# Zetetic architecture

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ABSTRACT: The broad economic and political consensus regarding the idea of progress in the West emerged from the beginning of the last century, particularly in the countries called to develop, as an agile engine of structural and paradigmatic change, even ontological, from the ideal of the future promoted by the modern ideology. That modernizing rationality has had as its ultimate goal to cover not only the city but the territory as a whole and urbanize it, promoting a powerful campaign of motorization and technification of the various regions of the planet, sometimes uncontrolled expansion that today has become the main promoter of climate change (see for example any independent report on pesticide use and its effects); Numerous voices have been crying out since the early 1960s for a radical transformation that today seems urgent based on the irrefutable evidence, despite which every year we see the situation worsening caused by the excessive growth of extractivism and consumption.

From the questioning of the classic division between nature and artifice that is at the base of our relationship with the world, the possibility of an architectural practice without first questioning the modern and postmodern axioms that govern it is also questioned. From the recovery of the skepticism of the zetetic, the possibility of looking at the world again no longer as a global integrity but from the small that supposes an extensive heterogeneity that composes the local and that reorients us towards the material of the physical world to discover in it the possibilities of action of the design capable of acting with the resources available there and producing a situated architecture.

As an example of zetetic architecture of material-cultural value, a work produced from the use of old disused agricultural machinery transformed into a quarry from its dismantling and resignification is offered. The assessment and study of the place and the use of available materials raise new possibilities beyond the conventional disciplinary views.

Keywords: Territory, Anthropocene, Zetetic Architecture

## 1 INTERVENE IN A FRAGILE TERRITORY

The broad economic and political consensus regarding the idea of progress in the West emerged from the beginning of the last century, particularly in the countries called to develop, as an agile engine of structural and paradigmatic change, even ontological, from the ideal of the future promoted by the modern ideology. That modernizing rationality has had as its ultimate goal to cover not only the city but the territory as a whole and urbanize it, promoting a powerful campaign of motorization and technification of the various regions of the planet, sometimes uncontrolled expansion that today has become the main promoter of climate change (see for example any independent report on pesticide use and its effects); numerous voices cry out for a radical transformation. Let us agree that this whole process has a long-

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standing historical echo and that it is easily traceable in a multitude of crises since the dawn of the industrial era attributable to the excesses of this productive-extractive perspective, so much so that the very concepts of sustainability, today vogue, date back to the first functions of the Royal Society, which in 1664 presented a very complete and critical report regarding the mismanagement of British tree masses that had practically been driven to extinction, proposing a series of lessons: "(...) the disproportionate spread of farming and destructive razing and conversion of forests to pasture had caused the devastation of the great riches and glory of this nation to become epidemic." (Evelyn 1662) The result of those investigations clearly was to take this highly destructive but profitable model outside the borders of the kingdom. We know its effects.

As the last century progressed throughout the West, a profound social change took place in which millions of people moved from the rural world to inhabit cities, most of them precariously; the old rural world was transformed into the domains of a new production and real estate model. Particularly from the 1980s onwards in developing countries "rural space was transformed into a new space for national and foreign investment, which contributed to reconfiguring the territory from the reconversion of agriculture to the export model" causing its rapid destruction. Ruralization and the consequent rural-urban migration from the consolidation of the new developmentalist ethos that, both in Latin America and in the rest of the West, marked the profound changes in the intra- and extramural urban territory. The massive production of food, goods and services for a growing population has had as a co- narrative the exponential increase in world consumption of primary energy: the production of aluminium, meat and plastics, paper, wood, steel and cement are far from stabilizing. and they have not stopped growing almost doubling every decade.

Vast areas of the territory are converted or incorporated as massive productive land or urbanized to different degrees and densities. Although all this has been going on for more than a century, agro-industrial, forestry, livestock, mining and energy development mark the productive present, extending its landscape where industrialization had not reached until now or its presence was rather secondary. Although these processes of change have been the tenor since the 19th century, never before has there been such an abrupt and comprehensive alteration as the one experienced by the territories in recent decades, and we see how it is accelerating every day.

The depth of the changes in the territory also entails changes in the occupation systems that today are the focus of attention from anthropology, environmentalism to philosophy. In all cases, a paradigmatic change is urgently needed and the speed of the loss of plant and animal species is alerted, ecosystems subjected to the pressure of transformation that puts the continuity of the human species at real risk for the first time, an issue that It has been discussed for several decades because "awareness of the degradation of the environment emerged in the 1960s with the publication of the book Silent Spring by Rachel Carson, and expanded after the United Nations Conference on the Environment. Human Environment, which took place in Stockholm in 1972. It is at that moment, when the limits of economic rationality and the challenge that environmental degradation represents for the project of modern civilization are pointed out. Scarcity, the foundation of economic theory and practice, has become a global phenomenon, which is no longer resolved through technical progress, the substitution of limited resources for more abundant ones, or the use of unsaturated spaces for the disposal of resources. waste generated by the unbridled growth of production." (Rivera 2012)

In this sense, what Williams described in "The New Metropolis" shows that the current state of things seemed obvious already in 1973 and anticipates one of the main current impediments regarding the possibility of structural changes to the extent that the so-called countries headquarters are not interested:

"In the most general sense, underneath the description of the imperialist nations as 'metropolitan, it can be seen that the image of the countryside penetrated, transformed and subjugated by the city, which learns to strike back with old tactics and also with other newer, is still valid (...). The destroyed rural societies include not only the economies of Latin America, (...) independent development, which must be bitterly fought

for, offers the only chance of any growth directed in the interest of the majority. And, although it is true that if we add up all the successes and all the failures of development, the global crisis is terrifying, it must be admitted that it is a process that cannot be interrupted... the decisive changes, if they are to take place effectively, will have to originate in the metropolitan countries, whose power currently distorts the whole process and prevents the establishment of any genuine system of common interest and control. However, when we look at the power and momentum of metropolitan trends, often accelerated by their own internal crises, we have no doubt that a change of course, assuming that it were possible, will necessarily have to imply a revolutionary change." (Williams 1973)

Williams already pointed in this and other texts to the possibility of a "resistance" or "independent development" in favor of the commons. With the advent of the Anthropocene we could add that the "revolutionary" moment occurs from outside the conventional political powers and this explains in part the dilution of the power of traditional institutions. In other words, climate change and ecological mutation seem to have the capacity to be a new Leviathan or, in Latour's terms, it is Gaia that imposes a new state of affairs in the face of catastrophe.

### 2 A NEW NATURE-ARTIFACT RELATIONSHIP

"Such attempts to divide things up and reduce them to abstractions miss their interdependencies. With its profit-based economy that depletes the living environment, modernism has accentuated humanity's separation and exploitation of nature. If we want to reorient ourselves, we must activate these interdependencies. Our task is to develop alternative forms of osmosis that assimilate nature and non-manufactured conditions that improve our existence and quality of life." (Younés 2019)

The extinction that we are witnessing, whatever the species, also extinguishes modes of human existence that have shaped the territory and that have proven to be the support of life that has allowed them to reach the present day. The destruction of those ways of life, most of the time, has been simply because they are considered backward, archaic, old, for hindering the modernization plans, most of them imposed under the pretext of following the general guidelines of developmentalism with no alternative. In the Anthropocene era, that of "unbridled artificialization" —says Cris Younés—, the search for an "appropriate" relationship with nature (with all its ambiguity) is necessary, recalling Paul Ricoeur's statement that "all works created by technical man are a source of additional fragility" and Younes adds:

When we speak of fragility, we usually think of that which results from our weakness, our vulnerability, our submission to disease and death. I would like to pay attention to the fragility that men add with their actions to our original finitude. The fact is that where human intervention creates power, it also creates new forms of fragility and, consequently, of responsibility.

The consensus regarding our shared responsibility in the ecological mutation that we are witnessing and which has come to be called the Anthropocene, since its emergence in 2016, determines a series of environmental factors that have meant, among other effects, the acidification of the oceans, its increase in temperature, change in the current regime and a series of effects that irreversibly compromise the entire planet.

For its part, the Gaia Hypothesis, coined by Lovelock to describe the atmosphere and the surface of planet Earth, behave as a system where life, its characteristic component, is responsible for self-regulating its essential conditions such as temperature, chemical composition and salinity in the case of the oceans.

Gaia is the planetary life system that comprises everything that influences and is influenced by the Biota. The Gaia system includes with other organisms the ability to seek

homeostasis: the regulation of the physical or chemical environment within the favorable limits of life. (Lovelock 1979)

Gaia is a teleological evolutionary organism not fully compatible with the theory of natural selection. In this, it coincides with the later works developed by Bruno Latour in books such as Face to face with the plant. Gaia behaves like a self-regulating and evolutionary system, a living organism (which tends to balance), and which has served Latour to expand the term to philosophy (of science mainly) and through it transform the idea of modern globality: from an idea of the planet as a whole understood as a globe and seen from an impossible extrater-restrial point of view (the typical view of the spherical and blue planet that for Latour makes it impossible to observe the particular phenomena that make up the whole) towards an idea of a whole made of parts hyper specific both chemically and biologically or culturally. Gaia, the ancient Greek goddess of nature, now serves as a name for that powerful conjunction of open systems that make up the delicate surface layer of planet Earth, which is ultimately made up of an infinity of complex and diverse realities, "composing" (key concept for Latour) a systemic and interdependent whole.

It is in that idea of the global as the conjunction of diversities, sometimes not compatible, that the possibility of a different understanding of the local arises. For design and for architecture in particular, disciplines of the transformation of the habitable environment from creative observation, a powerful possibility arises for participation in the debate on how to participate in the urgent changes that are required.

## 3 THE ZETETIC METHOD FOR A SITUATED ARCHITECTURE

How to lead design in today's rapidly changing conditions. I have no space here other than to outline a possible method and show an approximation of its scope. First of all, it is about recovering the ancient Greek idea of process through Zetetic action, recovering active skepticism. Secondly, to reestablish a relationship and generate a dialectic with "matter", with what exists physically, natural and artificial, including its hybrid condition, and thirdly, to learn about the particularities of the geo-cultural space in which it intervenes with in order to generate a situated and pertinent design, the foregoing in the understanding that urbanization has already reached the completeness of the planet and there is no longer any kind of easy distinction between city and territory.

Jason Ananda in his book Metamodernism: The Future of Theory (Storm 2021) poses the Zetetic being as a form of skepticism capable of overcoming postmodern skepticism that emerged as a reaction to modern axiomatic truths. As the author puts it, postmodernity would have generated an exacerbation of the skeptical component of thought in all areas of the human sciences from a series of second-order interpretations regarding the central authors of the postmodern. If the search for irrefutable truths (modernity) is a fruitless search and doomed to failure, postmodern skepticism, as doxa, is equally wrong since it could not be said that it is a proper skepticism since it does not ask about doubt itself. Modernity and postmodernity are, in this way, equally doctrines, in their own way, to which it is necessary to seek a liberating alternative.

In a few words, the zetetic method is then a way of proceeding through inquiry, which renews empiricism by deepening the path of doubt opened by postmodernism, leading it to last from doubt itself, that is, distrusting even the axiomatic form itself. which it could give rise to. It supposes doubting the methods and general conditions that have led us to the current situation without falling into new axiomatic forms that may presuppose a truth. It is about assuming that the room in which we find ourselves and we believed to be illuminated and well furnished is dark, but beyond immobilizing us, it impels us to know it again.

Una de las condiciones que tiene el pensamiento creativo es que opera no solo en los razonamientos deductivo e inductivo, sino que transcurre a traves de lo que se ha llamado razonamiento abductivo o inferencia a la mejor explicación, esto es, asumir que tanto la deducción axiomática a priori como la evidencia empírica a posteriori son susceptibles de duda. La

inferencia va más allá que la búsqueda y hallazgo de patrones. La inferencia creativa junto al actuar zetético nos permiten volver a mirar sobre lo que aparentemente estaba ya sancionado y proponer hipótesis nuevas considerando lo "otro" como válido, incorporando la opinión y existencia de los demás. La nueva información disponible no lleva por el camino necesario del escepticismo que nos permite repensar las antiguas doxas respecto de la disciplina.

Asking about the territory, far from meaning remaining on large scales, associated, for example, with planning, which are undoubtedly important and necessary to consider in these times, must be understood, as has been said, as an already urbanized complex made up of a multitude of parts heterogeneous and not always compatible with each other. This point of view forces us to look from the bottom up, consistent with the need to reassemble our understanding of particularities. Installing the question about what makes up the space that is inhabited considers the need to open up to a dialectic with what is outside the discipline, and also questions its technical and cultural objects. In this sense, the "cubes of matter" (Figure 1) are working hypotheses that take on a particular meaning more in the set, in the simultaneity of all the objects produced by the first-year students when faced with the same question, than in the individualities of each of them separately. These cubes do not "represent" the second life of the materials, but rather constitute a working hypothesis where matter is the protagonist and work is done by asking about its attributes and how to give it a shape.



Figure 1. Cubes of matter from Juan Roman's workshop for the first year at the School of Architecture of the University of Talca, Chile) (Roman, Talca: Unpublished 2013).

In the case of the work "Paseo por las rocks" I present below (only as a reference to this form of production) Sergio Molina, its author, in his final degree project has studied a particular territory, the top of an adjoining hill to the town of Colbun that takes its name from this geological formation whose name means "Snake's Head". The study of this territorial space visited since prehistory by wanderers, muleteers and now by residents and tourists has witnessed the abrupt change in the environment that the flooding caused by the maul river reservoir has caused. The rocky complex is surrounded by what little remains of native flora (Figure 2) in the middle of an environment transformed by forest plantations destined for the production of cellulose. Some telephone and high voltage towers cross their cables through

the place. Molina in his research journey has managed to understand the place and its history, learn from environmental conflicts and has taken the opportunity to intervene here to generate a cultural space capable of telling this story, relying on the route through the rocks that crown the hill and the powerful telephone signal that allows you to connect to the digital story. During the search, he obtained, as a donation, an old machine that is used for the purposes of his undertaking: it is a material quarry (Figures 3 and 4). From the dismantling of the machine and the understanding of the environment that has to be intervened, the possibility of architecture and detailed design arises, aimed at enabling the body to travel and understanding what happens in this place.



Figure 2. Summit of Colbún hill, types of native flora existing in the place to be intervened. the green stain indicates what is still maintained with native species. the white lines represent the tracings of high electrical tension.

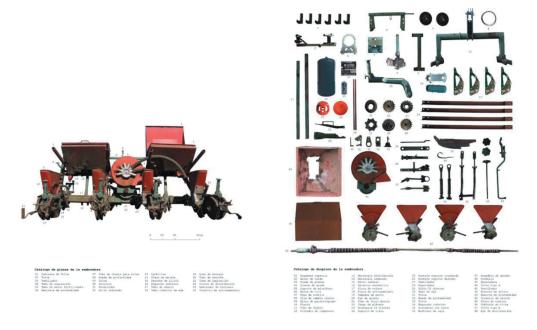


Figure 3. Agricultural machinery in disuse, disassembled to occupy some of its parts as pieces in the new work.



Figure 4. Pieces recovered and worked on for their new use and function.



Figure 5. Applications of the parts extracted from the machine transformed into parts of the route that enables the rocks and transforms them into a promenade.

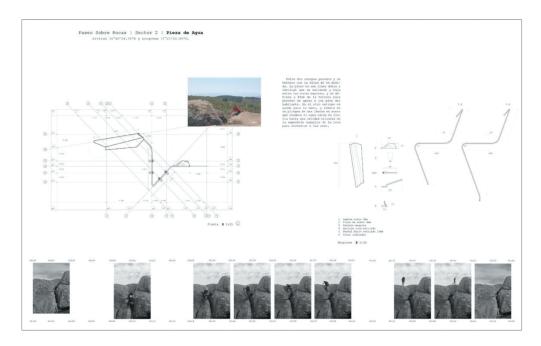


Figure 6. Pieces recovered and worked on for their new use and function.



Figure 7. Details of adapted parts. The inlays in the rock function as mediators between the pre-existence and the people, protecting the place and enhancing what exists.



Figure 8. The head of the snake, rock that gives its name to the hill with the intervention that helps to climb it. architecture has to disappear to value what exists and the environment.

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