

POLITECNICO DI TORINO
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Honors theses

EXPLORE LOW TECH ARCHITECTURE IN CRITICAL AREA. THE CASE OF PALESTINE

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The need to have shelter, to receive medical treatment, to get an education is a right of every human being. In many places on the Earth, however, there isn't the possibility to ensure this. Natural disasters, largely caused by man, and as well as technological disasters deprive millions of people of their primary assets and push them to migrate in the hope of a better life. The architecture, as a discipline governing space and the existence of man, must be able to respond quickly and accurately to the needs of the community living situations so delicate and fragile. In situations of scarce resources, the solutions adopted are aimed at simplicity and inexpensiveness and generate low tech construction types: quick to make, strong, comfortable, durable, are able to integrate local materials, labor and products.

A place where you have always been ongoing technological disasters is Palestine. History and wars have shaped borders, open wounds, created divisions. All this had devastating results on the general living conditions of the inhabitants of the West Bank. Consequences which then propagate and relapse on every aspect of life, even the possibility of having a home or adequate medical care. The settlements, the construction of the wall and the demolitions carried out by the Israeli army are just some of the measures to take possession of the space and reinvent a geography dominated by Israel. Architecture has become a means of planning serving geo-political and military objectives, used as a form of control, such as fragmentation and land use.



South Front

The design concept is developed in this context with the aim to create self-constructions with the use of modules replicable and repeatable with low cost materials and techniques for the most vulnerable communities of Palestine. The choice of school as a paradigmatic example is due to secure a future for children and more generally to people less fortunate in the area. The project is designed for the strip that starts from East Jerusalem and reaches up to the Jordan Valley via Jericho in the middle of Area C: is an area where the Bedouins and refugees are denied the right to own a home. After the Oslo Accords of 1993, the West Bank was divided into 3 distinct areas: Area A which represents 17% of the territory is under the control of the Palestinian military and administrative, Area B 23% of the territory under the military control of Israel and the Palestinian Authority administrative and Area C about 60% of the territory under the military and administrative control of Israel. In the latter area there is a total ban on building permanent edifices, except for Israeli settlements, consist mostly of concrete and stone. Designing buildings with foundations and reinforced concrete is forbidden.



North Front

The dry arid climate and lack of resources are the main features of the area. The building is therefore the result of different choices, mixing cheap and available materials (among which container, mudbrick and wood), easy and quick to install and climatic, socio-cultural and reinterpretation of the vernacular knowledge. Architecture in these contexts can and should be a means and symbol of rebirth and safety for vulnerable communities; it must also stand as an advocate of peace and harmony in areas devastated by disasters of all kinds.

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