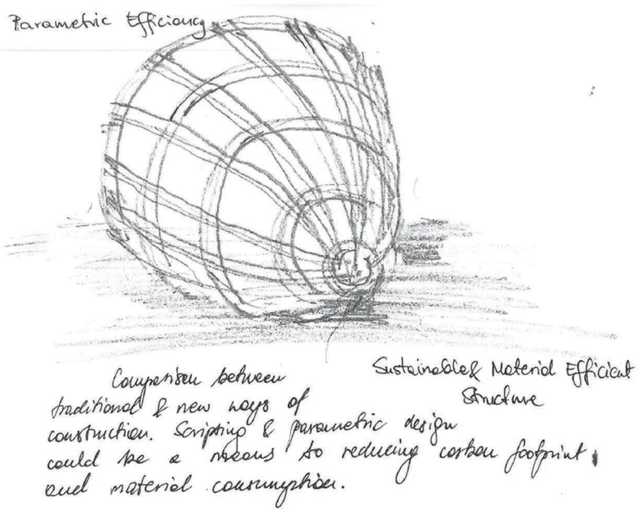
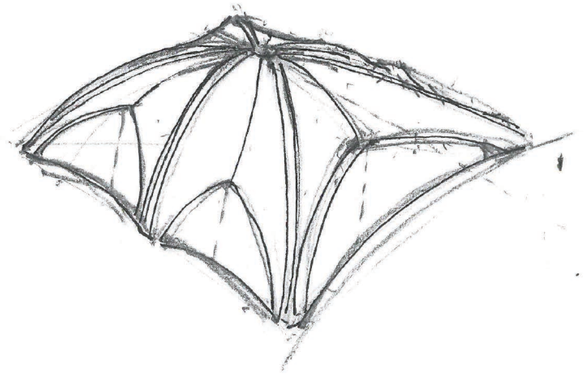
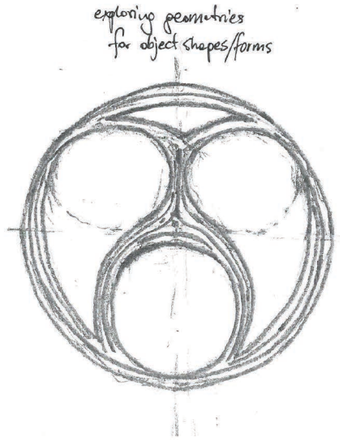
Process

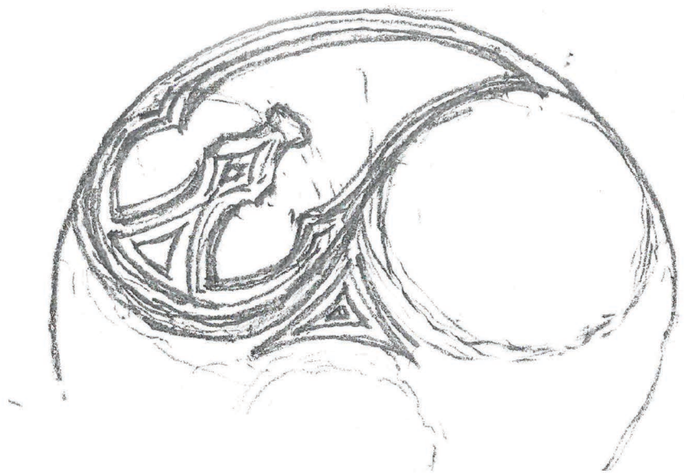
Exploring Gothic construction and ornament within the context of parametric design. Gothic architecture is a symbol of mathematical and geometrical design. With the era of digitalisation (scripting and 3d visualisation), tasks that would take long time to execute in the past are now done with more time and material efficiency.

Following the methodology of 'From Part To Whole', I decided to pursue investigation on rose windows geometry. While doing the research, I decided to translate the intersections of circular components into a 3d representation. The sketches show the study of geometry and initial idea for the script. Adapting the medieval structure, I wanted to explore ribbed and modular components that would influence the whole.









Gothic ornament is stricly geometrical and appears to be of structural integrity in the most building examples.

The sketches represent exploration of the sacred cut and logic behind ornamenting of gothic windows. Most of the geometry is based around intersection of circular shapes- as shown in the sketches of ornaments and the rose window.

During my experiments with the rose window script I discovered that it could be transformed into a 3d representation: using spheres as a basic shape for transformation or intersection.

With this thought I started thinking about implementing the circulular/intersection logic to create a system of ribs.