

# Augmented-Biophilia

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In the physical world, with the restauration, each jazzo has been given its own character, each theme being part of a holistic view on man's impact on nature. The first jazzo is dedicated to the Community, an open laboratory where passers by and locals can share experiences and learn from each other. It is a way to connect the villages around with the trekkers, giving a whole new dimension to the experience of the place. The second jazzo speaks about the night, Stargazing, and its generous glass roof give the users a new experience of sleeping under the stars. The third is dedicated to Self Sufficiency, a place of learning about how to live off the land and in harmony with nature. It gives the opportunity of the user to understand resources and how to harvest them, like wind, water and nourishment and exposes him to the idea of off grid living and wise use of the planets limited resources. The forth jazzo is dedicated to one of the worlds oldest occupation. Dated to have begun some 5000 years ago, Shepherding is thinning, which is why the ways must be preserved and taught to others. Traceability, self-sufficiency, sustainability are only some of the concepts that this app wants to create awareness about by constantly showing the cycles of the local materials used for man-made structures or the natural cycles of nature and how, in the bigger picture, it is all connected. Each user has the opportunity to leave his own comments for the world to see, without unbalancing in any way the natural habitat with his gesture. Moreover, he can choose to contribute to the maintenance of the area by adopting a tree, a valley or a patch of land that will be marked in the augmented reality with his profile, or the profile of a loved one if it was sent as a gift. Being connected means more than understanding the flora and fauna of our surroundings, but it also includes immersing ourselves the local ways of living, which is why the application creates a network of users that include the communities, following the km 0 philosophy.

The app follows the same 4 main topics that are the theme of each jazzo.

**1.Community:** Part of the regeneration is the integration of the surrounding community. Local trades, passed on through generation, is slowly fading away. The applications first step is connecting the locals with the passers by, giving the locals the opportunity to come out of anonymity and step into the spotlight of an ever growing virtual community and giving access of their knowledge and skills to all. The app keeps updated with all local events, fair's, markets and workshops. Moreover, it's a connection that can go beyond sharing knowledge, sharing the location of the trekkers and giving them the opportunity to connect to the nearest person (be it another trekker or local) in case of emergency.

**2.Stargazing:** For an astronomy lover, the skies outside the cities are a delight. As an

area with the lowest light pollution, the night sky here is shown in all his splendour. The application adds more layers to the visible reality, showing all seen and unseen constellations, their history and local legends related with them. It also accompanies you during your night treks, advising (using parameters like weather and location) where the best spot to camp through the night or to take a walk are. It also has the option to check the availability of sleeping inside a jazzo, or book it with anticipation, and it gives you the location of all places dedicated to outdoor sleeping.

- **3.Self Sufficiency:** Connecting to natures cycle means learning how to become self-sufficient, with a minimal impact on the environment. The application, having previously mapped out the area, is your companion during your adventure, letting you know which paths to take to encounter food, giving tutorials on water harvesting and filtering, and constantly educating you on the surrounding flora and fauna, aiming to leave the users with lessons that they can apply later on in all their travels. As the user explores its surrounding he is given the opportunity to adopt a tree or a small patch of land. The small donation will go into a fund that is dedicated to taking care of the ecology of the entire area. Moreover, implementing augmented reality into the application, the name of the donor and all others before them can be seen by all users.
- **4.Shepherding:** The area is a haven for sheep herding and the ways of an experimented shepherd are known to fewer and fewer people. The application tells you where the nearest shepherds and their herd are and puts you in contact with them. If just watching animals graze is not enough, you can spend a few nights with the shepherd to learn what it means to care for the animals and hear his stories of wisdom. The application even lets you virtually adopt an animal by giving a small donation that will go into a fund dedicated to keep the traditional and ecological way of caring for the animals.

## Concept

Locality, traceability, sustainability and innovation have been the keywords that have driven this proposal. AUGMENTED BIOPHILIA brings together the physical and virtual world. Aiming to deepen our bond with nature, the proposal radically minimizes the physical impact of the intervention, while living and growing actively through augmented reality. The physical interventions in the restauration of the jazzi were limited to ones that are related to local techniques and materials (such as chestnut wood, stone and clay), with only two subtle exceptions: a glass roof mounted on one of the jazzo and fiber optic light poles that act as a location signal of the shelters during the night. The restauration of the jazzi has been thought out to give out basic comfort levels with minimal impact, to switch the focus on bonding with nature, learning about your surroundings and connecting yourself to the natural cycle. "Nature connectedness" is a term used to measure the extent to which individuals include nature as part of their identity, their level of understanding of the cycles and the role of everything, including himself, in it. To enhance that connection without physically touching the sacred grounds of nature, we deploy augmented reality, which converts a device that has previously disconnected us from nature into a tool of understanding. Our every day companion is now a companion in our adventure, educating and guiding us, tracking our movements and our impact. As we explore, the application shows us layers and layers of hidden information, like the properties of a

particular plant, the way something was built or the thoughts of a previous trekker. A third layer of the proposal is aimed at taking locals out of anonymity and putting them, their traditional crafts and means of life in the spotlight. Your experience here is meant to impact your actions forever, taking knowledge and a new friend as a souvenir.

### **Obiettivi**

The ultimate goal is to live an experience that one can learn from and have a better understanding of a bigger picture where the natural cycles and the human cycles influence and depend on each other. We are at that point in history where we cannot stress enough the importance of our actions on this planet. Thus, the project has three main goals: Restauration and conservation: Give new life and individual character to the existing jazzi, using local and ecological material. The interventions are thought out to be humble and subtle to not contrast or impact the natural environment. Community networking: Open communication between users and locals, encouraging new activities and the emergence of workshops and exhibition of local craft, aiming towards preserving and promoting local culture, like connecting with the trade of the cunzàri (local potters). By putting local crafts and skills in a context with a broader cycle, focused on our connection with the environment, the importance of locality and ecology becomes clear, thus giving the passers by an opportunity to look at their surroundings in a new light. Awareness: Create awareness about the existing threats to our environment and educate towards a new approach that is in balance with nature. In this sense, the augmented reality acts as an interactive means towards accessing that knowledge appealing to all ages and typologies of users, combining the traditional background with the state of the art technological advancements. Making this project appealing adds another layer of economic self-sufficiency, because through awareness and growing interest, it can generate revenue for restauration and maintenance.

### Fattibilità tecnica

The proposal has no invasive construction planned, nor does it extend outside traditional building and restauration techniques. Our approach compares the full range of environmental effects assignable to our intervention by quantifying the embodied energy of materials proposed. We also track the inputs and outputs of material flows and assessing how they affect the natural and social environment. We use bioclimatic strategies as main driving topic in our design approach. The first step is to restore the entire structural integrity of the jazzi using local wood, stone and camerotana clay, followed by small touch ups, such as wall and floor treatments. The interiors are proposed to be minimal, with wooden platforms for sleeping bags and structures for hanging hammocks. Some jazzi are fitted with a greenhouse dedicated to food production, while one is proposed to have a glass roof dedicated to shelter the trekkers and astronomy lovers in the cold nights of the year. All functional jazzi are signalled by fiber optic poles, that through their movement generate their own energy. The proposed greenhouses also serve the purpose of passive heating and enhanced natural ventilation. The full restauration of all jazzi and giving into use is estimated to take 1 year, but a phase-by-phase approach could allow opening them to the public one by one in a shorter time span per jazzo. Interventions along the paths are

proposed to create a connection with the character of the jazzi and alternate stopping points during the trek or overnight. The interventions, mainly consisting of small wooden platforms and rock formations, also serve as areas designated for workshops.





