Corbusier's work, both transparent color and colored sketches overlay verbal and illustrative text²⁰. A self-portrait sketched in blue is ghosted over his introductory remarks (fig. 21)²¹. Sketches of shells in brown colored pencil are superimposed on a photograph of the front facade of the Villa Stein (the shell form is echoed in the topiary shrubbery found in photographs on the opposing page of the Beistegui terrace (figs. 22 and 23)²². The entire 'text' is illustrative, unified by the flowing effect of spilled color. The multiple layers bring a 'psychic' dimension and dream-like movement to the presentation, enriching it with spatial and symbolic juxtapositions. Le Corbusier's theme is the synthesis of the arts and he opened this issue with his now renowned essay on '*I'espace indicible'*.

Decantation of a less calculated nature re-emerged in the mid-fifties when Le Corbusier -furious with the insipid, lifeless, line drawings of Flaxman which illustrated a contemporary French translation of Homer's *Illiad*- drew over each of he black and white engravings in colored pencil²³. His sketches are vibrant, lewd, violent. They introduce hybrid and metamorphic creatures to the text, among them the horned woman of the 1948 Pavillon Suisse mural and the "tête de pierre" of Le Poème de *l'Angle Droit* (fig. 24). Unlike Soutter's drawing-over' which frames Le Corbusier's illustrations, in *L'Iliade* Le Corbusier's drawings, like graffiti, aggressively cover the original illustrations but without ignoring or obliterating the underlying work²⁴. Rather he employed the underlying illustration in a subtle manner, assigning it a subservient role while taking full advantage of the potential for metamorphic representation which comes from the alignment of one image with another.

Eyes are of particular importance; they are, quite literally, pivotal. In two sketches, Le Corbusier allowed the heads of god figures of the original drawings to inhabit the eyes of his own monstrous creations, both of which seem to float above he horizon. In one of these drawings, the eye of Le Corbusier's yellow, serpent-like creature absorbs the scowling eye of a god, while his red nude that floats above it seems to release from its own heavy corpus another spirit-like nude, that of the original line drawing (fig. 26). In the other drawing, Le Corbusier has ringed the head of the god with an iris of heavy black crayon, giving it a halo of sorts while at the same time appropriating is face for the pupil of his colossal levitating head (fig. 25). Thus in the resulting profile view, three eyes -the single eye of the colossus and the two eyes of the diminutive face- look directly at us.

Both sketches were done in February, 1955 and are later paralleled in photographs of Le Corbusier's architecture. In a photograph of the Assembly Building at Chandigarh, the building's profile assumes he shape of a head, with the curved umbrella roof as its hair (fig. 27). Within its vacuous eye, in the position of the pupil, sits a large black bird, no doubt *le corbeau*. A similar part is evident also in a photograph of Ronchamp at night, a photograph in which the chapel's east facade is transformed into a glowing, radiant face (fig. 28). The eye of this face is the glazed 'window' which houses again in the position of the pupil- the "statue miraculeuse" of the Virgin mother with child. Mounted on a revolving platform, the statue, the building's eye, can look inward as well as outward.

VI

Although in Le Corbusier's building from the twenties and thirties, large and continuous expanses of glass allow for visual release to the exterior of the building, at

Ronchamp, from inside the chapel, there is but a single aperture through which one may look out unobstructed. In the mid-thirties such minimal visual release was antithetical to Le Corbusier's conception of a new architecture in which the pan du verre was charged with symbolic significance. His Minotaure article nevertheless opens with the statement by Soutter quoted above in which Soutter, paralleling body and building, proposed an architecture without eyes. "Plus de fenêtres, ces yeux inutiles", Soutter proclaimed, insisting that the house of the future be built entirely of transluscent glass. "regarder dehors, porquoi?" he asked. Le Corbusier interpreted this desire as manifestation of Soutter's introspection is "l'antipode de mes propes idées", that from his buildings one looks out. But fifteen years later at Ronchamp light penetrated the building only through slits and small 'holes' where the view out is obscured by writings and drawings on the glass. Once inside this gigantic head on the hill, one looks out only through a single aperture, the glass eye in which the virgin resides. As with the Illiad drawings, our eye aligns with the eye of this building. We realize the space, we inhabit as a state of mind. The very structure of our body has been enlarged and, as with Brassaï's "Troglodyte", we are made profoundly aware that we inhabit out own skulls.

This condition of interiority, of introspection, would occur again in Le Corbusier's work, at Brussel's in 1958, where he conceived his pavilion without a facade, "an Electronic Poem contained in a 'bottle'... a stomach assimilating 500 listener-spectators" 25. And although in 1936 Le Corbusier could assure is readers that Soutter's wish for an abode "entièrement de verre traslucide" was the opposite of his own ideas on architecture, just one year later he built the Pavillon des Temp Nouveaux, a windowless tent structure of translucent colored canvas -its sloping roof and bowed walls (as portrayed in black and white photographs, at least) clearly anticipating the interior of the Ronchamp chapel²⁷.

VII

When he wrote of Soutter's condition in 1936, Le Corbusier did not foresee the introspective architecture he himself would create twenty years later. What he did foresee was the possible anguish of exposing for public consumption an "intense interior life of thought". "Is it of any use", he asked his *Minotaure* audience, "to place in circulation today at the threshold of the winter of a life, one more name?" And he followed this question by noting Soutter's as the overtly sensitive, introspective modern man who makes manifest in visual and readable form his own inner psyche. "He has learned to look within. Through him we can see inside a man". Le Corbusier, with all his brash exteriority, had regarded his own painting as a private affair. To exhibit this work was to expose his inner self, and it was at this time that he began to slowly reveal himself as a painter again. In this sense, "Louis Sutter: l'inconnuy de la soixantaine" was a manifestation of the inner turmoil he himself anticipated experiencing. "Est-il utile de mettre en circulation aujourd'hui, au seuil de l'hiver d'une vie, un nom de plus?". The inference was a much to Le Corbusier himself as to Louis Soutter.

Although painting was an important part of Le Corbusier's creative production and one that he worked at constantly, since 1923, as mentioned earlier, he had exhibited his paintings only twice: in 1933 in New York, remote from European critics and colleagues and in the small 1935 exhibition billed as "Les arts dits primitifs dans la maison d'aujourd'hui'. The 1933 exhibition was at the John Becker Gallery. In his review of the show, Henry-Russell Hitchcock wrote: "Since 1925 painting and architecture have diverged sharply in their development. The new architecture, now firmly established, has for the present no further need of the aesthetic research of painters"28. In the 1935 exhibition only a few of Le Corbusier's paintings were shown, these together with "sculptures by Bénin, other negro sculptures, a few Greek, Henri Laurens, tapestries by Léger, [and] paintings by Picasso, Braque [...]"29. Staged by the collector Louis Carré, the exhibition was held in Le Corbusier's painting studio in his recently in his recently completed Porte Molitor apartment, described on the announcements as "La maison de Verre (Le Corbusier et P. Jeanneret, Architectes)"30. The paintings he exhibited were recent works, and staging the exhibition in his own architectural creation could only have forced the viewer to consider the painting-architecture relationship written off by Hitchcock31.

This ten day, informal exhibition was a safe way for Le Corbusier to re-enter the art world. It would have attracted those interested in primitives, in Louis Carré's collection, in the avant-garde work of Picasso, Braque and Léger. For those who came to see the work of Le Corbusier, no doubt the focus was as much on his architecture and on his life style (the artist-architect, or the visual arts scientist in his laboratory (his wife compared the apartment to "a hospital, a dissecting lab"32)), as on his paintings. "L'art brut" was evident in the vaulted roof and exposed masonry wall of Le

Corbusier's studio, a 'palette' repeated at the Maison de Week-End built concurrently with the staging of this exhibit.

When finally in 1938 Le Corbusier exhibited fifteen years of his painting in a major retrospective at the Kunsthaus Zürich, the reviews were not good. "L'exposition de Zurich a été une consécration pour moi dábord", he later wrote. "J'ai pu voir que ma peinture avait de la fermeté, qu'elle était personnelle. Aujourd'hui je suis estimé ou haï pour mon oeuvre. La peinture révèle un côte de sensibilié utile à être connu. On e peut plus me tuer davantage qu'on l'a fait! Et puis je me montre maintenant comme je suis: un technicien suffisant, poursuivant la route de l'harmonie: création poétique, source de bonheur"33. Clearly Soutter's work and Soutter himself, as presented by Le Corbusier prior to this exhibition, were analogous to this fragile, sensitive side of Le Corbusier, his vulnerable interior. With "Louis Sutter: l'inconnu de la soixantaine, "Le Corbusier 'pre-viewe' his own 'coming out'. When he presented 'une vie decanté' to the readers of Minotaure, it was his own private self, as much as the life of Soutter, that spilled forth. Two years later he would write of the painter's vulnerability, "La peinture - SA peinture, le met un sur la rue"34.

Also and of equal importance, Soutter's condition and his unique artistic expression must have made Le Corbusier acutely aware or artistic expression itself as an act of metamorphosis, as initially a taking in of the objective world -a "trasposition, transfer des évènements extérieurs dans l'intérieur de la conscience"25- and then, ultimately, an externalizing of an inner emotional or psychological state. It is shortly after writing about Soutter that he defined the creative act as une pensée en effervescence permanente and that he declared the 'siège de l'infini' the ultimate end of this act36. The sensation of art, he wrote, is décidément l'insaisissable, c'est le mystère", and "Le mystère est une ouverture profonde devant l'âme avide toujours d'espace"37. This change in emphasis in Le Corbusier's theory of art, from the rational and certifiable to the mysterious and unknowable, from the object to the sensation of space evoked by that object in rapport with other objects and with the spectator, was an essential and fundamental change. It would greatly affect his architecture in the years following the World War II when technology and objectivity gave way to the primacy of what he had by then termed 'ineffable space'. The psycho-sensorial nature of ineffable space allowed for an architectural manifestation of decantation: an architectural analog of the 'interior of consciousness'.

HISTORY AND AESTHETICS IN ARCHITECTURE. MODERNISM OR THE ABSENCE OF CONCEPTUAL PARADIGMS

Ángel Medina

"History and Aesthetics in Architecture: Modernism or the Absence of Conceptual Paradigms" attempts to point to the inadequacy of the common mixture of surface description methods with the comparative study of formal elements, which is typical of historians (of art or architecture), and with the direct attribution of the emergence of a work to ideological, social or economic motives, which is what most Postmodernist critics do. This methodological mélange, or parts of it according to the specialized bias of architects, critics and teachers, either displaces or replaces in architecture the use of theory and aesthetics proper. Teaching or practicing architects are more comfortable appealing to their knowledge of current or historical works than to theory; and when they incorporate philosophical ideas in their study or work, they tend to use either naïve traditional concepts or fashionable ideologies of their time. The solid body of modern theory and aesthetics is still largely neglected in technical schools; they thus split the integral unity of perceptual, emotive and configurative or poetic aspects of works that modern theory and esthetics propose. In their peculiar synthesis of theory and practice, the understanding of forms as signs, as images and as contents of forms of life is thereby separated from the understanding and criticism of the constructive craft. Modern aesthetics of architecture is theoretically and practically intertwined with Modern art; the frequent misunderstandings and biases in the approaches to the latter have created serious prejudices in the study of the former and, as a consequence, in the design and criticism of recent and contemporary architectural works. The present article, which is a response to the historical observations on architecture, morality, historicism and modernity, by Juan Miguel Otxotorena (Ra, 3), conceptually interprets, and gives concrete architectural examples of, Modern architectural aesthetics as a phenomenology of the architectural sign, as an ontology of the work as image, and as a hermeneutics of construction and the constructed. The first clarifies the distinction between arbitrary and natural or quasi-natural signs and the chasm that the difference between the two created in all of the arts. The second clarifies the distinction, central to Modern aesthetics, between creative images and fictions in bad faith (Sartre, Lacan, De-construction). The third establishes the issue of the de-composition of the cube (Neoplasticism, Zevi) as the key to the Copernican turn from the boxed in space of an architecture to be seen to the dynamic time-space of a place (city) to be corporeally lived and moved through.

PAUL LINDER: ARCHITECT, CRITIC, EDUCATOR. FROM THE BAUHAUS TO PERU'S NATIONAL SCHOOL OF ENGINEERS

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Recent attention to the trajectory of the magazine Arquitectura between 1918 and 1936 has brought to the fore the architect Paul Linder (1897-1968) and his role in disseminating the postulates of Germany's Modern Movement in the Spanish professional scene, especially in Germanophile circles of the Madrid of those years. It may come as a surprise, then, that Linder's first rapport with Spain should have been closely linked to Catalanism. What happened was that in 1921, having finished his studies in the Bauhaus of Weimar, Linder and his friends Ernst Neufert and Kurt Löwengard went on a trip that had them covering much of the Iberian Peninsula in the course of a year. They embarked on the trip with concrete references and aims, following the trail of Gropius, who in 1907 had himself finished his studies and set off for Spain to study the architecture and crafts of the country for a whole year. In Barcelona he had come in contact with the architect Puig i Cadafalch. Thirteen years later, history repeated itself. Linder and Neufert were commissioned by the Institut d'Estudis Catalans to carry out works of Catalan Gothic architecture. In this work, the historic building of Catalan identity intermingled with redemptive visions of the crystalline cathedrals of postwar Germany.

Significantly, Linder's return to Germany marked a change of course in his relations with Spain. The architect Luis Lacasa played a key role in this story by writing a chronicle, published in *Arquitectura*, of his visit with Linder in Munich, whose "expressionist interior" induced him to state the flagrant backwardness of Spanish architecture. Soon afterwards Linder became the Madrid publication's German correspondent and so began his career as a critic. His career as a critic would ever reflect his parallel development as a professional architect. A case in point was his writing on the firm Taut & Hoffmann, of which he was a collaborator. Linder considered himself one of the avant-garde. Nevertheless, the moderation that characterized the projects he carried out from 1929 onward, once he had set up his own practice in Berlin, shows how his objective was not so much the mere transgression of form, but a more profound, modernizing transformation that covered everything from new approaches to housing to liturgical reform.

In the thirties, because of his socialist past and his wife's Jewish strain, Linder had to leave Germany. Backed by his Spanish experience and his good relations with diverse German Catholic organizations in Peru, in 1938 he went into exile in that Andean country. He lived there for thirty years, picking up on the different activities he had applied himself to previously. As a critic, he found himself involved in debates on Perunism in architecture, for which he availed of the essentialist schemes of his Catalan experience. As an architect he built up a body of works that is as valuable as it is unknown. He practiced the profession unattached to Lima's social media. For the part of Linder that was an educator, such isolation meant independence. In 1942 he became a professor at the Catholic Pontifical University of Peru and the National School of Engineers. Backed up by his having been a Bauhaus student, Linder would become a "model architect" even to politically belligerent students. He bridged Weimar to Lima by vindicating a degree of utopian extemporaneity as a constituent property of the "great common building" of modern architecture.

The articles of Mr. Fritz Neumeyer and Mrs. Judith Sheine, originally in English, are reproduced entirely. Ra wish to thank Mr. Fritz Neumeyer, who gave us permission to publish his article "A Return to Humanism in Architecture" in Spanish. This article was first published in: *Hans Kollhoff: Architektur=Architecture*, Prestel Verlag, München, 2002.