

BETWEEN NATURE AND CULTURE
reflections

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Topic

My graduation thesis aims to understand the conflictual relationship that exist between any building and the ground it stands upon. On a more general level, this conflict can be traced back to the opposition between man and nature, or better, between culture and nature.

I believe that this conflict lies at the core of the architectural discipline, and that - as architects in the age of climate change - it is most urgent than ever to be conscious of that.

Therefore, a big part of the research phase was dedicated to understanding the history of this conflict within Western culture, in order to then have the sufficient theoretical background that would allow me to take a position within this discourse through an architectural project.

Research

As I previously mentioned, my thesis develops from the following perspective: throughout the history of mankind, there's always been a conflict between man and Nature, a conflict that has been well expressed and conveyed by architecture. Since its dawn, mankind has always tried to escape its natural condition, paving roads, building houses and trying to cut-off the forests of our own origins. What is the state of this conflictual relationship today? Is this conflict inevitable even in an era when the natural balance of our planet is at risk? Can we intend the man-nature relationship differently then in the past? And if so, can this have any effect on architecture?

During this first phase, the architectural theme of the garden has been used as the theoretical backbone to analyze the conflict between man and nature. As a matter of fact the garden throughout history has always been the place where nature was bent and molded by human will, thus embedding the conflictual relationship between man and nature which constitutes the hard core of my thesis.

Therefore, I carried on a text-based, cross-disciplinary research around the theme of the garden, aimed at defining the terms of this conflict on a holistic level, drawing from architectural, historical and philosophical sources. During this initial step the literary work of Robert Pogue Harrison has proven to be particularly insightful. In particular, his books "Forests. The Shadow of Civilization" and "Gardens. An essay on the human condition" were tackling on a cultural level the same themes I was dealing with from an architectural perspective. This confrontation with his work confirmed the hypothesis that were guiding my initial interest on this topic, confirming how - throughout history, on both on a cultural

and material level - nature and culture have always been conflictual opposing poles. I therefore proceeded investigating the role of the garden throughout its history in architecture, analyzing and understanding what were the underlying factor that were influential in its formal configuration.

Once the hard core of the research was clear, I began tackling the research question that I had established since then. What is the state of the man-nature conflict today? Can architecture provide new means of intending such conflict?

The word "Anthropocene" - put forward by the 2000 winner of the Nobel Prize in Chemistry Paul Crutzen - refers to the contemporary geological epoch in which humans have become the dominant geologic force altering the planet. The human species has had such a widespread effect on earth systems that it is now a geological force detectable in the earth's strata. As such, there are now many environments - oil extraction sites, quarries, farmlands - whose main character is that of being quite evidently the result of cultural forces. These "modified environments" possess a very specific aesthetic quality, somewhere in between the artificial and the natural, the human and the non-human. They are the negative outcome of our exploitation of the planet, yet they are capable of unexpected and spontaneous entropic regeneration. There's no such thing as a final state to these environments. As such, they offer a precious occasion for reflections on the inevitable impact that we as a species have on the ground we walk on.

Project

Therefore, one of these "modified environment" was chosen as the site of the project. The site in question is the plateau of Sint Pietersberg, a former limestone quarry south of Maastricht. Since the foundation of the city as a Roman settlement in the 1st Century A.D., Mount Sint Pieter has served as Maastricht's main limestone stock throughout the entire history of the city. The more the city grew, the more marl was being extracted - and the mountain excavated. The result of the exploitation of Sint Pieter has created an 250km underground infrastructure of mining corridors that runs under the province of Southern Limburg. Starting from the mid 1930s, the drop of limestone import during the years coming to World War II caused the construction of a cement factory on the site. During the next 80 years, the ENCI Cement Factory served as the main cement stock for the Dutch construction industry. As a consequence, the exploitation of the site is nowadays visible in the massive void that lies at the center of the plateau. In 2008, a Plan of Transformation was drawn up by the municipality of

Maastricht, with the goals of both natural repopulation and tourism development. In 2018, the marl extraction in the quarry by the ENCI factory was terminated. Sint Pietersberg therefore raises the difficult question of how to approach these “modified environments”. In the case of European mining sites, in the past 50 years the mining activity has slowly decreased: some of the quarries in Western Europe have been mined out, and large concentrations became easier to find in other areas of the globe.

Within this context, my project aims at defining new future possibilities for the site, while also stimulating reflections and discussions on our inevitable imprint as a race on our planet.

Therefore, my project consists of a garden. More precisely a garden that lies between the two opposing realms of the site: the ENCI cement factory on one side, the quarry as a natural reserve on the other. In this sense, the garden acts as a mediator between nature and culture, quite literally.

The garden will host a botanical research centre, a scientific facility dedicated to the study and the observation of the many biological species that are autonomously flourishing within the quarry. In doing so, the garden will also serve as a testing ground for experimentation with this very particular limestone-bound species.

In regards to design choices, the garden and the research centre will be both carved inside of the limestone rock, adopting the architectural language of earth-dwelling architecture. Doing so, the very violent nature of (any) architectural project is made visible: the void in which the garden flourishes acts as physical proof of our agency on the planet.

On the other side, earth-dwelling architecture offers a very special relationship towards the ground, both of communion and conflict. Underground architecture in fact thins the boundary between natural and artificial, between building and ground, to the point where the line between nature and culture almost disappears.

Conclusions

In short, the aims of the project are double: on the one hand, it works as a physical proof of the inevitable impact that we as a species have on our planet. On the other hand, through the earth-dwelling design language, it tries to overcome the nature-culture divide, a cultural attitude that we have been carrying on since Roman times.

As Swiss architect Luigi Snozzi used to repeat to his student: *“Every intervention presupposes a destruction. Please destroy with reason”*.