14. Mind, Mood and Architectural Meaning

Mind: From Romanticism to Neurophenomenology

In my book *Architecture and the Crisis of Modern Science* (MIT Press, 1984), I described how Western architecture was profoundly affected by the Scientific Revolution of the seventeenth century, revealing a set of intentions that are wholly modern long before the material changes brought about by Industrial Revolution.[1] In relation to perception and cognition, an initial consequence of that momentous transformation in European thinking was the incorporation of René Descartes' dualistic epistemology/psychology into the dominant conception of how architecture communicates. This assumption had far-reaching consequences, opening the door for a subsequent understanding of architecture as a "sign" – whose meaning was articulated as the intellectual "judgment" of exclusively visual qualities. This became the primary assumption of many twentieth century poststructuralist and deconstructive philosophers and architects, and one still present, often tacitly, among contemporary theoreticians.

The Cartesian understanding of cognition first appeared in architectural theory toward the end of the seventeenth century in the writings of Claude Perrault, the famous architect, medical doctor, biologist and theoretician.[2] He believed that architecture communicates its meanings to a disembodied soul (today often still identified with a brain, understood as the exclusive seat of consciousness), thoroughly bypassing the body with its complex feelings and emotions.[3] Perrault assumed perception to be passive and cognition to be merely the result of the association of concepts and images in the brain. Like Descartes, Perrault believed that human consciousness (enabled by the pineal gland at the back of the head, conceived as a geometric and monocular point of contact between the measurable, intelligible world – *res extensa* – and the disembodied, rational soul – *res cogitans* – was capable of perspectival visual perception, and that this assured the human capacity to grasp the immutable geometric and mathematical truth of the external world.[4] He could question, for the

first time ever in the history of architectural theory, the bodily experience of "harmony" as synesthetic, applicable to both hearing and sight embedded in kinesthesia: a phenomenon that had always been taken for granted since Classical antiquity and that constituted the primary quality of architectural design. For Perrault, sight and hearing were autonomous and segregated receptors, and therefore the inveterate experience of harmony in architecture was a fallacy – or at best the result of misguided associations between self-evident visual qualities and cultural assumptions.

While mainstream, technologically-driven planning and architectural practice has remained caught in this framework of understanding until our very own times, around 150 years after Descartes' influential writings another, often unacknowledged revolution in the human sciences took place. Even though it was originally qualified as a mere reaction to positive reason, associated with the arts as they lost their claim to truth, and sometimes taken as a plea for "irrationality," over the last two centuries this transformation has proven to be as important for Western thought as the Galilean revolution.[5] This momentous shift happened at the end of the eighteenth century with the rise of Romantic philosophy. Writers associated with this position questioned the dualism of Cartesian philosophy and argued for the reciprocity and co-emergence of inner and outer realms of human experience.[6] This initial insight allowed thinkers to establish a distance from materialism, establishing a critical position with regards to the technological dogma of their own times, while affirming the importance of imagination and the truth-value of fiction. In his *Essais* (1795) Friedrich Schelling declares that it is our prerogative to question the times we live in and to contemplate within ourselves eternity with its immutable form. This is the only way to access our most precious certainties, to know "that anything is in the true sense of being, while the rest is only appearance." This intuition appears to us whenever we stop being an object for

ourselves… we are not "in" linear time. Rather "time, or pure eternity, is in us." This insight anticipates Maurice Merleau-Ponty's phenomenological understanding of time as thick present,[7] an experience which I will argue below, is now corroborated by recent neurobiology. It is important to emphasize that Schelling added an important observation that qualifies his introspective critical understanding: "Even the most abstract notions retrieve an experience of life and existence… *all our knowledge has as a point of departure direct experiences*" (my emphasis).

Recovering an insight that had been put forward initially by Aristotle in *De Anima*, these Romantic philosophers posited a concept of self which first feels and then thinks; the *I* who wakes up every morning is not equivalent to the Cartesian ego (an *I* that can only believe itself existing because he/she thinks).[8] The first person in Romantic philosophy is always the same throughout her life, yet never fully "coincidental" with her thoughts. Her words point towards meanings but never exhaust them. This embodied, non-dualistic understanding of reality includes our emotions and feelings; its primary seat of awareness is *Gemüt*, and its most significant experience is *Stimmung*: attunement, understood as a search for lost integrity, health, wholeness and holiness. This concept has been shown to have its roots in traditional ideas about harmony (proportion), concert and temperance in the context of Ancient Classical and Renaissance cosmology, philosophy, music and architectural theories,[9] eventually becoming cast as "atmosphere" or "mood;" a concept that is now understood as of great consequence for art and architecture. The self is endowed with a consciousness that cannot be reduced to transparent reason, and since the elements of consciousness (subject, object and action) are inevitably codependent, it starts to appear "ungrounded." Not surprisingly, Romantic thinkers were fascinated by Eastern philosophy and started to incorporate some insights of Buddhism into their own positions, an approach welcomed eventually by Heidegger and more recently by enactive

cognitive science.[10] They also could imagine a holistic biology that included the mind in the living body as opposed to the mechanistic medicine at the origins of contemporary physiology.

Romantic philosophy questioned positivistic thinking through narrative, giving rise to the modern novel as the privileged "place" for both the expression of *Stimmung* and meditation on philosophical and ethical topics.[11] It also gave rise to the new discipline of history as interpretation (hermeneutics), distinct from the models and methodologies of the hard sciences, postulating this discipline as the proper mode of discourse to understand human problems. This argument was expressed with clarity by Friedrich Nietzsche in his crucial essay on "The Advantages and Disadvantages of History for Life," a text which is as relevant today as when it was first published.[12] I would argue that these positions were the precursors of late-nineteenth century American pragmatism (William James and John Dewey) and of the early and mid-twentieth century phenomenology of Edmund Husserl and Maurice Merleau-Ponty; they thus lay at the root of later developments in American philosophy, like the contemporary work of Mark Johnson, of contemporary existential phenomenology, and also of the recent revolution in the cognitive sciences that has approximated this discipline with the previously mentioned philosophical positions, notably in the works of Evan Thompson and Alva Noë.

Given this lineage, I would like to suggest that from the point of view of Western architecture (whose assumptions, both instrumental and critical, are often universalized in our global village), the crucial moment when neuroscience starts to become useful for architects is after the now-famous "invention" of neurophenomenology in *The Embodied Mind* (1991), by Francisco Varela, Evan Thompson and Eleanor Rauch. In a later work, Evan Thompson explains how cognitive science came into being in the 1950's as a revolution against behaviorist psychology:[13] the same concern that motivated Maurice Merleau-Ponty to continue the

work of his teacher Edmund Husserl in *The Phenomenology of Perception* (first published in 1945). Early cognitivism, however, had as its central hypothesis the computer model of the mind. While cognitivism made meaning – in the sense of representational semantics – scientifically acceptable, it fundamentally banished consciousness from the science of the mind.[14] It soon became evident that abstract computation was not well suited to model the thought processes within the individual, leading in the 1980's to what has been labeled as the "connectionist criticism," which focused on the neurological implausibility of the previous model.[15] While cognitivism still presumed the mind to be firmly bounded by the skull (cf. Descartes' psychology), connectionism started to offer a more dynamic understanding of the relationships between cognitive processes and the environment, creating models of such processes that took the form of artificial neural networks run as virtual systems on a digital computer.[16] These systems, however, did not involve any sensory and motor coupling with the environment; their inputs and outputs were artificial. Only "embodied dynamicism," the most recent approach of cognitive science that arose only in the 1990's, involved a truly critical stance towards computationalism of any form.

Indeed, this latest approach in cognitive science stopped depending on analytic philosophy and computer brain models and started acknowledging the relations between cognitive processes and the real world. Embodied dynamicism called into question the conception of cognition as disembodied and abstract mental representation.[17] The mind and the world are simply *not* separate and independent of each other; the mind is an embodied dynamic system *in* the world, rather than merely a neural network in the head. For Varela, Thompson and Rauch (1991) cognition is the exercise of skillful know-how in embodied and situated action, and cannot be reduced to pre-specified problem solving. In other words, the perceiver (subject), the perception, and the thing perceived (object) could never be said to exist independently,

they are always codependent and co-emergent, and therefore *ultimately* groundless or "empty" (a term taken by the authors from Mahayana Buddhism, to emphasize that this awareness is as opposed to absolutism as it is to a despairing nihilism, for out of the experience of emptiness in Buddhist meditation – letting go of grasping and anxiety – arises "sense" and mindful compassion). In that same seminal book they introduced the concept of cognition as "enaction," linking biological autopoiesis (living beings are autonomous agents that actively generate and maintain themselves) with the emergence of cognitive domains. The nervous system of all living beings in this view does not process information like a computer but rather creates meaning, *i.e., the perception of purpose in life,* whose articulation becomes more sophisticated with the acquisition of language in higher animals.

The world in this model is not a pre-specified external realm represented externally by the brain, but a relational domain enacted by a being's particular mode of coupling with the environment. Experience in this approach is not a secondary issue (as it was since Descartes), but becomes central to the understanding of the mind, and requires careful examination in the manner of phenomenology. In this connection, I would like to cite as well the work of distinguished neuroscientist Antonio Damasio, who has argued for the importance of emotions and feelings as essential building blocks of cognition, supporting human survival and enabling the spirit's greatest creations.[18] Recovering Baruch Spinoza's (and later phenomenology's) refusal to separate the mind and body, Damasio has shown the continuity between emotions and appetites, feelings and concepts. He points out that every emotion is a variation of pleasure and pain, a condition of consciousness at the cellular level, always seeking for homeostatic equilibrium.

In a later work, Thompson (2007) relies upon the findings of Husserl and Merleau-Ponty to explicate selfhood and subjectivity from the ground up, accounting for the autonomy proper to

living and cognitive beings. There is a deep convergence between phenomenology and the enactive approach that concerns the actual experience of time prefigured by Romantic philosophy and discussed by Merleau-Ponty in relation to his concept of *écart* as a "thick present." Thompson summarizes (my emphasis): *"The present moment manifests as a zone or span of actuality, instead of as an instantaneous flash*, thanks to the way our consciousness is structured. [It] manifests this way because of the nonlinear dynamics of brain activity. Weaving together these two types of analysis, the phenomenological and the neurobiological, in order to bridge the gap between subjective experience and biology, defines the aim of neurophenomenology..."[19]

The consequences of this revolution in cognitive science are far-reaching, and the first two decades of the twenty-first century have witnessed the publication of important works exploring different aspects of them.[20] Alva Noë popularized the enactive understanding of perception and cognition in *Out of our Heads: Why you are not your Brain and other Lessons from the biology of consciousness* (2010), emphasizing particularly that in order to understand consciousness in humans and animals we must look not inward, but rather to the ways in which a whole animal goes on living in and responds to their world. Noë's work allows us to understand how the traditional view of perception (recovered in phenomenology and present in pre-modern psychology) as primarily synesthetic, is vindicated by the recent understanding of the senses as "modalities" that cross-over their functional (*partes-extra-partes*) determinations: for example, the now well-demonstrated capacity of human consciousness to have "visual perceptions" through touch, as is possible for blind individuals with the aid of a device that transforms a digital image into electrical impulses on the skin. If perception is something we do, not something that happens to us (like other autonomous internal physiological processes), it is obvious that our intellectual and motor skills are fundamental to cognition.[21] By

the same token, the external world *truly matters*, i.e., the city and architecture, and we don't relate to it as if it were a text in need of interpretation or "information" conveyed to a brain: interpretation comes after we have the world in hand, and in this way architecture affects us, along the full range of awareness, from pre-reflective to reflective. We are "already" in a shared social context and in the "game," as we might participate in a sports match, depending on motor intentionality and skills for our perceptions. As Merleau-Ponty points out, the consciousness of the player "is nothing other than the dialectic of milieu and action. Each maneuver undertaken by the player modifies the character of the field and establishes in it new lines of force in which the action in turn unfolds and is accomplished, again altering the phenomenal field." Thompson emphasizes a crucial point for architecture that has escaped Heideggerian philosophers like Hubert Dreyfus, and was always a difficult question for Merleau-Ponty as well as a hotly-debated issue for poststructuralists that denied art its capacity for "meaning as presence": Reflective self-awareness is not the only kind of self-awareness. Experience also comprises a pre-reflective self-awareness *that is not unconscious* but is not representational. This includes particularly the pre-reflective bodily self-consciousness profoundly affected by the environment (architecture) that may be passive (involuntary) and intransitive (not object-directed). Thompson adds that there is every reason to think that this sort of pre-reflective self-awareness animates skillful coping.[22]

Thus contrary to some fashionable misapplications of the term *autopoiesis* (a term reserved by Varela and Maturana for metabolic, autonomous life) to parametric architecture and the desire to create "intelligent" buildings that cater to our comfort by emulating the systems of a "computerized mind," neurophenomenology's understanding of architecture would be as a *heteropoietic* system, capable of harmoniously complementing the metabolic processes of human consciousness, seeking a balance

between the need to provide for a sense of prereflective purposeful action and a reflective understanding of our place in the natural and cultural world. Limits, here, would be articulated not as part of a system (as in a cell) but through language, in view of intersubjective expression. It bears recalling, though this complex issue cannot be developed in a short essay, that language also has its roots in the prereflective realm of gesture and the body as a primary expressive system. It is not a more or less arbitrary, constructed code. Merleau-Ponty's work is crucial for this issue (as are Heidegger's intuitions): language is "emergent," it "speaks through us" and captures meaning in its mesh; words point towards meanings but never fully coincide with them.[23]

I would argue that the unique gift of architecture is to offer experiences of sense and purpose not in the mere fulfillment of pleasure, but in the *delay* (Duchamp's famous word) that reveals the space of human existence as a space of desire, actually bitter-sweet, never ending with a punctual homeostasis (i.e., never reduced to the search of ever-increasing comfort or fulfillment). The so-called meaning of existence then appears profoundly grounded in our biology, yet as a true human alternative where desire is never-ending – and yet may be always sensed as purposeful in our actions amidst appropriate environments, particularly when framed by attuned works of architecture. In other words, architecture's gift is to reveal *the true temporality* of the space of human experience, one indeed open to spirituality: the experience of a present moment that while it can be conceptualized by science (and our clocks) as a quasi-inexistent point between past and future, is experienced by us as thick and endowed with dimensions and – in a sense – eternal. This has always been the time "out of time" which is the gift of ritual, festival and art, or the time of "silence," evoked by Louis Kahn and Juhani Pallasmaa for architecture. This present "with dimensions" corresponds to Merleau-Ponty's *écart*, the delay between prereflective experience and reflective thought in all its modalities that is

paradoxically present in experience and that neuroscience has substantiated.

Indeed, as I have suggested, according to neurophenomenology the formal structure of time-consciousness or phenomenal temporality has an analogue in the dynamic structure of neural processes.[24] This uniquely human temporality is generally hidden under scientific and hedonistic interpretations of meaning. Architecture's well-documented gift throughout history, like poetry's, is indeed to allow humans to perceive their sense in the experience of a coincidence of opposites: Being and non-being beyond theological dogma.[25]

Mood and Meaning

Once we start to understand through recent cognitive science that our consciousness doesn't end with our skulls, it becomes easy to grasp that the emotive character of the built environment matters immensely: what matters, in other words, is its material beauty; its power to seduce us on the one hand, and its capacity to open up a space of communication for inter-subjective encounters on the other. The cognitive sciences' engagement of phenomenology has been productive, and we must expect that in the future this cross-disciplinary pollination will yield important insights for architecture.

Indeed, if the quality of the lived environment is lacking, if we don't even look out to our surroundings for orientation and instead employ technological devices like GPS to find our locations in the world, for instance, our skills are continually jeopardized and our actions actually reinforce our pathological (and ultimately nihilistic) assumptions that "life is without orientation," indeed, meaningless. Rather than accepting that the built environment is merely a shelter and all that matters is our possession of a sophisticated computer or intelligent phone, these insights from neurophenomenology point to the crucial importance of

our habitat, one that for humans includes the complexities of material cultures and spoken language. The place of embodied appearance, where we find ourselves through the presence of others, is indeed nothing like the computer screen. Such spaces need to embody appropriate moods or atmospheres to further our spiritual well being. Architecture has to speak *back* to us without becoming merely invisible, acting like a numbing drug or the perfect fit dreamt of by functionalists and today by the architects of ever more "intelligent," i.e., comfortable, efficient buildings.

In fact, already fed up with functionalism in the mid-twentieth century, Frederick Kiesler imagined in his *Endless House* project an environment that would respond to our moods not by pleasing us (or perhaps simply hiding our mortality) but by challenging us, promoting the use of our imagination, so that every time we open the tap, for example, we would no longer perceive a liquid that circulates composed of hydrogen and oxygen, but experience instead the real (poetic) nature of water: its qualities as life-giving and primordial liquid, vehicle of purification and remembrance. Such intention offers difficult challenges to a contemporary practice driven by pragmatic and economic imperatives, and yet it is a challenge we must take seriously. In other words, sustainability, ecological responsibility, and efficient construction – important as they are – are not enough to fashion a human environment.

Hubert Dreyfus has speculated on the importance of understanding moods for architectural design.[26] It is easy to observe that human actions can change the mood in a room: a charismatic speaker, lighting effects, artificial acoustics, etc., can all transform a place substantially. On the other hand, architects are capable of incorporating in their designed spaces a more lasting mood, one that we may associate with the room itself: solemn, strange, quiet, cheerful, reverential, oppressive, etc. It is important to point out that regardless of these precisions, our architectural experience is always ultimately dependent upon

our participation in an event housed in the space; it is in such circumstances that architecture "means."

This contemporary concern is rooted in the Romantic concept of *Stimmung,* mentioned earlier; an attunement that evokes interiority. *Stimmung* is related etymologically to the central questions of harmony and temperance in music, philosophy and architecture, going back to the origins of European thought in Ancient Greece.[27] Significantly, traditional treatises on architectural theory always characterized this concern through the objectivity of mathematics (proportions, geometry), encompassing both form and space. This understanding became problematized by the end of the European eighteenth century. In his treatise, *Le Génie de l'architecture* (Paris, 1780), Nicolas Le Camus de Mezières addressed the "same" traditional issue but thought that the only way to incorporate the need for harmony in design (an "analogy with our sensations" as he put it), was to characterize the moods or atmospheres of rooms through *words*. He describes a sequence of spaces in a house, rooms with different attributes (light, color, textures, decoration, etc.) related appropriately to the focal actions to which they gave place. It was in this manner that the harmonic potential of architecture, i.e., its meaning, could be sought.[28] Let me emphasize: this expressive and musical potential was set out *in words*, as descriptive narratives – and no longer in numbers referring to proportions, as had been traditionally done when referring to architectural beauty and convenience in most previous treatises on architecture in the Western corpus.

Indeed, the Cartesian model of reality fails to explain the way moods are normally shared in the everyday world, and the fact that though they appear to be eminently internal they are actually "out there;" so at the time when Descartes' dualistic concept was becoming accepted as a fact by the culture at large, architects like Le Camus felt moods had to be made explicit in language, a vehicle of our primary intersubjectivity – bringing

forward what remains a central issue for architectural meaning today. In the everyday world our bodies spontaneously express our moods and others directly pick them up and respond to them. Merleau-Ponty calls this phenomenon intercorporeality: "It is as if the other person's intention inhabited my body and mine his."[29] According to Gaston Bachelard, we literally resonate with another's experience. First there is reverberation, followed by the experience of resonances in oneself, and these eventually have repercussions in the way we perceive the world. This is how the poetic image is communicated, and how we can all have the experience of being co-creators.[30]

Now neuroscientists have found an explanation for this important phenomenon in mirror-neurons, that fire both when one makes a movement and when one sees another person make that sort of movement: when we observe the actions of others, our nervous system literally "resonates" along with the Other.[31] Heidegger had already observed this: "Attunements.... in advance determine our being with one another. It seems as though an attunement is in each case already there, so to speak, like an atmosphere in which we first immerse ourselves... and which then attunes us through and through."[32] Like an atmosphere, a mood is shared, and is contagious, just like laughter or yawning. This contribution of neuroscience to the understanding of our "virtual" body through mirror neurons has enormous potential to grasp the possibilities of "telepresencing" in multi-media spatial installations, for example,[33] and in the consideration of digital media in design. In all these considerations, however, we must not forget that even more fundamental than neural effects is our embodied consciousness, our intercorporeality. Gestures and actions generate habits that are at the root of understanding; we are *primarily* social beings and thus any concern for architectural meaning must build its formal and spatial decisions upon this foundation.[34]

Heidegger specifies further: "Moods are precisely a fundamental manner of being with one another... and precisely *those* attunements to which we pay no heed at all... are the most powerful." In a sense, conscious existence, "*Dasein*, is always already attuned... There is only ever a change of attunement."[35] Being attuned to a situation makes things matter to us: we feel more complete and become participants; our lives matter. This could be the humble yet crucial contribution of architecture in a secular age. But to get there, we must engage language in design practice to articulate human action, avoiding the merely pictorial. Indeed language, particularly in literature, has a greater potential for creating vivid images than "pictures in the mind."[36]

Heidegger recommends spaces that gather self-contained local worlds, gathered around "things thinging." For example, the family meal: a "focal practice" that draws everyone together into a shared mood, so that the action "matters."[37] Such moods "can bring us in touch with a power that we cannot control and that calls forth and rewards our efforts," a power that could be recognized as sacred. The sense that the mood is shared is constitutive of the excitement, as used to happen in traditional rituals and in some contemporary performances, or in our experience of art. The architect can therefore try to bring about the appropriate moods for human actions that reveal life as purposeful by designing spaces that are attuned to an appropriate range. I would argue that literary language can describe these possibilities as one imagines a proposed space being used, in manifold contexts, to invite in the unexpected: thus architecture is never static, neutral or merely devoted to one use.

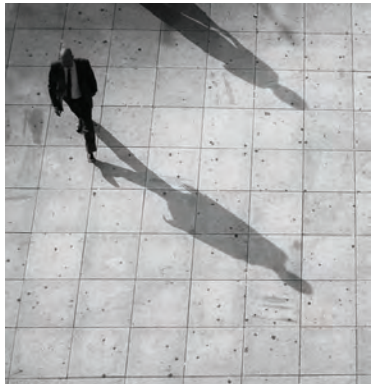
NOTES

1. See Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge MA: MIT Press, 1983).
2. See ch. 8 in volume 1 of this collection.
3. See Claude Perrault, *Ordonnance for the Five Kinds of Columns after the Method of the Ancients* and my own introductory study, trans. by I.K. McEwen of the 1683 first edition (Santa Monica, CA: The Getty Center, 1993), and C. Perrault, *Les dix livres d'architecture de Vitruve* (Paris, 1684).
4. Human visual perception includes peripheral vision and haptic qualities; it is not passive; our understanding of depth is the result of our motor bodily engagement with the world. Visual perception is therefore not analogous to a constructed perspective. This problem been discussed exhaustively by Maurice Merleau-Ponty, *Phenomenology of Perception*, new translation by D. Landes (New York: Rutledge, 2012), and in his essays on art, particularly "Eye and Mind," and "Cezanne's Doubt," collected in Johnson G., ed. *The Merleau-Ponty Aesthetics Reader* (Evanston IL: Northwestern University Press, 1993). See also, Alva Noë, *Action in Perception* (Cambridge MA: MIT Press, 2004). The far-reaching implications of this issue for architectural representation have been discussed in Alberto Pérez-Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge MA: MIT Press, 1997).
5. See George Gusdorf, *Fondements du savoir romantique* (Paris: Payot, 1982). Gusdorf has been instrumental in describing the importance of this revolution and its connections to later Continental philosophy and phenomenology.
6. The main figures are Friedrich Schelling, Friedrich Schlegel, Novalis (Georg Friedrich Freiherr von Hardenberg) and Carl Jacobi.
7. See Maurice Merleau-Ponty, *Phenomenology of Perception*, and especially M.C. Dillon, ed., *Écart et Différence; Merleau-Ponty and Derrida on Seeing and Writing*, (New Jersey: Humanities Press, 1997), chs. 1, 6 and 11.
8. See Daniel Heller-Roazen, *The Inner Touch, Archaeology of a Sensation* (New York: Zone Books, 2007).
9. For the linguistic roots of *Stimmung*, see Leo Spitzer, *Classical and Christian Ideas of World Harmony: Prolegomena to the Interpretation of the Word 'Stimmung'* (Baltimore MA: The John Hopkins Press,1963). For an elaboration of the consequences of this analysis in architecture see A. Pérez-Gómez, *Attunement, architectural meaning after the crisis of modern science* (Cambridge MA: MIT Press, 2016).

10. See Francisco Varela, Evan Thompson and Eleanor Rosch, *The Embodied Mind* (Cambridge MA: MIT Press, 1991), especially chs. 10 and 11.
11. This argument has been brilliantly put forward by Hans-Georg Gadamer, *Reason in the Age of Science* (Cambridge MA: MIT Press, 1981), ch. 8.
12. Friedrich Nietzsche, "On the Advantages and Disadvantages of History for Man," in *Untimely Meditations* (Cambridge UK: Cambridge University Press, 1983).
13. Evan Thompson, *Mind in Life, Biology, Phenomenology and the Sciences of the Mind* (Cambridge MA: Harvard University Press, 2007), 4.
14. Ibid., 5.
15. Ibid., 8.
16. Ibid., 9.
17. Ibid., 10.
18. See Antonio Damasio, *Descartes' Error* (Toronto ON: Penguin Books, 2005); and *Looking for Spinoza; Joy, Sorrow, and the Feeling Brain* (Toronto ON: Harcourt, 2003.
19. Thompson (2007), 15
20. See, for example, Shaun Gallagher, *How the Body Shapes the Mind* (Oxford UK: Clarendon Press, 2006) and Louise Barret, *Beyond the Brain, How Body and Environment Shape Animal and Human Minds* (Princeton NJ: Princeton University Press, 2011). While not all on exactly the same footing, these books contribute enormously to our understanding of the issues raised by enactive cognition and neurophenomenology.
21. Alva Noë, *Out of our Heads: Why you are not your Brain and other Lessons from the biology of consciousness* (New York: Hill and Wang, 2009), 7. See also his more technical *Action in Perception* (Cambridge MA: MIT Press, 2004).
22. Thompson (2007), 315-6.
23. See Maurice Merleau-Ponty, "The Phenomenology of Language," in *Signs* (Evanston, IL: Nothwestern University Press, 1964), 84-97.
24. Thompson (2007), 356-7.
25. This is also Octavio Paz's universal definition for a "poetic image." Octavio Paz, *The Bow and the Lyre* (Austin TX: University of Texas Press, 1991).
26. Hubert Dreyfus, "Why the Mood *in* a Room and the Mood *of* a Room Should be Important to Architects," in *From the Things Themselves, Architecture and Phenomenology,* Kyoto University Press, Kyoto, 2012, pp. 23-39.

27. I examine this problem extensively in *Attunement,* op.cit.
28. Nicolas Le Camus de Mézières, *The Genius of Architecture; or the analogy of that art with our sensations,* trans. D. Britt (Santa Monica CA: The Getty Center, 1992).
29. Dreyfus, op .cit., 26.
30. Cited by Susan Kozel, *Closer, Performance, Technologies, Phenomenology* (Cambridge MA: MIT Press, 2007), 25.
31. This is the neurological phenomenon that now explains the "phantom limb" syndrome of amputees. See V.S. Ramachandran and Sandra Blakeslee, *Phantoms in the Brain: Probing the Mysteries of the Human Mind* (New York: William Morrow and Co., 1998).
32. Cited by Dreyfus, op.cit., 27.
33. See Kozel, op.cit.
34. See Nick Crossley, *The Social Body Habit, identity, desire* (London: Sage, 2001).
35. Martin Heidegger, *Fundamental Concepts of Metaphysics* (Bloomington IN: Indiana University Press,1995), 67-8.
36. This is the main argument developed by Elaine Scarry, *Dreaming by the Book*, (Princeton NJ: Princeton University Press, 2001), 3-9.
37. Dreyfus, op.cit., 35.

15. Poetic Language and Architectural Meaning



Architecture's primary function throughout history may well be to provide a communicative setting for cultures, one that speaks both intellectually and emotionally to embodied consciousness, disclosing attuned places for significant human action. Opening up spaces where one may attain self-understanding through action in communion with others, this primary function – traditionally associated with an epiphany of beauty – may indeed be more fundamentally understood as a condition for humanity's psychosomatic health; an environment that harmoniously completes rather than alienates human consciousness.[1] While engineers may be better equipped to solve building design problems in view of pragmatic use, structural efficiency and energy sustainability, architects like to think that they can contribute something of specific significance beyond those issues. Architectural theory, however, particularly in the wake of Foucault, often declares that regardless of intentions, architecture expresses political and economic power; it is obvious that it can function as a sign like some form of publicity, and often becomes a commodity. Ethical practitioners rightly worry that their work should not merely express self-indulgence. Ultimately, and regardless of the representational intentions of designs – which should be driven by a quest for both beauty and justice – it is evident that communication of some sort, evidently multi-layered, is the primary social and cultural function of our discipline. And yet, while architects tend to think a lot about the role of pictures, drawings, forms, or even spaces as geometric volumes, they generally disregard language – especially the polysemic, inherently poetic languages we speak and write, assuming they have little to do with design and architectural meaning.

It is nevertheless obvious that living, natural languages, such as English, Spanish, Greek or French, constitute our primary mediation between pre-reflective embodied consciousness (with its motor skills), and intellectual articulation. The languages we speak (primarily oral) give us our cultural roots and are our

primary medium to communicate. I want to address the importance of language and its relationship with a significant architecture, identifying the different aspects of this relationship and some specific strategies for its involvement in design.

I take to heart the linguistic nature of human reality, particularly Martin Heidegger's observation that there is no Being before man speaks. I take my cues from philosophical hermeneutics and the concept of emerging language as part of the flesh of the world, in continuity with habits and gestures.[2] This is at odds with a constructivist concept of language as a more or less arbitrary code, a vastly complex and hotly debated issue. I will say a few more words about this philosophical position towards the end of this essay.

My concern with language in architecture is not as an auxiliary inspiration, as in the unambiguous prose of technical specifications, or that of rational and consensual design through a committee. Poetic – original, polysemic – language is central to the very possibility of retrieving cultural roots for architectural expression that may result in appropriate atmospheric qualities responsive to pre-existing *places,* typically themselves brought to presence through articulate stories. This concern is not current in architectural theory and practice. The contemporary world is generally suspicious of natural language, deemed fuzzy and deceitful, particularly when compared to so-called mathematical languages, such as those that our computers understand and that "get things done." In North America, some years ago, writers declared "the end of theory" in architecture. Taking as a mantra certain observations by Foucault, they have retained a profound suspicion about language, construing it as an irredeemable instrument of power and manipulation. In recent years, this has resulted in the current obsessions with algorithms and parametric design; a strategy of form generation that deliberately bypasses language while it legitimizes itself with the prospect of infinite formal novelty and its presumed ethical neutrality.

The disregard of language by architects in the process of designing is not as recent as it may appear. In the wake of nineteenth-century positivism and its increasing acceptance of specialization in all areas of knowledge as the only way "forward," professional disciplines such as architecture became driven by instrumental efficiency. Taking their cues from the theories of Jean-Nicolas-Louis Durand,[3] who argued for rational self-referentiality, architects focused on pragmatic, functionalist concerns, believing that efficiently solving space-planning and structural problems would be sufficient for forms to communicate their function. Nothing else was needed. Intentional expression in analogy to poetic language, as had been theorized during the previous century, was deemed unnecessary and even an aberration. Trying to protect the discipline from the consequences of such a position, effectively becoming a subset of engineering, later architects reacted by associating architecture to the Fine Arts, stressing the importance of formal issues in building composition; most sought only a visual, stylistic coherence, whether motivated by political, religious or aesthetic ideologies, or by the egocentric concerns of an architect's self-expression. Although the result was in line with aesthetic concerns, the architectural mainstream generally assumed theory (discourse) could be nothing other than applied science or formal methodologies; thus were ignored a rich set of traditional discursive options rooted in mythical and poetic language that had been crucial for generating culturally significant work in the early stages of the history of architecture in Europe.

To put my point across I would like to highlight a few crucial historical moments that are particularly illuminating. Writing in the first century BCE, Vitruvius understood fully the primary communicative function of architecture. Respecting the divisions of knowledge first put forward by Aristotle, his theory – a form of narrative that is totally unlike what we generally take for theory today – included properly theoretical knowledge, *theoría*

leading to *sophía*; practical knowledge leading to *phronésis*, narrative wisdom; and technical knowledge, *téchne*. These were autonomous forms of knowing that contributed to the success of architecture as a communicative setting. Repeating the Ancient Greeks' conviction that architecture must imitate the perfect articulation of the superlunary cosmos, Vitruvius insisted in *dispositio* or order on the basis of proportions, stressing the importance of concepts such as commensurability: *symmetría* and *eurythmía*, significantly terms imported from both the plastic arts or *téchne*, and the performing arts associated with the theatre – music, poetry and dance.[4] This articulation that architecture made possible was the most cherished property of culture: it was the aim of Greek *theoría*, the contemplation of order in Nature associated by Plato with *mathémata,* and mostly present to the senses in the celestial realm. This theory was expressed in discursive texts (like philosophy) and, Vitruvius tells us, is the same for a doctor or an architect. The actual practice of architecture, however, was never understood as the "application" of such theory. It involved both practical knowledge, conveyed through stories in the language of everyday life to make wise and prudent decisions, and *téchne-poíesis,* an irreducible knowledge of the body manifested in skills, induced at times by external forces and taught orally in relation to specific tasks while also acknowledging inborn talent. Indeed, Vitruvius' famous section in which he describes how architectural forms should be disposed according to mathematical proportions emulating the order of the cosmos includes, *in continuity*, the importance of storytelling in relation to a category he named *decor* (decorum, correctness – associated also to ornament). *Decor* accounted for crucial issues of meaning and appropriateness of form to cultural situations – we would say programs – as well as natural sites. We easily grasp today the formal issues involved in proportion but often miss the importance of the stories, such as those that illuminate the presence of the famous caryatids in the Athenian Erechtheion. The languages of *mathésis* and every day speech – or *mythos* – were

complementary in Antiquity and remained so until the Renaissance. This is explicit in humanist works such as Alberti's *De re Aedificatioria* and Francesco Colonna's *Hypnerotomachia Polifili*. Thus architecture could open a clearing for dwelling in a menacing, mortal sublunary world; it could communicate articulated order creating harmonious and tempered atmospheres, mimetic of the heavenly star-dance, yet also "dressed" appropriately for specific tasks, situations or programs, and framing all-important cultural habits.

In this regard, the *Hypnerotomachia* merits some additional words. This erotic novel, published by Aldus Manutius in Venice in 1499, is one of the most beautiful books ever printed.[5] It posits the new Renaissance architecture as a poetic medium whose purpose is to orient life, always torn by desire, vis-a-vis the uncertainties of destiny, and thus make human existence propitious at a time when humanity felt liberated for the first time from medieval theocentric determinism. The story, a "strife" for love in a dream told by Polifilo, describes attuned and tempered atmospheres that negotiate such desire and make a good life possible – even when confronted with the inevitability of love's separation at death. Only a literary form could have been appropriate to this effect.

The nature of architectural theory started to change after the inception of Cartesian dualism in the seventeenth century, moving away from philosophical and rhetorical discourse and closer to technical knowledge. Nicolas Malebranche, a disciple of Descartes, affirmed that only God is a *true cause* of all things, because only He knows *how* he makes things happen, including the perceived relationship between our minds and our bodies. Even if we will to move our arm, we don't really know *how* we move it, we are only witnessing an *occasional* cause, and ultimately it is God that moves my arm. Conversely, we could infer that whenever we *know* mathematically – clearly and distinctly – *how* something happens, for example *how* a lever operates in

terms of the proportions between distances to the fulcrum and applied forces, or *how* an architectural plan or elevation is generated from strict geometrical operations, as is often the case in Baroque design, then we are not only ethically and effectively creative, but our mind is in fact operating through the very same ideas that are "in God." Thus "know-how," the expected aim of instrumental theories – previously *téchne*, Aristotle's irreducible technical knowledge – acquired the status previously held by contemplative *theoría*, eventually becoming "applied science." In the short term, this assumption produced Baroque instrumental (yet transcendental) theories of architect polymaths like the Theatine father Guarino Guarini,[6] and eventually the first truly proto-positivistic architectural theory in the Western tradition in the writings of Claude Perrault.[7]

Perrault questioned the fundamental assumption that architecture is capable of re-presenting the order of the cosmos. In doing so, he opened up a modern awareness to the question of architecture's meaning. He believed that architecture, like human languages and civil law, changed in time and was the result of human conventions. The fact that the meanings of architecture may depend upon "custom" rather than "nature," however, did not make it in his view any less important or culturally significant. Like the French language itself, at that point perceived to have attained its summit and proper codification at the *Académie Française*, architecture could and should be open to further refinement and "progress," thus eventually suggesting the possibility of architectural expression in the form of linguistic analogies.

In the Preface to his treatise, the *Ordonnance* (1683), Perrault questioned the analogy of architectural and musical harmony on the basis of the diversity of the two phenomena, addressed to independent senses conceived as autonomous mechanical receptors of sensory information. Thus he was the first writer ever to reject the usefulness of optical corrections to reconcile the proportional prescriptions derived from traditional theory with

the actual execution of buildings expressive of harmonic regularity for an embodied synesthetic consciousness; previously it had always been accepted that such prescriptions should be adapted to accord with the real experience of architecture by the body. For him the only purpose of mathematical rules in architecture was to facilitate practice and systematize all dimensions in classical architecture so that buildings, now understood as aesthetic objects rather than primarily as settings for events, could be built exactly following the designs of the architect. In this way, for Perrault, ideal – mathematical – perfection was externalized into built form. Once this was understood, it became the task of the architect to innovate "aesthetically" within the "tradition" – now perceived as a sort of ornamental syntax – making works increasingly more refined and magnificent, capable of reflecting the glory and accomplishments of France during this period.

During the Enlightenment many architects questioned the instrumental intentions of Perrault's theories (which were easy to disbelieve given the conditions of pre-Industrial Revolution practice) and took his insights as a challenge to understand architectural meaning in relation to natural language rather than to mathematics, foregrounding the issue of *decor* from Vitruvius. Thus the problem of *expression* became primary.

The architectural theories of character and expression that developed during the eighteenth century are very diverse. They aspired to understand the potential significance of architecture both discursively and emotionally, and I shall not attempt in this summary to do justice to their intricate subtleties. The desire to seek harmony with a Divine nature could not be surrendered easily, particularly in view of the apparently definitive successes of Newtonian cosmology and its God/geometrician. A central concern, however, was to adequately *express* the uses for which a building was destined so that it could provide a harmonious setting to actions, as well as representing the status of the building as if it were a social entity – the "mask" or public persona of

its client. Jacques-François Blondel, the most important teacher of architects in Paris around 1750, believed that excellent buildings possessed "a mute poetry, a sweet, interesting, firm or vigorous style, in a word, a certain *melody* that could be tender, moving, strong, or terrible."[8] Just as a piece of music communicated its character through various tonal harmonies, evoking diverse states of nature and conveying sweet and vivid passions, so proportion (understood mostly as geometric magnitude and no longer as Pythagorean arithmetic ratios) now acted as a vehicle for architectural expression. Thus buildings could be made terrifying or seductive, and capable of expressing their character, be it "the Temple of Vengeance or that of Love."[9] Notice how the inevitable mathematical and geometric qualities of architecture became subject to linguistic expression, both discursive and poetic (or emotional). This early modern development constitutes the origin of our own possibilities of understanding how fiction and natural language might be crucial in design.

Yet, a second consequence of the Enlightenment, with problematic future consequences, must also be noted. The association of architecture with the Fine Arts became commonplace during the eighteenth century. Arguing against Perrault, J. F. Blondel thought that beauty was immutable, and that architects, with an open spirit and keen sense of observation, should be capable of extrapolating it "from the productions of the fine arts and the infinite variety of Nature."[10] This reveals a different assumption about the reception of the work from that which had operated since Vitruvius. While not totally immanent, the expression or significance of architecture was increasingly internalized and transformed into a problem of "composition," brought to fruition through an objectified building. The temporal dimension, which was always central in architectural meaning – both emotional and intellectual and understood by the "user" through the spatio-temporal *situation* (rituals and poetic programs) housed by the architecture – receded in favour of the conception of

architecture as "aesthetic object." Its potential significance could now be "read" out of time. The ultimate accomplishment of this new paradigm, to be found only after 1800, would be an architecture reduced to a sequence of novel or exciting forms for voyeuristic visits in which linear time became an added factor (rather than intrinsic to the situation): what would become known as the *promenade architecturale*, a place for tourism often better understood through "pictures," rather than for genuine participatory experience. Buildings could then be conceived as literal frameworks for "discursive" writing, like Labrouste's *Bibliothèque Ste. Geneviève*, or generated as forms motivated by fictions – yet incapable of transcending their status as aesthetic objects.

Continuing the insights of earlier character theory, two late-eighteenth century French architects, Claude-Nicolas Ledoux and Nicolas Le Camus de Mezières, sought alternatives to this sort of objectified aesthetics and tried to re-introduce a temporal dimension to architectural meaning. They emphasized the emotional "space-in-between" the inhabitant and the building, the space of action, one never before theorized, and articulated through *open* narratives kindred to much-later surrealist techniques and cinematographic montage.[11] The very nature of theoretical writing about architecture was also questioned. This implied a new concept of transmission and education, one that could no longer depend on the assumption of theory as *téchne* or applied science. Boullée, Ledoux, and Viel de Saint-Maux declared the need for a new architectural discourse capable of transcending the limitations of what they mistakenly (yet justifiably in view of the Perrault's interpretation) perceived as the prosaic scientific prescriptions of Vitruvian theory and its re-incarnation in Renaissance and Neoclassical treatises.[12] Thus, they thought, the intentions of a new poetic architecture could be better-articulated by engaging narrative forms. Narrative and emplotment gave architects such as Ledoux the tools to imagine an architecture that no longer simply reflected the conventional

order of society, like the "masks" of the earlier eighteenth century architecture. Now fully in the realm of both human politics and fiction, devoid of intrinsic transcendence, architecture acknowledged new responsibilities. Ledoux understood that it became necessary for architecture to project a better future for society, and that this project issued from the critical imagination of the architect/writer rather than from rational analysis or mere societal consensus. His ideal city of Chaux, described in exquisite literary form in his lavish *L'Architecture considérée sous le rapport de l'Art, des Moeurs et de la Législation* (1804), proposes life as lived in new institutions, formally innovative yet always seeking a reconciliation with the natural world, a "space of appearance" for the "new man" of the French Revolution. The new political subject could not dwell in the old classical architecture. Drawing from Rousseau's understanding of historicity, Ledoux was keenly aware of the fact that the new humanity was irremediably other than that of the *Ancien Régime*. Thus he designed places for freedom and responsibility, and his literary description discloses the ethical and moral consequences of living in this new world.

Personal expression became a condition for this poetic possibility – a retrieval of the universal *in* the creative soul of the architect. This realization resonates with the nascent concepts of Romantic philosophy. Nicolas le Camus de Mezières imagined the inveterate space of desire transferred to the experience of the private home, shifting the emphasis from the public exterior to interiority, in search of "limits" that could no longer be found in the infinite, homogeneous space of natural science – increasingly (but erroneously) identified in European cultures with actual lived space. Employing descriptive narrative in his treatise *Le Génie de l'Architecture* (1780), he illustrated the manner in which architects must seek to design rooms, "qualitative" spaces characterized by appropriate moods to specific focal actions; these were to be paradigmatic of harmonic environments, joined and modulated as if in a theatrical experience, in a way that the

house itself seduces and becomes a poetic image of dwelling. Every space has its appropriate colours, light, ornaments, textures, and iconography, and prepares the inhabitant for the adjoining room, ultimately leading to a sense of recognition and wholeness in the *boudoir,* literally a space apart, the uncommon sacred place which was the space for love. This is the first instance in the history of architectural discourse in which the *quality* of space becomes the subject matter, and atmospheres and moods are conveyed not through mathematical proportional relationships – like harmony in music – but through poetic words. This is indeed the inception of the modern concept of *Stimmung* or atmosphere, a term that would be used by Romantic philosophy and later passed on to phenomenology and architecture, as for instance in the works and theories of Peter Zumthor. At the time when place, as an intersubjective cosmic *tópos*, was being obliterated from the public's memory, Le Camus' sought to retrieve it *in discourse*, in the hope of actualizing it.

Australian philosopher Jeff Malpas has demonstrated how *place* is a condition of consciousness in perception.[13] Giorgio Agamben, commenting on Heidegger, adds that mood or *Stimmung*, the appropriate atmospheric quality we seek in architecture, "rather than being itself in a place, is the very opening of the world, the very place of Being."[14] Agamben elaborates that mood appears as the fundamental existential mode of *Dasein*, not in the ontic but in the ontological plane, "neither within interiority nor *in* the world, but at their limit."[15] One may recall the fundamental phenomenological context of these observations, already expressed by Buddhist philosopher Nagarjuna in the second century of our era, when he affirmed the codependent arising of subject, object and action as we experience the world, neither of which terms can be postulated to exist independently or prior to the other.[16] One could then conclude that *place* is therefore present in contemporary culture, but hidden

by our technological constructs, and it is the task of artifacts like literature, art and architecture to retrieve our attunement. Malpas has further pointed out that *place* emerges with language, but in a sense that we must qualify carefully. As I suggested, it is not language as commonly assumed by constructionist linguists, as an arbitrary code of more or less transparent signs that could be improved and replaced by some universal Esperanto, but rather understood as our fundamental human expressivity: inherently poetic, indicative, polysemic and open, in continuity with the body's own expressivity and gestures, language as our connection to others in view of our primordial social being, and therefore intertwined with cultural habits. Properly understood in this way, language is not arbitrary: it has the capacity of speaking about the world through us, and it comes to fruition in dialogue, through the voice, *Stimme*. The nature of poetic language, which is humanity's original speech, is that it can be translated out of time and place: like the work of art.

Thus, as we come back to consider the relationship of poetic language and architecture, we can immediately identify some crucial issues. Regardless of whether modern and contemporary fiction can truly play the role myth did in pre-modern cultures, as Louis Aragon thought was possible in his "antinovel" *Paris Peasant*, we may expect poetic fiction to function as much more than vague inspiration. Acknowledging its role in design, both in the elaboration of programs and in the disclosure of atmospheres, we can assume that it may further an architecture that gives *place* to significant human action, resonating with the purposefulness which characterizes our biology, even while acknowledging our generalized nihilism and the fact that contemporary man does not generally believe in the efficacy of ritual as a form of participation through action (one whose results are not necessarily the responsibility of those that act). Most of these questions were first acknowledged by Romantic philosophers who believed the novel was the central form of artistic expression, capable of addressing

our modern existential questions better than any other form of discourse; these concerns were taken into the twentieth century in the writings and works of surrealist artists. Poetic language is the privileged medium of moods and atmospheres, *Stimmungen*, and the expression of *Gemüt*: the Romantic concept of emotional consciousness that anticipated the current neurophenomenological understanding of embodied, emotional cognition.

Paul Ricoeur, Richard Kearny and Elaine Scarry, among others, have suggested in their own ways that the human imagination is primarily linguistic.[17] Furthermore, we also know through neurobiology that mental images are not picture-like, but rather literal re-enactments of scenes, necessarily operating through language.[18] All this posses a fundamental challenge for architects, often consumed by pictures and their iterations.

Understanding the importance of literary language for architecture also entails, fundamentally, grasping the crucial importance of literature to disclose the nature of urban contexts with all their cultural complexities, essential for an ethical and poetic practice of architecture and urban design. This is something that scientific mapping and statistics can never accomplish. Let me emphasize: this is language in continuity with phenomenology, as part of the flesh of the world; language therefore in the sense defined by philosophical hermeneutics, inherently at odds, as Merleau-Ponty points out, with the so-called language of algorithms and its desire for absolute clarity and its unambiguous function as sign.[19] This represents a paradoxical inversion of the conditions that characterized Classical architectural theory with its symbolic mathematical proportions and geometries, necessitated by the changing conditions of culture resulting in what Dalibor Vesely has called "the age of divided representation."[20]

It is plainly obvious that some of architecture's traditional cultural roles can no longer be implemented. The crisis affecting the profession since the beginning of the European nineteenth century has been well documented. Durand was explicitly

responsible for asking architects (for the first time ever) to bypass what he believed were irrelevant issues of linguistic expression in their designs, and simply to solve a functional problem which would repeatedly produce pleasure: seeking biological homeostasis rather than *attunement*, which is by necessity a *concordia discors.* He thought that extruding the building from its plan would bring about meaning automatically: the mere expression of a sign. Such a mathematization of design processes is still with us in all our contemporary fashions and infatuations with the computer. City planners prevailed over architects and urban designers, adopting the values of the engineers in the service of political power and economic expediency: reason, utility and efficiency became the determinants of the physical environment, which was assumed to communicate, if needed, clear semantic messages unencumbered by emotional intentionality. Confronted by the inability of traditional forms and processes to engage new materials and express modern values, architects had no option but to experiment, engaging creative processes to find novel, emotionally charged forms. Like other artistic disciplines engaged in poetic making – a making that attempts not imposition but disclosure, the revelation of something that is *already there* and is thus familiar and habitual to a culture while being also new – architecture has suffered during the last two centuries the limitations of potential solipsism and near nonsense. In our discipline this is the syndrome of architecture made for architects, *particularly when detached from language* and not framed through appropriate critical questions. This has prolonged the crisis and, some would even claim, the agony of the discipline. Yet the fundamental existential questions to which architecture traditionally answered, the profound necessity for humans to inhabit a resonant world they may call home, even when separated by global technological civilization from an innate sense of place, remain as pressing as always.

At this juncture, the call for a careful and multilayered consideration of poetic and hermeneutic language in the generation of architecture and the built environment appears pressing. Narrative forms should be engaged for their fundamental capacity to orient ethical action; this is a call for history as interpretation through stories about the past, one that acknowledges the deep roots of our questions in the history of the Western world. Stories are also important for their unique ability to map architecture's urban context, increasingly synonymous with the human environment at large; they are crucial to set *in place* human actions, as in Ricoeur's narrative model of *prefiguration, configuration and refiguration*.[21] Ricoeur's schema might suggest for architecture a narrative understanding of site as *prefiguration*, form and atmosphere as *configuration*, and lived program as *refiguration*, accounting for the nature of the project as an ethical promise, communicating through emotion and reason. Engaging hermeneutic and poetic language in this fashion we can imagine how architecture may offer better alternatives to reconcile the personal imagination of the architect with an understanding of local cultures and pressing political and social concerns, beyond obsessions with fashion and form: the crucial dilemma we have inherited with our modern condition.

Furthermore, in view of the poverty, neutrality and even hostility of much of our postindustrial environment, literary mediations of urban space in the form of novels that reveal possibilities for significant human life acquire a growing significance for any architectural practice that may seek to resist the pressures of consumerism, banal functionalism and ideological imperatives. Examples could be drawn from works by authors such as Bely, Joyce, Robbe-Grillet, Murakami, Soupault, Breton and Sebald, among others. Even literary science fiction, like Michel Houellebecq's *The Possibility of an Island* has the capacity to show, much better than the theory of technology, what might happen to our humanity if we finally got rid of death and desire: the limited

place of intersubjectivity which has always been the gift of architecture.

Architects today, with the help of digital media, are capable of proposing all sorts of novelties. In our pathological urban contexts, it does not suffice to make contorted buildings constructed with unfamiliar materials to house yet more shops and fashionable designers. It is not enough either to merely disrupt habits through effects, without proposing attuned alternatives for human action. Self-edification, the architecture that completes us and lets us dwell, recognizing our human condition, will not issue from any pictorial, formal acrobatics. The problem of historical and ethical responsibility is often buried in a postmodern culture of pastiche and instrumentality. The literary imagination, drawing from language which is our being, forces an acknowledgement of ground – crucial for architecture both literally and metaphorically – in a time when designing and building complex structures for their own sake has become the leading fashion of practice.

NOTES

1. A full treatment of this issue is the topic of my recent book, *Attunement: architectural meaning after the crisis of modern science* (Cambridge MA: MIT Press, 2016).
2. See particularly, Maurice Merleau-Ponty, *The Prose of the World* (Evanston IL: Northwestern University Press, 1991) and *Signs* (Evanston IL: Northwestern University Press, 1964). This is the position of hermeneutic philosophers in the tradition of phenomenology, like Paul Ricoeur and his students. George Steiner also argues against a constructivist theory of language in *After Babel* (Chicago IL: University of Chicago Press, 1989).
3. Jean-Nicolas-Louis Durand, *Précis des leçons d'architecture -1819* (Facs. reprint, München: UHL Verlag, 1981).
4. M.P. Vitruvius, *De Architectura* bilingual ed. by F. Granger (Cambridge MA: Harvard University Press, 1931), Book 1.
5. Francesco Colonna, *Hypnerotomachia Polifili* (Venice, 1499). There is a recent English translation by Joscelyn Godwin, 1999. See also

A. Perez-Gomez, *Polyphilo or the Dark Forest Revisited,* a modern rendition of the story (Cambridge MA: MIT Press, 1992) and ch. 4 in vol. 1 of this collection.

6. Guarino Guarini, *Architettura Civile 1737* (Facs. reprint, Milano: Edizione il Polifilo, 1968).
7. See Ch. 8 of vol. 1 in this collection, and Claude Perrault, *Claude Perrault's Ordonnance for the Five Kinds of Columns after the Method of the Ancients,* trans. I.K. McEwen, (Santa Monica, CA: Getty Center for the History of Art and the Humanities, 1993).
8. Jacques-François Blondel, *Cours d'Architecture ou Traité de la Decoration, Distribution et Construction des Bâtiments* (Paris, 1771), 9 vols, vol. 1, 376.
9. Ibid.
10. J. F. Blondel, *Architecture Françoise* (Paris, 1752), 318.
11. Claude-Nicolas Ledoux, *L'architecture considérée sous le rapport de l'art, de moeurs et se la législation -1804* (Facs. reprint, München: UHL Verlag, 1981); and Nicolas Le Camus de Mezières, *Le génie de l'architecture -1780* (Facs. reprint, Genève: Minkoff, 1972).
12. Etienne-Louis Boullée, *Essai sur l'art* (Paris: Hermann, 1968); Jean-Louis Viel de Saint-Maux, *Lettres sur l'architecture des anciens et celles des modernes -1787* (Facs. reprint, Genève: Minkoff, 1974).
13. Jeff Malpas, *Place and Experience* (Cambridge UK: Cambridge University Press, 2007).
14. Jenny Doussan, *Time, Language and Visuality in Agamben's Philosophy* (London UK: Palgrave McMillan, 2013), p. 22-23.
15. Ibid. Citing Giorgio Agamben, *Language and Death: The Place of Negativity*, trans. K. Pinkus (Minneapolis: University of Minnesota Press, 2006).
16. Nargajuna, *Stanzas of the Middle Way*, cited by Francisco Varela, Evan Thompson and Eleanor Rosch, *The Embodied Mind* (Cambridge MA: MIT Press, 1991), p. 221.
17. See for example, Richard Kearney, *The Wake of Imagination* (Minneapolis MN: University of Minnesota Press, 1988), and Elaine Scarry, *Dreaming by the Book* (Princeton NJ: Princeton University Press, 2001).
18. Evan Thompson, *Mind in Life, Biology, Phenomenology and the Science of the Mind* (Cambridge MA: Harvard University Press, 2010) 278-79. Thompson explains that in fact we visualize an object or a scene by mentally enacting or entertaining a possible perceptual experience of that scene.
19. Maurice Merleau-Ponty, *Signs* (Evanston IL: Northwestern University Press, 1964), 5.

20. Dalibor Vesely, *Architecture in the Age of Divided Representation* (Cambridge MA: MIT Press, 2004).
21. Paul Ricoeur, *Time and Narrative*, 3. vols. (Chicago IL: University of Chicago Press, 1988)

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Pérez-Gómez has lectured extensively around the world and is the author of numerous articles published in major periodicals and books. His book *Architecture and the Crisis of Modern Science* (MIT Press, 1983) won the Hitchcock Award in 1984. Later books include the erotic narrative theory *Polyphilo or The Dark Forest Revisited* (1992), *Architectural Representation and the Perspective Hinge* (co-authored with Louise Pelletier, 1997), which traces the history and theory of modern European architectural representation, and most recently, *Built upon Love: Architectural Longing after Ethics and Aesthetics* (2006). This last book examines points of convergence between ethics and poetics in architectural history and philosophy drawing important conclusions for contemporary practice. Perez-Gomez is also co-editor (with Stephen Parcell) of a well-known series of books entitled *Chora: Intervals in the Philosophy of Architecture*. The seventh volume in this series appeared in February 2106. His most recent work titled *Attunement, Architectural Meaning after the Crisis of Modern* Science (MIT, March 2016) examines connections between phenomenology, recent cognitive science and emerging language, seeking attunement in architecture and the urban environment.