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Pedagogies of Problematisation: On the Value of Architectural Intuition

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This paper outlines the basic elements that a shift towards a problematised architectural pedagogy entails. Relying on philosopher Henri Bergson, as well as his later appropriation by philosopher Gilles Deleuze, the paper claims that to open architectural pedagogies to practices of problematisation, we need to educate architects and urban designers in a particular method of approaching reality — one that can examine it with a much-needed precision. This method is what Bergson has coined as *intuition*, standing as the only term that can express a mode of learning that is distinct both from sterile intelligence and propositional knowledge. Such an intuitive mode of learning can effectively cross disciplinary boundaries and enhance urban literacy — understood as the capacity to properly discern and modulate via design the singular elements that determine the technicities of urban life. If we wish to educate architects that can address collective issues and respond to the problems of their era — and this *responsibility* is what at once defines both a dissident intellectual and an ethical professional — then we are truly in need of pedagogies of creative, speculative and precise problematisation.

URBAN LITERACY

In times of urban tensions, refugee flows, rapid climate change and increasing housing crises, the answer cannot be coming solely from the State (as a regulatory mechanism) nor from the Market (as profit-driven interventions). Arguably, the answer can be the proliferation of *urban literacy*: a form of urban knowledge that is embodied, enacted, intuitive and extends beyond the disciplinary boundaries of architecture and urban studies. In this respect, while the oft-cited quote “we shape our buildings; thereafter they shape us” (attributed to no other than Winston Churchill) is somewhat a commonplace, there has been a substantial scientific gap in examining how this is the case. Many architecture and urban theories have reached a point where focus is given mainly on formal characteristics, stylistic conventions or discursive polemics. Even in the cases where social or cultural factors are taken into consideration, this is done in a reductionist manner: social interests, cultural tendencies or economic decisions are taken as the starting point, functioning as the means to explain the development of urban environments.

On the contrary, the main assumption of my paper is that architecture cannot be explained by culture; quite the opposite, architecture produces culture.¹ Therefore, pivotal for my claim will be a renewed understanding of the relationship between architecture and culture, as well as an innovative understanding of architecture as a technology (but in an amplified account where technology is understood as any environmental intervention). Consequently, the concept of *architectural technicities* will help in examining how humans relate to their environment through architecture and how this mode of relation has the capacity to transform both.²

To achieve that I follow philosopher Gilbert Simondon in his argument that contemporary culture is out of phase with technical progression, either considering it as a threat or as neutral matter that is ascribed merit by humanity.³ Simondon aims to demonstrate that both positions are incorrect, proposing instead that culture needs to understand technology in its technicity. Technicity is fully relational, conceptualising how humans relate with their environment through technical structures and operations. Moreover, it examines how this mode of relation has the capacity to transform both humans and environment. As such, architectural technicities understand inhabitants as ecological engineers who by producing and manipulating their urban environment are also producing the cultural meaning that brings them together.⁴ In this respect, meaning is understood as information: an indication of a potential for action that can prove itself of value. Consequently, I propose that architecture produces cultural information that determines collective values.

At this point, it is important to consider the work of philosopher Bernard Stiegler who claims that technology is responsible for the emergence of any collective.⁵ This is the case because technology has the capacity to potentialise a particular kind of both memory and intentionality. Technological artefacts inscribe and exteriorise the actions of a collective past while simultaneously enable future interventions. A humble table, for example, is the expression of collective efforts that lasted thousands of years aiming in literally elevating the ground from the earth, enabling a form of sociality that would not have been possible otherwise. In addition, the (fundamentally technological) inscription of plans and ideas on a piece of paper brings

people together by exteriorising the promise of a future that is not here yet. With these two examples, we can understand why Simondon and Stiegler suggest that we should use the term *transindividual* when attempting to speak of human subjects and how they evolve: the purely personal and the wholly social constantly co-transform through technology — and, accordingly, through architecture.

Therefore, lack of knowledge on how architectural technicalities determine our collective lives, implies a profound form of *urban alienation*, both among inhabitants and in relation to their habitat. This form of alienation, complementary to the traditional Marxist use of the term and to its technological update by Simondon, is of great importance: alienated from each other and from our urban environment we can neither remember nor plan together the future of our cities (and everything that happens in them). To counter this, I propose that architectural and urban pedagogies need to shift their attention from a solution-based approach to one that prioritises *problematization*.

For the rest of this paper I will outline the basic elements that such a shift towards a problematised architectural pedagogy entails. Relying on philosopher Henri Bergson, as well as his later appropriation by philosopher Gilles Deleuze, I will claim that to open architectural pedagogies to practices of problematisation, we need to educate architects and urban designers in a particular method of approaching reality — one that can examine it with a much-needed precision. This method is what Bergson has coined as *intuition* and, while aware of the controversy of the term, I will claim that it is the only term that can express a mode of learning that is distinct both from sterile intelligence and propositional knowledge.⁶ Such an intuitive mode of learning can effectively cross disciplinary boundaries and enhance urban literacy — understood now as the capacity to properly discern and modulate via design the singular elements that determine the technicalities of urban life. If we wish to educate future architects that can overcome urban alienation, address the issues of our transindividual collective transformations and respond to the problems of their era — and this *response-ability* is what at once defines both a dissident intellectual and an ethical professional — then we are truly in need of pedagogies of creative, speculative and precise problematisation.

SENSING PROBLEMS

As Bergson claims, what philosophy — which we can understand as metaphysics — has lacked most is precision.⁷ By precision, Bergson has in mind a reliable method that can actually deliver precise knowledge about metaphysical reality.⁸ According to him, transcendental thought is simply too wide for reality, making propositions and advancing statements that can also 'hold as true for a world or universe that is radically different than the one we do occupy.'⁹ In his own words, transcendental thought, thinking in terms of generalisations

could apply equally well to a world in which neither plants nor animals have existence, only men, and in which men would quite possibly do without eating and drinking, where they would neither sleep nor dream nor let their minds wander ... and where everything might just as easily go backwards and be upside down.¹⁰

Bergson demands a metaphysics that does justice to this reality and not a possible one, to this world and not one that would serve the person thinking about it; to an architecture that is without anything except its architectural reality. Even more, to an architecture so close to its reality that between the two nothing else can really fit, since

the only explanation we should accept as satisfactory is one which fits tightly to its object, with no space between them, no crevice in which any other explanation might equally well be lodged; one which fits the object only and to which alone the object lends itself.¹¹

Bergson does not hesitate to point out the exact fallacy of transcendental metaphysics, which does not allow it to be precise about reality: it showcases a fundamental disrespect for time. Put succinctly, its only interest lies in seeking the truth in what does not change, thus positioning itself outside of time. Close to the masters who remain distant from the workshop, transcendental thought relies on inputs and outputs precisely because these are without any temporal dimension, static terms that can not only be exchanged at will but, crucially, they themselves never change. One needs to be cautious though: for Bergson, the greatest change of all, the greatest difference of all, is the difference of something from itself. To understand why, it is important to follow Bergson in one of his most beautiful examples. As he writes,

one might as well discourse on the subject of the cocoon from which the butterfly is to emerge, and claim that the fluttering, changing, living butterfly finds its *raison d'être* and fulfilment in the immutability of its shell. On the contrary, let us unfasten the cocoon, awaken the chrysalis; let us restore to movement its mobility, to change its fluidity, to time its duration. Who knows but what the 'great insoluble problems' will remain attached to the outer shell? They were not concerned with either movement or change or time, but solely with the conceptual cocoon which we mistakenly took for them or for their equivalent. Metaphysics will then become experience itself; and duration will be revealed as it really is, — unceasing creation, the uninterrupted up-surge of novelty.¹²

The keyword in Bergson's quote is duration: this is what can provide precision to thought, and what any transcendental metaphysics lacks. Bergson claimed that it is his conclusions on the importance of duration that led him to develop a method that could approach reality with precision. He would, somewhat

provocatively, call this method intuition and claim that it is the only term that can express ‘a mode of knowing distinct from intelligence’.¹³ Brought close to architectural thought and practices, intuition is a mode of knowledge that, not to be confused with instinct or feeling, can actually think in terms of duration. This is the case precisely because intuition does not start from the static and immobile in order to explain that which is always transforming; quite the contrary, intuition starts from movement and considers immobility as merely an abstraction.¹⁴

Intuition is a method that needs to constantly experiment. For Bergson, the goal of intuition is to aim towards a concrete knowledge and do so ‘not by way of the abstract, as is customary in many metaphysics, but through sustained engagement and connection with the concrete, since this latter route enables a tighter fit between object and explanation (i.e. metaphysical precision).’¹⁵ To bring thought back in this reality, one that is both individuating and experiential, Bergson wonders,

how much more instructive would be a truly intuitive metaphysics, which would follow the undulations of the real! True, it would not embrace in a single sweep the totality of things; but for each thing it would give an explanation which would fit it exactly, and it alone. It would not begin by defining or describing the systematic unity of the world: who knows if the world is actually one? Experience alone can say, and unity, if it exists, will appear at the end of the search as a result; it is impossible to posit it at the start as a principle. Furthermore, it will be a rich, full unity, the unity of a continuity, the unity of our reality, and not that abstract and empty unity, which has come from one supreme generalization, and which could as well be that of any possible world whatsoever. It is true that philosophy then will demand a new effort for each new problem. No solution will be geometrically deduced from another. No important truth will be achieved by the prolongation of an already acquired truth.¹⁶

Deploying intuition in order to grasp reality in its movement and duration, implies that this reality should be understood problematically. Moreover, as Bergson clarifies, for each new problem, there should be a new intuitive effort to approach it. For, as philosopher Brian Massumi claims, what is intuition but

a thinking feeling. Not feeling something. Feeling thought – as such, in its movement, as process, on arrival as yet unthought – out and unenacted, post-instrumental and preoperative. Suspended. Looped out ... Insensibly unstill. Outside any given thing, outside any given sense, outside actuality. Outside coming in. The mutual envelopment of thought and sensation, as they arrive together, pre- what they will have become, just beginning to unfold from the unfelt and the unthinkable outside: of process, transformation in itself.¹⁷

Intuition is being able to feel a problem. Consequently, intuition becomes for Bergson almost synonymous with invention — a peculiar invention however, since it relies on an absolute origin and not on anything given in advance. As he claims,

a speculative problem is solved as soon as it is properly stated. By that I mean that its solution exists then, although it may remain hidden and, so to speak, covered up: the only thing left to do is to *uncover* it. But stating the problem is not simply uncovering, it is inventing. Discovery, or uncovering, had to do with what already exists actually or virtually; it was therefore certain to happen sooner or later. Invention gives being to what did not exist; it might never have happened.¹⁸

For Bergson, therefore, to state a problem is to invent one. However, how can one be sure that invented problem has a truly transformative potential? How can one be sure that out of obscure intuitions an effect of clarification will emerge? In other words, how can one be sure that what is being invented is a true problem? To respond to that, one needs first to reconsider the relation between problems and solutions.

Under the dominance of prioritising solutions, under the reign of problem-solving attitudes, problems are demonised, they become synonyms of what is wrong, negative conditions that we must ‘correct’, difficult moments that we need to overcome in order to ‘advance’. It is this assumption that reduces problems to negative states awaiting solutions that animates the technocratic attitude itself, associating the very activity of thought with the search of solutions, and evaluating answers and solutions as a matter of adequacy, a supposed truth and falsehood of responses. However, it is never solutions that are true or false. On the contrary, thought errs when it poses false problems as it is them that mislead it. As Deleuze writes,

who says ‘Good morning Theodorus’ when Theaters passes, ‘It is three o’clock’ when it is three thirty and that $7+5=13$? These are effective examples of errors, but examples which, like the majority of such ‘facts’, refer to thoroughly artificial or puerile situations, and offer a grotesque image of thought because they relate it to very simple questions to which one can and must respond by independent propositions. Error acquires a sense only once the play of thought ceases to be speculative and becomes a kind of radio quiz.¹⁹

Once we no longer bother with questions that simply demand a demonstration of propositional knowledge, once we move beyond the fixed responses to quiz questions, then the duty of architectural thinking becomes to be able to determine problems that can transform architectural thought (and practice) itself. As such, learning becomes much more important than knowledge: there is a profound difference between learning — which, is a knowing-how — and knowledge — which corresponds to the accumulation and memorisation of knowing-that propositions. In other words, learning is a matter of opening thought to the

domain of problems, which has its own autonomous existence and not an issue of solving specific questions and securing a permanent body of knowledge.²⁰ As any teacher would confirm,

errors or falsehoods are rarely found in homework (except in those exercises where a fixed result must be produced, or propositions must be translated one by one). Rather, what is more frequently found – and worse – are nonsensical sentences, remarks without interest or importance, banalities mistaken for profundities, ordinary ‘points’ confused with singular points, badly posed or distorted problems – all heave with dangers, yet the fate of us all.²¹

In other words, we need to conquer our problems, we need to reconcile with them. If we do not, then we risk remaining ‘slaves so long as we do not control the problems themselves, so long as we do not possess a right to the problems, to a participation in and management of the problems.’²² That is precisely what the technocratic problem-solving attitude excludes: our participation to the determination of a problem. However, ironically, all of science has never been anything but fundamentally dependent on its ability of posing a problem. The empirical objects of science (including architecture) are above all answers to problems. As philosopher Gaston Bachelard (who coined the term *problematique*) claims,

it is indeed having this sense of the problem that marks out the true scientific mind. For a scientific mind, all knowledge is an answer to a question. If there has been no question, there can be no scientific knowledge. Nothing is self-evident. Nothing is given.²³

Said differently, every solution is as good as the problem it responds to, every solution has the problem it deserves. Therefore, our whole mindset needs to change: instead of treating problems as obstacles to overcome, we need to start wondering, exploring and finding ways that we may come to desire a problem, to actively look forward it and actively stay with it.

A TELLING SIGN

One cannot respond to a problem one has not learned how to pose. As such, we need to disconnect thought itself from the process of finding a supposed truth, a supposed solution, universal and everlasting. Moreover, we need to replace the common image of philosophy as a gathering of truth-seekers, friends of truth, who voluntarily exercise a natural tendency for the truth in the form of a dialogue based on infinite what is questions about the essence of a similarly infinite amounts of things. But if we are to do so, then with what should we replace it? To begin with, thinking is not voluntary. On the contrary,

something in the world forces us to think. This something is an object not of recognition but of a fundamental encounter. What is encountered may be Socrates, a temple or a demon. It may be grasped in a range of affective tones:

wonder, love, hatred, suffering. In whichever tone, its primary characteristic is that it can only be sensed.²⁴

To affirm that problems do not exist in our heads but occur in the actual world, that they are genetic forces that produce worlds, is to make clear that our encounter with them does not happen in or with thought, but rather with an outside that is populated and alive, full of durations that can only be sensed and therefore can only be intuited at first. Let us examine an example that will make this clear, one used by Deleuze also in reference to learning: how does one learn how to swim? As Deleuze underlines ‘to learn is to enter into the universal of the relations that constitute an *Idea*, and into their corresponding singularities.’²⁵ In other words, to learn is to immerse oneself in a problem and its system of differential relations that compose the singular – as in, the important – points of the problem, opposed to the myriad ordinary points that are, eventually, irrelevant to the problem itself. In learning how to swim, the sea can be understood as such a problem. As Deleuze claims,

The idea of the sea, for example, as Leibniz showed, is a system of liaisons or differential relations between particles, and singularities corresponding to the degrees of variation among these relations – the totality of the system being incarnated in the real movement of the waves.²⁶

As such, the problem of the sea in general, the *Idea* of the *Sea* is that of the differential relations between dynamically interacting wave particles, with the singular points of that problem being the nadir and the apex, the highs and the lows of different potential wave functions.²⁷ Each and every actual wave is the expression – Deleuze would say the actualisation – of one set of singular points, while the total of the sea is itself the expression of the differential relations that form the problem of the *Sea*.²⁸ With this in mind, Deleuze would claim that ‘to learn to swim is to conjugate the singular points of our bodies with the singular points of the objective *Idea* in order to form a problematic field.’²⁹ In the act of swimming, the singular points that compose the swimmer’s body come together with the singular points of the sea, eventually forming what Deleuze would call a problematic field.³⁰ This coming together of singular points ‘determines for us a threshold of consciousness at which our real acts are adjusted to our perceptions of the real relations, thereby providing a solution to the problem’.³¹

This congregation of singular points is thankfully open to literally an infinite number of different ways and manner; in other words, how one relates the singular points and therefore determines a problematic field as well as the solutions that can emerge out of it is fundamentally open and creative. In simple terms, producing and resolving a problematic field is a matter of style. This means that there is a creative gap between a problem and a solution, and this gap is precisely what allows for anything novel to emerge. However, the first and most important requirement in being able to perceive the singular points of a problematic

field yet to come, is precisely the very capacity of perceiving them in the first place. Put succinctly, the demand of any problematic field is the ability to perceive its signs.³² Only through an involuntary confrontation with something other does thought engage difference, and that which provokes the thought of difference is a sign.

A sign is simply the expression of crossing a threshold, the expression of crossing a limit. As such, signs are always relative to the meaning that they carry for the one perceiving them, depending on the situation that one finds themselves in. Preparing to get of your home in the morning, the sound of drops in the ceiling is a sign that it will rain, and you pick this up, it informs you, it has meaning for you, because you will need to act accordingly to protect yourself from the rain, to resolve the problematic field between your body and the rain. Swimming in the sea, you register the sound of the water, the drift of a current, the distance from the shore, because you find yourself in the process of resolving the problematic field between your body and the sea. What happens in less obvious cases, however, such as the ones involved in a design process? Then one needs to actively engage with the field itself in order to register the signs that can allow its resolution. If to learn is to intuitively bring together singular points in order to form a problematic field, then we may say as well that to learn is indeed to constitute this space of an encounter with signs.³³

As such, and in the effort of determining a problem by grasping its signs, the thinker — the architect — should not be seen anymore as the Platonic friend of truth, but rather as a Proustian jealous lover. No longer voluntarily asking questions about the ‘what is’ of essences (since these questions are devoid of any duration, they are static and eternal) but rather violently confronted with minor questions about a problem they encounter.³⁴ It is through these intuitive minor questions that signs can be grasped in all their intensity, in all their dynamic complexity: what happened? How? When? Where? Why? With whom? For what reason? What was the goal? The best that teachers can do is to invite their students to participate along them in asking those minor questions, in an activity of determining a problem rather than telling them or showing them how to do it.³⁵ After all, one learns nothing from those who simply ask to be followed, those who say, ‘do as I do’. Our most valuable teachers are “those who tell us to ‘do with me’ and are able to emit signs to be developed in heterogeneity rather than propose gestures for us to reproduce.”³⁶ Our most valuable teachers help us to invent problems.

ENDNOTES

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