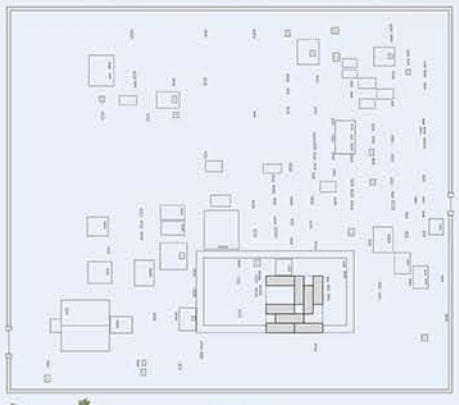


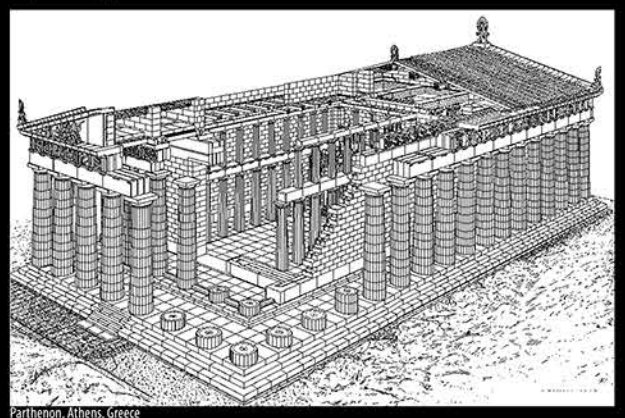
Having a site as Raheen Graveyard, this proposal was based on a worship and reflection space as an architecture element which would play with lighting and views of the surrounding area. The volume created would interact with the existing stone construction in order to provider the users different sensations, perspectives and spacial interaction, due to its jigsaw drawing. The proposal consists on the assembly of pre cast concrete blocks (3Mx1Mx1M) on top of each other, ressembling almost a legos game. This long lasting structure resists the idea of change as it uses methodologies and techniques used in Greek and Roman Architecture. By the contradictory approach of a "non changable" construction, its materiality was studied based on Parthenon and Temple of Zeus, in Greece. The approach of the recreation of the column drums was taken as a parallelepiped shape with a glass finish in order to get a perfect finish, which would ressemble almost like a marble finish. After the pre cast concrete blocks were in place, which already had a rectangular shape cutting, the bronze was poured as it worked as a connector between each block. This technique inspired in Parthenon would prevent any movements and separation between each element of the construction, making it as a long lasting structure.

Parthenon wooden drums connectors (left) and replaced titanium connector (right), Athens, Greece

The columns at Parthenon are quite unique regarding its connections. After breaking marble pieces from the quarry, they were transported and placed on the site, using sand to level and even the surface, creating a perfectly air tighten space. The shafts of two columns have rectangular cuttings for wooden pieces, which were meant to interlock with each drum. Nowadays, to prevent marble damage and to restore this monument, the cider interlocking piece was relpaced by a titanium version which will not rust and will have the same strength as the older version, once these titanium joints are put under pressure they will break but will not damage the marble. This technique provides a secure and protected space for the joint material.

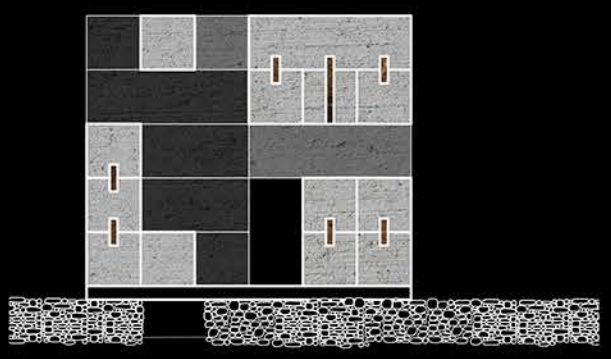
Construction method model representing the blocks of proposal connections

Temple of Zeus, Olympia, Greece

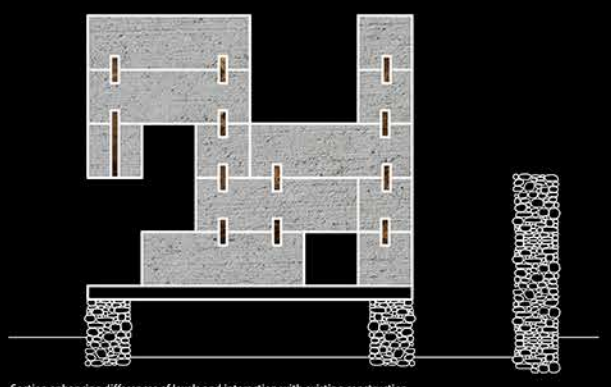


Parthenon, Athens, Greece

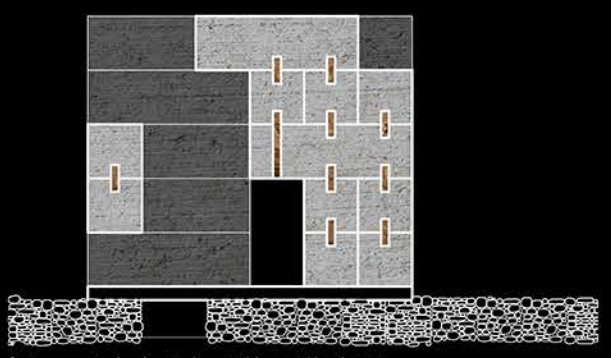
Second model approaching the bronze assembly method



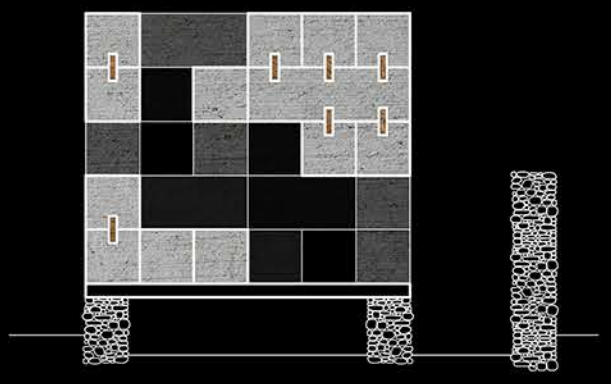
Section enhancing contrasting materials and relation with existing construction



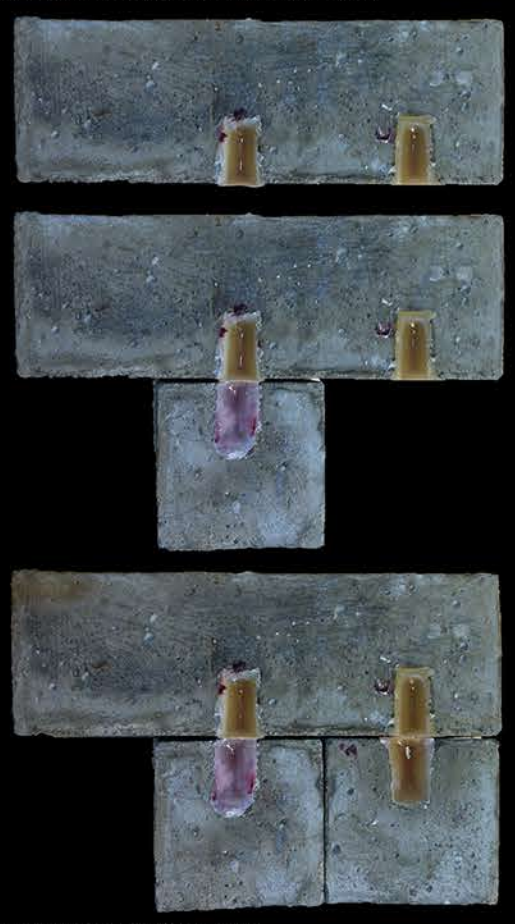
Section enhancing differences of levels and interaction with existing construction



Section representing the volumetric element with bronze visible in the interior



Section representing the differents plans of concrete



First model approaching the bronze assembly method

Both techniques on how to approach the interlocking element of the pre cast concrete blocks presented in models are used in the project. Firstly, the usage of bronze as an element pin, which is poured once the blocks are connected on site with rectangular cuttings, is a technique which prevents the alloy to interact with the environment. As an alloy, bronze is composed by 57% of Copper, 7% Tin and 5% of Lead (this one coated on iron clamps that interlocked the blocks of the base of Parthenon). On the other hand, the second approach of a vertical bronze clamp (Picture above) will be used to provide the user a suprise element and a construction hint. In order to assume a long lasting structure, the concrete mixture will consist on cement, sand, aggregate, brick dust and volcanic ash, used in Pantheon in Rome to strengthen the durability of the concrete mix. To maximize its longevity the unreinforced concrete will have a brick faced framework, the same method of Pantheon in Rome.

Volumetric forms of the connectors