Architecture of Embodiment

Alex Arteaga

(Print version of the closing lecture of the project *Architecture of Embodiment*'s first phase, given on October 7, 2016 at Aedes Network Campus Berlin)

http://www.architecture-embodiment.org/

In this lecture I am going to present the main results of the first phase of *Architecture of Embodiment*. I consider this project to be a first step towards an understanding of the so-called built environment from the perspective of theories of embodied and situated cognition, and more concretely according to the enactive approach to cognition. The most basic and broadly accepted idea of these cognitive theories is that thinking—cognition—is the interaction of a body —of a living being, an organism, a biologically realized autonomous system—with its surroundings. Cognition is the interaction between a body, other bodies, and other entities that are heteronomously organized, that is, not self-organized but organized by others, like the wall of a building or the paper on which this lecture is printed [or the screen that is making it visible]. Thinking—cognition—is not the result of a pure and disembodied mind, but rather a network of activities performed by a large number of fundamentally connected autonomous and heteronomous agents. The idea that also heteronomous entities have cognitive agency is not accepted by all theorists in this field but it is, as I will show, basic for my research.

Another important idea specifically rooted in the enactive approach is that the concept of thinking cannot be reduced to the activity of reflecting on a given object, performed exclusively on a linguistic basis. Instead cognition is understood as the constitution—using the phenomenological term—or the emergence—using the enactivist expression—of the subject matter of our thinking through our bodily interaction with our surroundings.

Obviously our thinking refers to already constituted objects. When we begin to "think about something" this something must be already constituted. Nevertheless, thinking can be

understood as an intervention in an ongoing process of emergence, from which the initial object of our thinking has already emerged—that is, has been already stabilized as an object or a state of affairs. An intervention that varies the enabling conditions of the emergence of our subject matter and consequently allows, literally, its meta-morphosis—its new formalization as a meaningful entity.

Thinking—cognition—is understood in this project as a relational process of trans-formation performed by very diverse and fundamentally connected agents, which gives rise to the presence of these agents as clearly contoured phenomena—as objects with clear form and meaning—interacting with one another in a senseful way. Or, to put it in enactivist terms: cognition is a process of emergence of sense, a process of arising as phenomena—as intentional objects endowed with form and meaning—of those agents that enable this process. These agents relate to one another coherently, that is, holding together as a whole, in a way that appears for the subject as senseful, that is, in a way that, we would say spontaneously, "makes sense." Accordingly, bodies and constructive elements appear as specific subjects and particular architectural artifacts configuring a common and coherent environment due to the very way they—bodies and constructive components—actively relate to one another. This environment is present for the subject as senseful.

Obviously, the concept of sense is a keyword in this context. Therefore the main research question of my project is formulated as follows: How does architecture condition the emergence of sense? Or in other words: How does the built environment—or better said, the constructive alteration of our surroundings—influence the presence of our environment as a coherent and senseful whole? This project thus is not about the perception of architecture. This project is about the cognitive function of architecture. It is about cognition, and architecture is considered here as a cognitive agent. Alongside this question and in order to make this research possible, I address a second, methodological inquiry that can be formulated as follows: How can this topic be researched in a non-reductive way?

The ultimate goal of this research project is to facilitate a change in the architectural design practice, that is, the practice of architectonic environmental transformation. This is not a "theoretical" project, first of all because I think that the distinction between theory and praxis is as conceptually wrong as it is unproductive. This is a project that, through the combination of different practices in different media, thinks architecture as a thinking practice and the constructed surroundings as a thinking agent.

In this lecture I am going to present the main results with respect to these two questions. And I am going to do it through 3 sub-projects, or as I prefer to call them "research cells," which have been developed in the framework of *Architecture of Embodiment*, which I prefer to call a "research environment." These research cells are: *near(ly) sounds*—a sound intervention in the Bauhaus building in Dessau—*transient senses*—a constellation of aesthetic artifacts in and around the German Pavilion of Barcelona (the building of Mies van der Rohe)—and *emerging environments. tabacalera*—a video and sound installation in an old tobacco fabric in Madrid. The artifacts generated in these projects, together with those produced by two new, site-specific projects, configure the aesthetic research dispositive we are opening tonight.

In September 2014, I spent two weeks making sound recordings in the former architecture studio of Walter Gropius at the Bauhaus in Dessau. I made these recordings at night—around 3 a.m.—in order to "not record any sounds" or more precisely, to just record "nearly sounds." I use this term—nearly sounds—to designate auditory presences not fully constituted as contoured, meaningful aural phenomena, that is, not fully constituted as sounds—as auditory phenomena we would spontaneously and clearly identify as, for example, "the sound of a car," or simply as "a car." In the following week, I reproduced some selected recordings during the day, without any modification but some changes of intensity, on the same spots on which I had recorded them, using semi-open headphones.

Listening in this situation, conditioned by the dispositive configured by these specific recordings in these specific constructed surroundings, or better, being in this situation focusing our activity on listening, that is, interacting with our surroundings mainly in an aural way conditioned by these kind of aural material, allows a different presence of the built environment-the environment conditioned by construction-to arise. The sounds coming through the headphones are not singular sounds. They do not present themselves as something different, singularized from the other sounds surrounding them as is usually the case when we hear something through headphones, let's say music on a crowded street. The nearly sounds merge with the environment in which they are presented. They operate as a particular kind of "augmented reality," not adding new information but rather facilitating a new in-formation of the environment. The processual character of the nearly sounds, the absence of concrete aural objects, inverts the usual relations of the act of listening, bringing the process of listening, instead of the listened objects, into the focus of awareness. This turn, the primacy of the process of listening by listening, allows the processual character of the built environment to become present. The usually solid and stable presence of architecture is substituted by a fluid, unstable one. The material, objectual presence of the constructive elements fades into the

background, allowing their dynamic coherence—that is, the way in which they arise together as parts of a whole, the way in which they relate to one other, in which they take form as phenomena by virtue of one another—to appear, to move to the foreground. The variety of interaction with our surroundings induced by this disposition of recorded aural material allows the environment to manifest as the ongoing process of its own emergence. It enables the presence of our surroundings as an emergent, coherent whole to come to the fore.

To spontaneously focus our awareness on non-objectified varieties of aural presences facilitates the operational horizon of the objectified phenomena, that is, the connecting dynamics that make possible their objectification—their constitution as objects—to appear in a subtle, liminal, and fragile way. This is the kind of presence characteristic of the environment and of sense.

I consider environment—as well as sense—to be not objective but rather operative presences. This means that they do not appear in an explicit, stable, contoured, clearly defined way, but in an implicit, processual, relational, vague, and dispersed way. I consider environment not to have a perceptual presence and thus not to be in itself phenomenal.

We do not perceive our environment but our environment is, undoubtedly, present. It is present as the processual background on which all phenomena appear. It is present as the dynamics that enable all phenomena to arise by virtue of a double potential coherence: the coherence between them—between the phenomena in their process of constitution—and the coherence between them and the subjects to whom they appear. The environment is thus in itself nonperceptual but it refers to perceptual entities in a twofold way: it is simultaneously the dynamic and relational condition of possibility for all our perceptions to emerge, and the coherent whole that emerges out of the presence of all our perceptions. Our environment is the horizon of our current perceptions, which appears operationally, that is, embedded in our interactions with the objects of our perception, as a senseful, dynamic whole. Consequently, the environment cannot be built. It is not graspable, not manipulable. To "build" the environment can be understood in this context as the intervention in an ongoing process of emergence through a constructive alteration of the surroundings, that is, of the material substrate that enables the environment to emergence, or in phenomenological terms, of the objective correlates that co-constitute the environment. To build the environment means, therefore, to interfere in the infrastructure of an emergent system. It can be conceived and practiced as the modification of some of the system's material constraints. A modification that can induce the adaptive alteration of other systemically related conditions-for example, our behavior-giving rise, eventually, to a change on the emergent level of the system: the presence of the environment, or better, the environment as an operative, senseful presence.

The starting point of *transient senses* was my experience of the German Pavilion in Barcelona as unstable in relation to the experiences of "inside" and "outside." Usually, "interiority" and "exteriority" are phenomena that present themselves clearly, mutually excluding each other. We don't doubt if we are inside or outside. "Inside" and "outside" are fully constituted and stable intentional objects. They are phenomena with clear meaning. However, when these meanings are destabilized—in this case through interaction with a particular construction—they make evident their phenomenal status. They show that they are constituted, that is, that they are the emerging result of certain kind of interactions.

Researching the Pavilion through the simultaneous realization of a video essay, a sound essay, a text essay, and a sound installation, or more precisely through the combination of different aesthetic practices—recording, editing, composing, installing, writing—all of them focused on the process of emergence of "interiority" and "exteriority" in, or better with, this particular architectural artifact, other presences began to appear. Compression and expansion, protection and exposure, distance and closeness, openness and closure, here and there, here and not-there reveal themselves to be presences involved in the emergence of "interiority" and "exteriority" and "exteriority." However, these other, more basic and simple presences did not manifest in the same way that "inside" or "outside" did. They were not evident, conspicuous, clearly tangible. They were rather primarily embedded in, and inherent to, my interaction with this architecture. In this situation they didn't appear spontaneously as constituted, objectified presences—as meaningful presences. They were not explicit. They remained rather in the sphere of sense.

The aesthetic research of the emergence of "interiority" and "exteriority" in the German Pavilion provided the experiential, phenomenal foundation for my definition of the concept of sense.

On this basis, I define sense as the operative presence of the viability of our conduct. "Operative" here—in reference to the concept of "operative intentionality" as defined by Husserl —denotes the specific variety of presence that characterizes sense, as well as environment. We do not perceive sense. Sense is not a phenomenon. It is not an ob-jectified presence. It is not something—some-thing—thrown in front of us—ob-jectere. It is intrinsically and implicitly present in our behavior, or as I prefer to formulate it, in our conduct—in our con-duct: in the very specific way we lead ourselves in interaction with the components of our environment. Sense presents operatively that our conduct is viable—that it is possible for us to continue interacting with the components of our environment in a coherent way—and, simultaneously, how our conduct is viable, that is, the precise way in which we can continue interacting coherently. Interacting in certain ways with a specific organization of walls, ceilings, and floors with specific dimensions and materialities, what we could identify as, for example, emptiness can implicitly emerge, constraining those actions that contribute to its presence in a different way than the latent presence of high density or fullness would do. Our actions would be potentially different if they were to enable a sense of protection to be more intensively present than exposure would be, or if our interactions were to allow proximity to be operatively present rather than a sense of distance.

Acting in adaptation to the agency of a specific construction, performing our sensorimotor abilities according to the affordances the construction's agency enables to arise, a sense of, for example, compression might become operatively present. But allow me to make a remark at this point. Trying to express the relationship between the operative presence of compression and our actions, my expression hits other walls: those of syntax. Using language the way I am doing here, that is, trying to clearly and precisely describe a state of affairs, I am forced by the structure of the medium I am acting in-descriptive language-to present the sense of compression and our actions as two different entities, and then to specify the kind of relation that joins both terms. But this is not the way it happens in experience. It is neither true that compression is an attribute of action—that our actions are compressed—nor a constraint—that compression conditions the further development of our actions. Their relationship is much more intimate, much more intrinsic. It is close to being not a relationship but-and here is where the walls of syntax are not to be torn down-a kind of identity (which of course is also a kind of relationship). This is the best I can construct in this medium: compression is the operative presence that our actions acquire in this specific situation-the one enabled by our interaction with this architecture. Or furthermore, forcing the language: compression is our actions here and now as sense. Sense is the presence in and as our actions of the current dynamic coherence of our actions and our environment as the specific possibility for these actions to be further developed, to be viable. And as such, sense is the condition of possibility for meaning to be objectified. Sense is the operative substrate of meaning.

We are, constantly and inevitably, acting in, or better with, our environment—a dynamic, integrative, relational all-over that emerges out of the performance of our sensorimotor abilities in adaptation to the activities of our surroundings, presenting the whole system as coherent and viable for us. Construction intervenes in this ongoing process. Construction is a transformative interference in the dynamic coupling between bodies and their surroundings, between surroundings and their bodies. To be more precise, construction introduces new constraints in the system through the alteration of the agency of the surroundings, giving rise to a

transformative potential that can be actualized, that is, a potential that can lead to an environmental transformation, depending on the ways bodies respond, depending on the manners in which they modify the performance of their sensorimotor skills.

The constructive alteration of the surroundings configures an in-between, a medium, a network of constraints for the course of the ongoing structural coupling between bodies and surroundings to evolve, potentially, in different ways. Simultaneously, this constructively mediated development can eventually bring about a modification of the operative presence of the system's coherence—the environment—an alteration of the viability with which the environment appears to the emerging subject—the sense of the whole system—and a transformation and a re-vision of the meaning of all arising phenomena.

The agency of the medium "construction" can be characterized as distributed between two poles: enablement and blockage. The constructive alteration of our surroundings can lead to an intensification of the already intimate and mutually interpenetrating flow between bodies and their material circumstances, increasing the contact, multiplying the surfaces and modes of touch between them, diversifying the ways in which this exchange takes place, expanding the varieties of interaction between both agents, and consequently enriching, extending, and simultaneously particularizing the cognitive domain of the emerging subject, of the presence of its world-around—its Um-welt, its environment—and of itself for itself.

Complementarily, as another way to potentially enhance the shared process of sense-making, this time *ex negativo*, construction can restrict the easiness, the spontaneity of the ongoing communication. It can hinder the natural flow, it can obstruct the channels of connection between bodies and their non-constructed milieu, simultaneously confronting the bodies with the absence of a so-far given presence, with new presences that now tend to substitute the former, with the vital necessity of connection with their abutting otherness, and consequently, with themselves. Isolation—the extreme consequence of the blocking force of construction—brings to the fore the isolated entity, the lack of the other, the isolating element, and the impossibility of isolation. Through construction, bodies are confronted with themselves as communicating organisms, and consequently compelled to redefine the connection through the establishment of construction as the new environment, communicating thus, necessarily, with what prevents communication.

Emerging environments. Tabacalera is a video and sound installation I realized in Madrid in December 2015. The video and sound recordings I reproduced simultaneously in the installation, were registered while walking through the urban surroundings of the space in which the installation was presented: the changing rooms of the old tobacco fabric in Madrid. To record them, I performed a specific practice of walking. I walked through these public spaces, suspending my control over the two parameters that shape the process of walking: direction and speed. Instead of fixing the direction and speed of my steps, I was moved by the environment in which, or better, with which I was walking. I suspended my will as the main driving force of my movement and let my environment—or, to be more precise, the connecting dynamics between myself and the components of my environment—guide and shape my course. This does not mean that I walked randomly. On the contrary, there was a very strong guidance whose agent was not me-an exclusive my-self-but rather the inclusive system in which I participated or, to be more precise, the constitutive connectivity of the system, the fundamental dynamic coupling that allowed me to be part of it, to be one of its enabling conditions. Walking in this way, I carried either a video camera or a sound recorder. While recording, I didn't look through the camera or use headphones to hear though the recorder. I didn't use these devices as substitutes for my eyes and my ears. I used them as recording devices in the narrowest sense: as machines to register perturbances of the surroundings I was walking through-changes in the light and air pressure—instead of using them as instruments to reproduce what I heard or saw.

Before playing the recordings publicly, I fractioned them, creating short pieces of video and sound, I reorganized these fragments in time and distributed them spatially using 2 screens and 8 loudspeakers.

These strategies of edition and installation pursued the same goal as the recording strategies: to avoid the presence of these materials as re-presentations of a given reality. It might seem paradoxical to use technologies conceived and used precisely to represent our environment "as it is," that is, according to the way we perceive it, in order to attain this apparently contrary goal. But it is precisely the analogy of the visual and aural materials—that is, the mediated environment—with its immediate presence that allows me to intervene in the process of its becoming present. I understand these procedures—walking, recording, editing, installing—as practices of destabilization, and I consider destabilization to be the most fundamental cognitive function of aesthetic practices and artifacts.

Aesthetic practices and aesthetic artifacts, that is, devices produced through aesthetic practices, intervene in the interaction between environment and subjects, inducing a specific variety of conduct that I call aesthetic conduct. This conduct, this form of behavior, this variety of

participation of subjects in the system they configure with their environment—this form of beingin-the-world—is characterized basically by passivity. Obviously passivity is not understood here as a lack of activity but rather as a specific kind of activity. Passivity denotes here a way of actively being-in-the-world, a variety of action that is receptive to other actions, focused—in an unfocused way-on its adaptation to those actions that touch the passively acting body. It is thus an attentive, adaptive passivity. Aesthetic conduct is basically characterized by a reinforcement of shared agency, that is, by a reduction of one's own agency as leading force in favor of the agency of the other components of the environment, of the other factors that enable its emergence. Behaving aesthetically, the body acts by virtue of the connective dynamics that empower the emerging system, in which the passively, attentively, adaptively acting body participates. This intensified connection with the connecting dynamics of the system allows the constitution of phenomena in touch with the processual presence of the environment, or better, with the environment as processual, operative presence, that is, with the environment as environment. The presence of the environment remains inevitably operational, but in a more decisive way, its enhancement influences the configuring function of the objectifying intentionality and therefore the way phenomena arise. This is the reason why aesthetic research, that is, the research through practices that actualize the cognitive potentialities of aesthetic conduct, is necessary in order to inquire into the subject matter of this project—the emergence of sense and its conditioning through architecture—in a non-reductive way. To locate aesthetic practices in the basis of the research methodology allows me to address operative presence in their own idiosyncrasy, with the specificity of their own variety of presence. Aesthetic conduct and its organization into research practices makes it possible to minimize the inevitable alteration of the object of research through the process of research. Aesthetic research allows for the exploration of operative presences-like sense and environmentalmost as operative presences.

The organization of aesthetic research practices and the artifacts they produce as a dispositive like the one introduced by this lecture [Architecture of Embodiment: an Aesthetic Research Dispositive], as constellations of singular artifacts in different media structured respectively in an autonomous way but linked to one another by their connection with their common subject matter, reinforces the cognitive power of each component. It contributes to presenting them as elements of epistemic contingency rather than as containers of knowledge. Their organization as a dispositive creates an in-betweenness, an empty space, tensioned by the single components and activated by the visitors—the users rather than the public: the guest researchers—in which, or better, with which, new knowledge about the researched subject

matter can emerge. An aesthetic research dispositive neither contains, nor presents, nor produces knowledge: it aims to offer conditions for knowledge to emerge in and from the perspective of aesthetic experience.