Architectural Making: Between a “Space of Experience” and a “Horizon of Expectations”

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I. Architecture as In-Between

“In-between” (be-tween) means being neither at the beginning nor at the end of a series, lying between two extremes in time or space or state, as opposed to being or being situated at an end. It may be associated with mediation (forming a link or stage between two others), or with interceding (acting between parties with a view to reconciling differences). In-between is reminiscent of a metaphor of linearity, but the “in” hints to an inside (in-side), a depth. Architecture, as a process of creation, lived environs, or acts of interpretation, is the in-between in all these senses. It is the in-between of the surrounding world and the embodied self, of givenness and response, of awareness and unconsciousness, of identity and place, of individual and public, of event and tradition, of technology and ethics. As a bridging/separating phenomenon, it offers momentary balances or embodies imbalance between primordial human depths and living human worlds. It takes part in undoing existing horizons of meaning and reconstituting them into new ones. As an in-between, architecture is both dialogue and tension, or dialogue in tension. This, of course, is a position, an interpretation standing against traditions of architecture as building, art, art and science, profession, etc. The present essay would like to

focus on just one aspect of architecture, namely the architectural process of creation (architectural making) as an in-between.

As for the edges of architectural making¹ as in-between, the essay will adopt Alberto Perez-Gomez's assertion, as per Ricoeur, after Koselleck, that a meaningful architectural act is always between a cosmic or historical world (whatever the architect's cultural inheritance), and a better future for the common good. Hence we can refer to this making as between a "space of experience" and a "horizon of expectations" (Perez-Gomez, "Hermeneutics")—terms which are more explicitly discussed in the following section.

Thus, it is the *poiēsis* of material architecture in-between its two edges, the "space of experience" and the "horizon of expectations," that will be referred to in the following essay. Architectural production as a social art involves additional processes and iterations that are beyond the scope of this essay.

II. Architectural Making as a Phenomenological Inquiry

As a way of approaching this in-between of architectural making, I would first like to suggest that the making of architecture is a research-in-practice (Schon 309), and that to a large degree it actually applies the phenomenological method of inquiry, albeit usually not acknowledging the kinship. This suggestion is based on more than twenty years of introspection, close observation of the work of students in the architectural studio, and a number of examples from the professional literature.²

The affinity between architectural making and phenomenological inquiry struck me from my first acquaintance with the field, in the early 1990's. Phenomenological inquiry—rooted in conscious experience, and extending from the subjective or first-person point of view towards

things and events, other people, ourselves, and, in reflection, our own conscious experiences—is very much the method applied in architectural practice. Even if architects are not aware of phenomenology as a school of philosophy, they use its approach as know-how, as a bridge between what is and what will be: meaningful interpretation of context, product, and outcome of architecturally creative acts.

III. First Sketch of Edges and the In-Between

As noted above, architectural making can be understood as occurring between a “space of experience” and a “horizon of expectations.”

There are three components of the architect’s “space of experience:” the brief (program), professional knowledge (including special studies undertaken for the specific design), and his/her personal experience. The brief is external, importing experience from life-worlds that the architect may share or not, and professional knowledge adds historical and scientific evidence, including architectural precedents. The architect's individual experience includes his/her memories, feelings, emotions, related or unrelated to the project, as well as professional experience with previous projects. Among the three components of the “space of experience,” the personal is the most intermingled with the inner, creative life of the architect.

Against this “space of experience” stands the “horizon of expectations.” Before modernity, the architect’s “horizon of expectations” was well integrated into the past, that is, into Greek classical perfection (Doorman 41). This changed with modernist functionalism, with the horizon of architectural expectations purportedly being set by the brief (program), imposed on architectural making from without, i.e. external to the architect's discipline (Pelletier & Perez-Gomez, *Architecture* 4). The brief determines the purpose, the quantified attributes and much of

the qualitative properties of the architectural project, within the framework of the habitual. But the brief is a mesh framework, always incomplete, as clearly evident in architectural competitions, when the same brief yields hundreds of different proposals. Beyond the brief, there is the architect's personal and pre-conscious "horizon of expectations" which is felt rather than consciously defined or envisioned, holding that which is acceptable and even more so, what is unacceptable.

These two edges—the "space of experience" and the "horizon of expectations"—seemingly condition and confine the in-between, because they are its connectors to the approaches, concerns, and perspectives of others, besides the architect herself. This might imply that the in-between is somehow derivative of its edges. However, although related to edges, the in-between is neither an interpolation nor an extrapolation thereof, but a space in itself, characterized by a dimension of freedom, where creativity happens.³ The "space" metaphor is used to connote infinite mathematical space, hence the limitlessness of the in-between as creativity. Following the opening of an in-between, the "space of experience" can be broadened or relocated, and the "horizon of expectations" can be diverted, deflected, and occasionally transgressed: a breakthrough.⁴ In order to describe how this sense of the in-between emerges from architectural making, I will first elaborate how the various stages of architectural making correspond to the stages of phenomenological inquiry.

IV. Architectural Making as In-Between

The first phase of phenomenological inquiry—epoché—is, in architectural making, the bracketing of meanings that are taken for granted, of worn-out interpretations, generalizations, the impersonality of the given, trivialized experience. Since making is always specific, place-

and time-related and contextualized, it demands reinterpretation of even the most banal starting points. For example, although I have gathered all my acquaintance with dwelling, based on my personal experience and the best possible resources (architectural precedents, the sciences, future user preferences), all of this prior acquaintance must be put at a distance in order to open up the possibility of creating a dwelling here and now. Distancing or “bracketing” is not forgetting; it is diverting attention. The poetic in-between does not discard the edge of former experience, but turns away from it. The “architectural *epoché*” enables wonder: a break in the regular flux to appreciate anew this very ordinary “space of experience” itself, in all of its senses and capacities.

Bracketing follows a last moment on the edge, when, just before immersion into the in-between, there is intense observation, collection, and recollection of experience. In design there is always intentional extension of both the personal “space of experience” in order to accommodate precedents (i.e. the knowledge of others), and the “horizon of expectations,” in order to include others’ prospects as well. On this “edge” there is a gathering of a world wherein and whereof the making might be released, though not constrained.

On this edge, one experiences a sense of wonder. As Shmueli writes, “[w]onder reveals the novel in what it sees, not necessarily for the first time. The seen may be ordinary, but the seeing is new, and it reveals in the sight a thing that arouses wonder, that moves the heart and awakens the mind to inquire” (23 [*author’s translation*]). Here wonder is related to anxiety, because the order and stability of things are at once distanced and, at least potentially, shaken. The “architectural *epoché*” thus opens up a space where the natural anxiety provoked by development is contained. This is a space in-between inner and outer worlds, where creativity occurs (Winnicott 87-114). As French remarks, “If well enough contained, anxiety can act as a source of creative, task-related energy, as reflected in the phrase ‘anxious to learn’” (484).

This phase of the “architectural *epoché*,” the turning away from wandering and wondering on the edges, is followed by the second phase of architectural making, and it is here that architects, and especially students of architecture, are liable to get stuck (Sachs).

The second phase of phenomenological method—phenomenological reduction—is, in architecture, the fresh and unconditioned understanding, or better, the *verstehen* of the essential quality of the poetic task. In the words of the Finnish architect Reima Pietila, “The initial idea for a building is no clear matter. A building doesn’t begin from anything familiar or predetermined. It is non-verbal, like Samuel Beckett’s *L’Innomable*” (Norri et al. 26). Moustakas (16) maintains that the task of phenomenological reduction is the description of the phenomenon in textural language, i.e. the description of its essential quality. In architectural making, this reduction emerges in a unified primary scheme that represents the constituent components and relationships of the project. It is frequently conceived as a sketch or an ideogram. Students of the architectural studio are well acquainted with the difficulties of this phase.

For example, Gal, a fifth-year student, had a detailed brief of the cultural center she would plan in Bat-Yam (a town south of Tel-Aviv), very good analyses of the urban context (local population, activities, needs etc.), and studies of many precedents. In other words, she had explored the edges in a most thorough way. Nevertheless, she felt stuck and unable to start designing: “I have been staring at the site plan for the whole week ... I built a 3D model of the site ... I am confused ... I believe in the cause of this project! I know the people! I know the place! ... I can add more analyses... But how can I get going with the project?” (Aravot, *Transcriptions* 12). Gal knew that more analyses of the site would not shake her from this paralysis. As Rafael Moneo has argued, “I am not suggesting that architecture is derived from the site. There is no cause-and-effect relationship [between any factual given and an architectural

project]. To know the site, to analyze it, to scrutinize it, does not produce an immediate or obvious answer” (cited in Davidson 48).

One can identify this phase in projects from the architectural canon. For example, we recognize a crab shell as the constituent image of Le Corbusier’s Chapel of Notre Dame du Haut in Ronchamp (Groat and Wang).⁵ Another example of such an ideogram is found in Lucio Costa’s sketches for the Pilot Plan for Brasilia.⁶ Here, the shape of an irregular cross suggests an airplane or dragonfly. These examples, which show how full-fledged works originate in idiosyncratic beginnings, shed light on Gal’s stuckness. After opening up the in-between (that is, between her own accumulated knowledge of the site, and the expectation of what she was supposed to design), she completely understood that the edges were rendered irrelevant: past experience was arrested and the horizon of the future was unattainable, because there was nothing yet to *pro-ject on*. No strict limits were required; rather, what she needed was an ad-hoc dock at which to anchor her creativity. Additional specifications of the edges could contribute nothing to the desired ideogram. The in-between as perceived between its edges was just one level of a space freely growing beyond the edges. Gal, so to speak, was on the surface of an infinite present, anxious to let herself go into the abyss of the in-between. She needed a hint, a grip, but could not find it precisely because she was so conscious of the situation as a whole; she was unwilling to let go of her edges. But, like a swimmer, Gal had to leave the visible shore behind, even while the equally visible horizon was still inaccessible. Like the swimmer in the midst of the sea, she was afraid to sink. Gal was being asked to dive, to take up a free direction of her own, propelled by her own creative energy. She had to let go of the edges, but this held the danger of disorientation in a bottomless gulf. To grasp the essence of her design she had to give

up thinking and let herself intuit, but as a student she was not confident that intuiting would end up anywhere at all.

Gal's "diving" finally succeeded when she transferred her efforts to the friendly milieu of her childhood and let her embodied self come forth: working with clay. The clay, offering her both comfort and security, allowed her to let go of her edges. It was her vehicle into the abyss of the in-between. Turning away from the edges, the freedom of the in-between suddenly emerged as a tangible reality. Anxiety of the mind connected easily to the energy of the hands, indulging in the plastic coolness of the wet soil. Gal's hands led her intuition to an ideogram that could then be explored further in the next stages.

The third phase of architectural making—free variations—involves the intentional activation of imagining. While *free variations* lead in Husserl's terms to the "essence" or "eidos" of the intended, in architecture they lead to an ad-hoc essence. This ad-hoc essence is released from specific purpose and local circumstances (expectations and experience), while at the same time it is rooted in the free dimension of the in-between. At this stage of architectural making, the background studies undertaken for the project are present implicitly, while the creative work is directed to the possibilities opened up by the in-between. The in-between connects to spheres which do not habitually form part of the edges: neither the sea-shore, nor the horizon in the sea metaphor, but the bottom of the sea, rich in topographies and creatures not seen at sea level. Through this connection, the in-between grows and generates creative energy, and will eventually imprint itself on the edges.

The significance of the free play of possibilities is a way to reach the meaning embodied in the form and structure of the merely intuited ideogram (in phase two). The variations themselves are appreciated and explored as experimentation with the primary sketch. The architectural

project is expounded in its as of yet undefined form. Rather than putting determinate knowledge to use, this phase employs empathy. Here, the designer gets closer to the vague, dwells with the obscure, embraces the blurred, and works with these variations prior to any fully developed “bridge” between the edges. The “space of experience” is left in fog, and since the work has to be projected first onto the “horizon of expectations,” this edge too is washed with mist. Emphasis is laid on the variations emerging in the in-between.

An example of free variations is Reima Pietila’s design for Mantyniemi, one of the three official residences of the President of Finland, 1983-1993.⁷ It incorporates very local, rather idiosyncratic components: contemplating “Finnish morphology,” watching a film about Alaska on TV, and so forth. His variations include “interacting of the forest-space—interior-space” and “space and line rhythms” (Norri et. al. 26-30).⁸

The fourth phase—transcendental intuition of the essence—is, in architecture, the first grasp of the entire project as a unity, the wealth of meanings of the ad-hoc essence, its heretofore hidden properties, as well as the hermeneutic circles of its significance. In professional jargon, it is the schematic proposal of the project.

Giorgi maintains that the eidetic reduction or search for essences involves searching for “invariance that will render a host of variables more intelligible in the realm of meaning” (214-215). Here, in architectural poetics, this is the enrichment of the condensed scheme developed during the earlier phases, and its envelopment within its closest hermeneutical circles. Canonical examples of the envelopment of the condensed scheme can be seen in some of the further developed sketches of the Notre Dame du Haut, Ronchamp, by Le Corbusier, of Lucio Costa’s Brasilia Plan and of Pietila’s Mantyniemi—projects discussed above.⁹

In the studio, the teacher plays a particularly key role in this fourth phase; the teacher must help the student read his or her own scheme as a unity within extending hermeneutic circles. In the author's view, the studio is the locus of architectural making per se, with relatively loose definitions of the edges of experience and expectation. While acquaintance with the edges might need the architect's special capacities of observation, differentiation, conceptualization, etc., these realms could be visited and explored by non-architects too. The creative making, however, is the architect's alone, and fourteen short weeks of the studio (each semester) have to strengthen exactly that part of the student's work—the heart of the design process. The younger and more earnest the student, the greater his or her anxiety to proceed with partial knowledge of “experience” and “expectation.” Thus when coming up with a scheme (in phase two), he or she needs the teacher's eye-opening demonstration in order to find an appropriate “solution” to the “architectural problem,” that is by definition ill-defined. Without this guidance, the student might drop a potential scheme when encountering the first apparently problematic aspect in relation to “experience” or “expectations.” Instead of unfolding the possibilities opened up by the scheme, the student might conclude that more background studies are required, studies that would eventually lead to a faultless scheme. If, however, the return to the edges and an additional scheme are followed by disappointment, the young student might enter a vicious cycle, ultimately detrimental to the student's semester of work, to his or her entire year, or even his or her very image of self (Austerlitz, Ben-Ze'ev and Aravot, *Emotional* 108-109). More often than not, the novice might be unable to appreciate his or her authentic achievement in-between. The teacher should be instrumental in discovering the unity and wealth of meanings within the poetic result.¹⁰

During this phase, the work floats up from the depths of the in-between to posit itself between experience and expectations. The extent of convergence and divergence of the projected hermeneutic circles from the “horizon of expectations” has the power to determine the fate of the work: perhaps the schematic proposal will be just “more of the same,” or perhaps it will be unrecognizable “nonsense.” At both extremes the work, and any in-between it offers, will be dismissed, albeit for opposed reasons. Between these extremes, however, the work is accepted and the in-between deforms and diverts the far horizon, and is then sent back as accession to the “space of experience.” This successful in-between thus has the power to reshape and rearticulate the edges that formerly held it captive.

The fifth phase—description—is the communication of the findings to the peers and community involved. It is the bridging from an individual enlightening to an inter-subjective sharing of meaning. In reaching the inter-subjective network, the end result of the poetical making is now imprinted on the “horizon of expectations,” and at the same time, added to the “space of experience” of future making, not of the architect alone, but of the community involved. Due to its inter-subjective nature, the fifth phase brings up the issue of architectural representation. While personal expression suffices in the previous phases, here communication requires conventionalized language.¹¹ Much has been written about the latent meaning, values and power relations embedded in architectural representation (e.g. Beckmann; Perez-Gomez & Pelletier *Architectural*; Agrest & Allen), but this is precisely where the present analogy to phenomenological analysis ends.¹²

Architecture is a creative art, a praxis, not a philosophy. Confined in the contingencies of everyday life, it is not a pursuit of ultimate ontological or epistemological generalizations. Experience, sensing, and perception in architecture are not an underlying stratum from which

true knowledge is to be extracted, but the knowledge itself. The process of architectural making reveals, for each architect and project, a specific space-time-context related essence. It is as if this final description is indeed a “Bringing-forth [that] brings out of concealment into unconcealment” (Heidegger 317), and hence reveals one essence, convincing as truth. Yet at the same time, this description reveals but one of many essences accessible for a given context. Thus architectural making is very similar to eidetic intuition, but it results not in universally valid knowledge, but in ad-hoc truth in its context of place and time. Each such “architectural intuition” is intended for just one, specific project.¹³ Still, like the universals of phenomenological inquiry, architectural phenomenology in practice reveals a unified essence, which forms the core of that architectural project.

V. The Edges

The “space of experience” and the “horizon of expectations” are concepts of the German philosopher Reiner Koselleck, introduced by Ricoeur in relation to the temporality of action (Ricoeur, *Time and Narrative* 209-219). The “space of experience” is made up of the events a person remembers, and the “horizon of expectations” is the unfolding of projects and hopes, both largely set by society, rather than directly by the person her/himself. They are the intersection of past and future in the present. As Ricoeur reminds us, “Koselleck points out that we cannot derive the ‘horizon of expectations’ from the ‘space of experience.’ ... [T]he exchange is only fruitful if the present is itself a force of initiative. Nietzsche spoke in this sense of the ‘force of the present’” (*Coming to Terms* 5). This paper focuses on the in-between of these edges as indeed the “force of the present.”

From a distance (i.e., disinterestedly), or from a very low level of observation (i.e., unconsciously, uncritically, conservatively) the edges might deceptively appear as a stable continuum. Yet in fact they are re-assembled from the present, and are neither stable nor continuous. The past is porous, saturated with forgetting and necessarily selected by only a very limited rationality. The desirable future is constantly re-set, re-shaped, re-imagined—this is an open/torn future as implied by the concept of progress. Considering a particular project, a person may be prompted to extend his/her “space of experience” and “horizon of expectations.” This inserts additional dimensions of provisionality into the already unstable edges, because the personally assembled edges are especially prone to absorb instant, impoverished components, due in part to the time pressures that might circumscribe architectural making.

As noted at the beginning of this paper, the architect’s “space of experience” includes three components: the brief, professional knowledge, and his/her personal experience. If the present is the intersection of the “space of experience” and the “horizon of expectations,” then it is personal experience that forms the key to the intersection, i.e., to the emergence of the in-between. At the moment of in-between, it re-calls surprisingly unhabitual experience, like a poetic metaphor created from previously unrelated words.¹⁴

Similarly, the architect’s “horizon of expectations” was described as consisting of both the brief that determines the purpose, attributes and properties of the project, but also as a mesh framework, yielding potentially innumerable different concrete results. This horizon also includes the architect’s own personal expectations of both what is and what is not acceptable.

“Horizon,” however, is more than that. It is richly portrayed by the concept of “horizon” in phenomenology: the larger context of meaning in which a particular, meaningful presentation is situated. Husserl, Merleau-Ponty and Gadamer emphasize “horizon” as referring to the

opening to something beyond what is already there: towards the object in its entirety, towards the character of the object, and towards understanding as a meaningful dialogue with an “other,” respectively.¹⁵ Against this background, the intersection of the “horizon of expectations” with the present in general, and in an architectural context in particular, is a ground to be further explored, but beyond this paper’s scope.

VI. The Edges and the In-Between

Architecture is a social art and architectural design is a dialogical process, an inter-subjective interweaving, which makes the “fusion of horizons” (Gadamer 336, 366, 397, 577) of vital importance. Still, architectural design includes a moment (sometimes a very long moment) that is entirely subjective, when the dialogue is within the first-person space. This is architectural making, so far presented in terms of its affinity to phenomenological inquiry and its location between the two edges: the “space of experience” and the “horizon of expectations.” While prior to making, the edges form an apparent continuum, the making inserts a wedge, distancing the edges from each other, but letting go of neither entirely: the specific in-between of architectural making separates them into two, even as they are still held in relation.

The edges are asymmetrical: the space in-between is potentially vast, like a huge amoeba that keeps growing. The horizon is its skin—thin, exchangeable and relocatable. The horizon is not entirely conditioned by experience; it pops up at the temporary limits of the experience and imagination, only to be absorbed as part of experience a moment later. Fortunately, the enormous weight of the edge of experience is also reduced by forgetting, which allows more maneuvering space for imaginative making, in the in-between. The in-between changes the relationship between the edges, as well as each of the edges in itself.

Making is *poiēsis*, the in-between, the present. It redefines the horizon. After distancing from the “space of experience,” the horizon will never return to its previous position. Redirected to the opposite edge, the horizon makes changes in experience, bringing in new contents, new insides, new insights.

Whether conservative, innovative or critical, imaginative creativity in architectural making, which has been described here as emerging from the in-between, is essentially structured as a phenomenological approach to reconstruct and reconstitute our already structured and constituted world. This is perhaps also the reason why, as one of our colleagues has remarked, “architects are fond of phenomenology” (Weiner).

VII. Conclusion: Life in the In-Between

Beyond the practice of architecture, the in-between is the living activity, the creative life of the self, saturated with energy (or anxiety, when the energy is not released). The continual swelling of the amoeba of experience and its growing weight compel living vibration to slowness and internal movement to inaction. Anxiety takes over, paralyzing creative life, like an old manatee dying on a sandy beach, its skin crusting and stiffening. Attempts at distancing or transgressing such a rigid “horizon of expectations” are doomed to failure. When all is already contained in experience, and the future is rendered in the image of the past, creativity stops. There is no space for creativity, if a wedge is not inserted between the “space of experience” and the “horizon of expectations.”

This wedge, the in-between, has an inside, released from the edges but not confined by them. The in-between has a structure, and most importantly a depth, which is a free dimension that transcends the edges. Despite the sea metaphor employed earlier, the depth should not be

seen only as perpendicular to the surface of edges; it also penetrates the edges in areas remote from the insertion of the wedge; it connects the unlikely; it is a strangely familiar topography, distinct, mine, and explorable by me alone. The creative energy is directed towards the depths, and towards the enigmatic moment, which is pre-conscious, embodied and ineffable. This is the instant of creation.

Anything on the edges is given and present if one only cares to observe. In contrast, in the depth the “I” seeks the givenness of a nonpresence, an absence. In this sense, we can in fact understand architectural background studies actually as the elaboration of the absence of the absent. The sought essence within the depth is grasped as a sort of pre-reflective perceptual experience, where one “sees” the essence (which in architecture is the essence of the project), and one is also somehow aware of him/herself grasping it. There is a feeling of fulfillment, of “eureka.” The in-between, the locus of creativity, is the space of life in its most vibrant manifestation. It is the space of freedom from the (immediate) burden of experience, a chance for authenticity, for being oneself. It is pure joy, to the degree of ecstasy and exaltation. In *Einstein and Religion: Physics and Theology*, Max Jammer describes the moments when Einstein experienced new insights on natural law as moments akin to Divine revelation. The in-between however, is not only a joy: it is also a struggle and anxiety of the self, all-alone by itself, exploring the depths. There is an essence to be grasped. This is the very heart of the creative act, but it is also a mission set and accomplished by the self alone. It is only the self who can appreciate just how genuine the grasp is. Therefore, although others may applaud a creative act, the “I” might nevertheless sense non-accomplishment.

The edges and the in-between are temporary configurations in a flux. The edges seem stable and continuous, but this is only a matter of perspective and focus: they are provisional and

porous, themselves a metamorphosing construction. The in-between stems from the edges, just as the edges stem from the in-between. Each is constantly constituted by flows. The in-between, however, is a special current: an origin of new energy, an accelerated and energizing whirlpool.¹⁶

The edges and the in-between are parts of a Heraclitic flux, an incessant stream. Closer examination reveals calm and slow streaming in one time and place, and energetic flows in another. Observing from within the flux in an instant of time, the edges, i.e. slower currents, seem in arrest, and the in-between, i.e. a faster or differently directed current, destabilizes them. Actually they are all in flux, losing energy (forgetting) and re-energizing from the enigmatic source of creative life. Thus, the in-between is the locus of the creative life of the human self, whereof the space of experience and the horizon of expectations of the self and of his/her culture are changed, reassembled, revitalized; dynamic and full of spirit the in-between recurs in all spheres of human existence.

To end in a somewhat playful vein: to the Western philosophers' characterizations of the essential, defining aspects of the human being as *Zoon Politikon*, *Animal Rationalis*, *Vir Bonus*, *Homo Sapiens*, *Homo Faber*, *Animal Symbollicum*, *Homo Ludens*, etc., we should add "*Homo Generum*" or perhaps "*Homo In-Inter*" or "*Homo Proclivus Intentio*."

Notes

¹ "Architectural making" is the creative architectural process related to *poiēsis* and *poetics* (*poiēsis* means making in Greek), and associated with Heidegger's use of *poiēsis* as "bringing-forth" ("Question Concerning Technology"). This interpretation contrasts architectural design understood as problem solving, technical process, pattern appropriation, etc. The term was probably introduced into architectural discourse by Dalibor Vesely and the Essex School (Hays 462). For an early discussion of poetic architectural making, see Vesely, "Architecture."

² Architectural making as a research-in-practice, following the phases of phenomenological inquiry has not yet been proposed, although phenomenological approaches to architectural theory and research abound (see Aravot, “Back to...”; for a bibliography of phenomenology in place, environment, and architecture, see Seamon, “A Way of Seeing”). The architectural making of other mature architects is enlightening but unfortunately it is largely concealed, due to its nature as a very intimate, emotionally saturated process (Austerlitz et. al.; Austerlitz & Aravot) and hardly apparent even to the “maker” him/herself, who is absorbed in the making and not in the awareness of making. Design studies, as a field of cognitive research, has been trying to decipher the process of making, for example through think-aloud protocols (e.g. Casakin & Goldschmidt; Goldschmidt), but critique from within this field has raised the problem of unnaturalness and reactivity and the excessive burden on the subject. Prior to that, at least since the 1960’s, architectural design had been viewed by normative theory as “design methodology” (e.g. Lang, *Creating*; Aravot, “From Reading”) and by cognitive research as focused on problem solving. This instrumental-scientific modeling has been questioned on its own grounds for more than a decade now (e.g. Goel 53)

³ Creativity as comprising a dimension free of programmatic constraints is well known in architectural practice. For example, there are endless examples of competitions where detailed qualitative and quantitative briefs are supplied (i.e. full fledged “edges”) and yet entries, sometimes in the hundreds, vary from one architect to another. Famous examples could be: The Houses of Parliament competition, won in 1836 by Sir Charles Barry; The Sydney Opera House, won by Danish architect Jørn Utzon in 1957; The New Library of Alexandria competition, won in 1989 by Snøhetta, Norway. For many more examples see Haan and Haagsma (*Architects in Competition*) and De Jong and Mattie (*Architectural Competitions*).

⁴ To illustrate a breakthrough, one might imagine how Austrian émigré architect Victor David Gruen extended the “space of experience” for his project to include European town centers and climate-controlled environments. Consequently, he created a new building type: the first “mall”—Southdale Center near Minneapolis, 1955-1956, described as “[a] template in the (re)construction of an ideal capitalist society” (Mennel 116). Although many of us are probably far from enthused by malls in general, and by Gruen's ideology in particular, it is not difficult to appreciate Southdale Center as a breakthrough in its original context. Few architectural processes yield breakthroughs to such a degree, and novelty is certainly not an aim per se, but each *poiēsis* has its authenticity; otherwise it is mere repetition.

This trait is contemporary-Modern and Western, as opposed to non-Western traditions in art and pre-Modern trends in architecture. See, for example, Orhan Pamuk’s *My Name Is Red*, where generations of miniaturists pass on their craft through centuries, master to disciple, so that the perfect form and technique of their art are committed to memory. See also Otto Wagner's book, *Some Sketches, Projects and Buildings of 1890*, where he introduces “Baukunst” as a neologism at the moment of formation of modern interpretation of culture, in contrast to “style architecture.”

⁵ Please see: Notre Dame du Haut in Ronchamp:
http://www.auditoryarchitecture.com/swisssummer/notre_dame.jpg.

⁶ Please see Brasília, Lúcio Costa's first sketches, Plano Piloto 1956 (courtesy, Arquivo Público do Distrito Federal) <http://forumpermanente.incubadora.fapesp.br/> in comparison to:

Brasília, view of Monumental Axis towards the National Congress. (Photo: Nelson Kon) at: <http://forumpermanente.incubadora.fapesp.br/>

and

Brasília, view of Monumental Axis from the National Congress:

<http://www.phaidon.com/Default.aspx/Web/brazils-modern-architecture-9780714842929>

and

Digital Globe's Quickbird satellite look at the central part of Brasília:

(http://www.rst.gsfc.nasa.gov/Sect4/Sect4_4.html)

⁷ Please see Reima Pietila's design for Mantyniemi at:

<http://www.tpk.fi/ahtisaari/eng/institution/mantyniemi.html>

⁸ To avoid confusion, it should be noted that in architectural methodology there is reference to "alternatives," especially in discussions with clients or future users. Ideally, each alternative should result from a full sequence of architectural "phenomenology in practice," but more often these are analytical steps within the "space of experience." The more closely bound the "space of experience" and the "horizon of expectations," the more negligible the architect's creative contribution.

⁹ Please see Le Corbusier: Sketches for Notre Dame du Haut, Ronchamp at:

www.archinect.com/schoolblog/entry.php?id=387 and Lucio Costa, Brasília plan at:

<http://forumpermanente.incubadora.fapesp.br/> and Pietila's Mantyniemi. As Norri et. Al. note,

"The metabolic sketches become more rectilinear: 1/500 diagrams in felt pen colors" (30).

¹⁰ It should be noted that other approaches might prefer to be more solution-directed and avoid an "exhaustive search through both relevant and irrelevant knowledge embraced in the 'problem space'" (Eckert et. al. no page number).

¹¹ When portrayed as a linear sequence, the five phases of phenomenology in practice sometimes include inner cycles, in which some phases are repeated, such as a return to the condensed scheme after *free variations*, or to *free variations* if the *ad-hoc essence* somehow fails to satisfy.

¹² The author thanks Ron Jelaco for the following comment: "The bringing of architectural creativity into its most salient, communicative state—as representation, can only be possible under the condition of 'conventionalized language.' That is to say, creativity eventually finds a place where it becomes intelligible, i.e., ethical (as in ethos), and it is there that it can be engaged by all in the practical, vague, trivial, contextualized world—cyclically returning to its 'most banal of starting points'" (Comments on the first version of this paper, sent to the author by email on 31 May 2008.)

¹³ All the examples (except Gal's) in this paper present ad-hoc essences. The intersubjective acceptance is retroactive: the essences of Ronchamp, Brasilia and Mantyniemi are accepted by far as absolutely appropriate in their contexts. These are examples of excellent architecture (but it does not entail that a different excellent architecture could not be created by a different architect in the same context.) Logically, the architectural essence is necessary, but not sufficient.

¹⁴ When concluded, a sequence of architectural making becomes part of any future space of the architect's experience. If this sequence is repeated in a single project, it becomes experience for the consecutive sequence. Such repetition is not easy, because it requires distancing from a personal path just trodden.

¹⁵ The author is profoundly grateful to Ed Casey for suggesting the connection of "horizon" to the writings of Husserl, Merleau-Ponty and Gadamer. The relation between the appearance of horizon in architectural drawing and texts to "horizon" in phenomenology will be explored in a future essay.

¹⁶ Sometimes the struggle of creativity's current might involve violence, seeking its abolition. When the in-between is considered illegitimate in the habitual flow (or "habitus" [Bourdieu and Passeron]), severe action might be undertaken to close the gap, for example, apostatizing or secularizing, which might result in excommunication from religious communities. In academic communities this is perhaps the overthrowing of conventionalized paradigms, or what Thomas Kuhn (*Structure*) describes as "scientific revolutions."

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