The process and evolution of thought that eventually leads to the final proposal is what I value in architecture. In this spirit, my portfolio represents not only my individual approach to every project, but also the growth and development experienced in my education.
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What is the fulcrum in nature?

The complexity of the natural cycle generates human experience and vice versa. The layers of planet Earth are in a constant movement that can be described by the Newton’s third law of action and reaction. This ongoing game of balance is affected by human interaction. In the architectural field, the notion of natural versus artificial can be reinforced by the question of how the landscape is touched and occupied? What does the architect do to maintain the fulcrum within the natural cycle?

The following project starts with an observation of landscape of a observatory park in Florida, Paynes Prairie. The analysis of flat and vast land include understanding the relationship among water, earth and air.

The vastness of Paynes Prairie is a boundary between below and above, enclosed and open, controlled and in-flux. The land is a porous datum that enables the earth to breathe periodically, creating the boundaries that challenge human activity and generate the experience.
In communication with flat ground, the essence of Florida landscape, is in the water. Ceder Key, National Wildlife Refuge, is yet another flat and vast landscape to be analyzed and occupied. This specific site is surrounded by water and shaped by daily tidal fluctuations. The horizon line shifts constantly, forcing the phenomenon of natural selection.

One of the zones of Ceder Key is surrounded by the trees, promising intimacy and a substantial interaction among living species. The intervention serves as a moment of pause that generates the ritual sequence: collecting, cleaning, cooking and gathering.
Contour line as a tool for interpreting the landscape?

By definition, contour line is a sequence of points at certain heights joined together in a singular line. A contour line in architecture is a continuous mark of edges, a singular joint between the space above and below, and the space to the right and to the left.

The intervention within Ceder Key is a marker that measures the tidal changes while providing a point from which to observe the distant horizon.
How do we occupy horizon line?

The vast and open natural surrounding allows for interaction with both the near and the far landscape. The essence of inhabiting horizon allows the occupant to interact with the nearest zone, while observing distant territories. This proposal explores juxtaposition between the nearest context conditions and conditions of the long distance sites, only visible to the eye.
Earth Lab is the vinery, a space of production, that explores the conditions of the earth from the micro to the macro scale of architectural operation in order to celebrate and make more present and visible the paradoxical qualities of very ancient material. Since the earth is often taken for granted and ignored in western disciplinary terms as being ugly, dirty, abject and other than architecture, this vinery sets new perspectives on dirt and what dirt means in the Anthropocene.

My own desire to be intimate with the earth as the material of construction brought me to the experimentation with this material. I was interested in exploring the tension between the material as found in nature and the one processed by architecture. I was interested to find the ways to deploy this aspect of alterity in order to create an environment that flickers between the two, the natural and constructed.
The building is based on two grids; one grid follows the topographical lines of Arroyo (site) and another grid follows the orientation of the existing vineyards. The most important organization element of the interiority of the building is the circulation. Circulation is embraced by the lines of the landscape, existing roads, and walls. It is organized in the way that the building is experienced through the sequence. It starts above Arroyo and it ends in the Arroyo.

The production of wine happens within the walls. The production is operated in a linear process. Within this sequence, there are three community/gathering spaces: the Earth Lab, barrel aging room and cooking station. The Earth Lab allows experimentation of planting the same species of the vine in the different type of soils. The goal of this is to advance and embrace innovation in a variety of vine taste. Parallel to the Earth Lab, located in the underground, there is a barrel aging room. Lastly, the cooking happens in the form of a fire pit and it is located in Arroyo.
This test uses half cut vine bottle inserted in the rammed earth block to allow the air porosity. The air moves from the larger opening located at the exterior surface to the smaller opening located on the interior surface. This strategy brings cooler air and warmer air outside the space.

This test uses the glass plates located perpendicular to the rammed earth surface. Glass plates are inserted into rammed earth block, allowing the light porosity inside the space. This strategy uses indirect lighting and minimum heating, which is required for sustainable vine production.
An Elephant in the Room

An elephant is known as the largest existing land animal on the Earth. The scale is not the only important feature of this animal. With around 40,000 muscles in his/her trunk, an elephant is capable of both: crushing a human body to death, as well as delicately opening a peanut shell without breaking a peanut inside.

Today, among many other global challenges, we face an extinction of an elephant. In the last decade, the number of elephants in the world dropped by 62%. It is estimated that over 100 African elephants are killed each day by humans seeking for food, body parts and ivory.

This project aims to rethink the ways in which architecture can engage in the protection of life, of the living, beyond human scale. In the time of climate change, moving forward is fragile, however, every new approach is a complementary to the change. In this project the space for an elephant becomes a call to reevaluate what is a sanctuary today? And what is the agency of architect in the process of designing for endangered species?
How can materiality contribute to the experience of light?

The ephemeral qualities of light can become objectified when introduced to architectural form and materiality. The atmosphere of a space depends on the thickness, density and texture of the material it is built with. This project explores the capacities of the plaster, as the main material of construction. The aim of the test was to find the minimum thickness of the plaster that will emit the light inside the space.
New York is a city characterized by accelerated growth. It is a city in which the edges are continuously shifting and where the traces of time imprint their mark, yet are soon buried by the new. This raises the question: Should the city of New York strive to preserve an architecture that speaks of the history of the city, tracing the influence of different eras? Or is this an impossible task?

This research looks at two sites, New York City, and post-war Mostar. Both sites raise the question of occupying the existing in a slightly different manner. However, each context tackles the question of inhabiting the old and the existing? How architect adjusts to the sites that were already in use?
Cities are constantly in a process of transformation. Natural disasters, human conflicts, and social demands are always creating a change that causes shifts in cities' boundaries. In Bosnia and Herzegovina the post-war trauma is still highly visible through destroyed architectural monuments. The history of Mostar in particular manifests itself in the presence of countless ruins throughout the city.

The analogy of parasite architecture has greatly influenced my current research where I seek to investigate the architectural possibilities of ruins in the city of Mostar, Bosnia and Herzegovina.

How do we rebuild to preserve the treasured elements of the past?
The project aims to reactivate the abandoned site of Monastery of Toumliline into an experimental campus of learning local craftsmanship and cultural exchange. The proposed intervention serves as additional off-campus facilities to the University Al-Quaraouiyine. Located outside the urban fabric, the proposed facilities are designed with materials and resources existing on-site. Design of the campus is done in a team of 6 people, each designing one facility that provides a space for making and sleeping.

Clay is one of the six crafts that can be learned on the site. The project revolves around a clay shop supplied by living spaces. Each space accommodates users with specific conditions required for clay making, as well as spaces that can be easily transformed into living conditions.
Clay is a commonly used material in Moroccan ceramics, but also as a building material. This project looks at the local clay construction techniques in order to expand on contemporary ways of using clay as architectural material. The large focus is placed on recycling already existing clay walls as a material for new proposed spaces.

Clay Shop is located in the most ruined spaces of the site. The remaining architecture on the site contains clay, stone walls with no roof conditions. The project proposes preservation of structurally stable walls, located on the ground level. This space will accommodate an open workshop space: workshop room, storage, kiln and pigmentation lab. Removed walls will be reused in construction of additional facilities, located on the second floor. Existing walls serve as structural support for the proposed facilities above. These facilities accommodate a large auditorium space, and studio that can transform into temporary housing for 80-100 people.
Our brief was to double the Patscenter by Richard Rogers. The project was completed in 1985. The roof is suspended from above by an A-frame, cantilevering 75 ft and freeing the floor below. The completed building is 80,000 sqft, though it was designed to be expanded by adding additional bays. The building as constructed has 9 lines of structure, producing 8 bays.

The Patscenter falls into a lineage of buildings that produce a generic, open, flexible space. Rogers describes his design for the Patscenter as a section. Though the structure acts in section, the space that structure produces, the box below, is generic. The primary effect of this structure doesn’t appear in section, it appears in plan. It produces large open spaces.

In our proposal, all enclosed, specific spaces move to the level of the roof. Each box is associated with a different program: meeting room, kitchen, bathroom, corporate archives, a public cafe, etc. Each box contains its own circulation and is accessed from below. For instance, a spiral stair leads to a meeting room. A two-stop hydraulic lift accesses the corporate archives. And a set of auditorium seating leads out onto the roof. Each stair is suspended from the structure above. Each box delivers something different to the space below. This is how we see ourselves as entering a conversation with Rogers’ original structure.
1/ In Rogers’ design, the ceiling delivers services (such as HVAC and electric lighting) to the space below. In our proposal, these services now include meeting spaces, auditorium, light, entry spaces, etc.

2/ In Roger’s design, the column free space allows for the walls to be reconfigured with minimal regard to structure. In our proposal, moving all enclosed space to the roof frees the ground level of all partitions.

The roof becomes a village of individual structures, little buildings, each with their own programs, light qualities, means of circulation, users, etc.
Coal Power Plants are still the major source of Energy on Earth, emitting almost 15 billion metric tons of CO2 yearly, which is almost a half of the world CO2 emission.

Carbon Power Plant is an intervention that aims to transform the existing Coal Power Plant into Biomass Power Plant using the algae as the main source of “power”. This concept seeks for alternative solutions towards a decrease of CO2 in the atmosphere at the industrial scale of production. In this process algae reverse the cycle produced by Power Plant, with algae’s ability to “breathe in reverse”. “Breathing in reverse” represents the process of growing algae, in which CO2 is captured while oxygen is emitted back to the atmosphere.
December 8th, 2019, Sarajevo, the capital of Bosnia and Herzegovina, faces the major air pollution marking itself as the second most air polluted city in the world. According to UN Environment Program, “the country is now estimated to be the second deadliest in the world for another killer, responsible for more lives lost worldwide than any war.”

Each year 44,000 years of life are lost due to the toxic particulars traveling through the atmosphere.

Bosnia and Herzegovina is not the only case in the world in which its inhabitants live within the thick, visible air. China, Japan, Thailand, the USA are just some of the many countries that actively have been reforming the structure of the air. This restructuring has an effect on the life of the planet Earth from the molecular to the geological scale.
The project is located in Bosnia and Herzegovina, in coal power plant that is considered to be the 10th biggest polluter in Europe. It is unknown of how much CO2 is emitted by this plant, but it is known that there are continues international investments in increasing the production of energy by coal.

The site contains 3 major locations. The coal mining site, coal power plant, ash disposal. This particular overview allows us to see that coal burning does not only has effect on the air quality but also a major effect on the geological transformation of land.

Algae walls are wrapping around the biomass production, allowing the production process to become a heart of the building. Algae Farm is mainly human occupied and therefore the scale of it accommodates human. There are three spaces. The collection of lecture halls, the collection of labs and the collection of offices. In section the algae wall acts as the unifying membrane between human and industrial scale od production, between the algae and biomass and lastly between CO2 intake (consumption) and oxygen outtake (production).
Carbon Power Plant aims to not only reverse the power plant cycle, but also reverse the cycle of labor and maintenance. Working in deep, dark and dangerous layers of Earth can be transformed by working on planting, growing and maintaining the life above the ground surface.

In the long run, this project can be zoomed out on larger geological scale, in which once coal mining site can become a forest farm used for further biomass process, while ash disposal site can be returned to its initial state of being a hiking destination for locals.
Thank you.