Social Housing | “Accretio“ Maximilian Michl

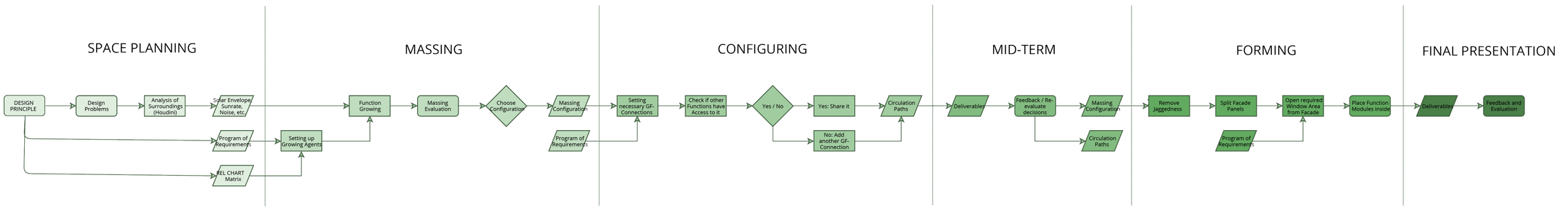
In the early stages, I kept on reencountering some main problems. How to open up the site and make the entrance more friendly? How to provide room to break out of your room? How to provide some privacy to the inhabitants with that many public functions? Through the use of the decided design principles many of those were mitigated if not completely resolved.

Another key aspect for me was to grow within the given site conditions making it a very specific design solution as well as allowing for the growth of a homogeneous community, spreading a positive environment inside the building.

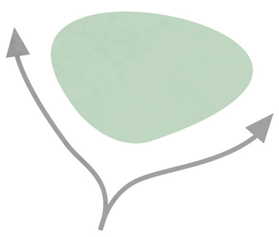
The growth of a building due to site conditions was especially interesting and therefore, became the main focus of my procedural modelling and coding. After a thorough analysis of the site and its external factors a two way optimized agent based growth was implemented. Functions move into a equilibrium between optimal conditions and relations between each other.

As a last step an algorithm was added to split up the façade and find best positions for the windows. The split is to a certain degree random, creating various variations throughout the panels.

Urban Plan 1:2000



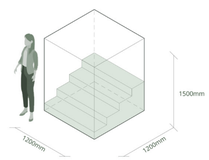
Flow Chart Project Stages

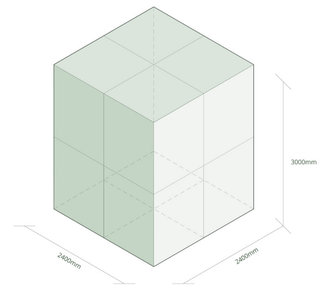


Design Principle Fluid Movement

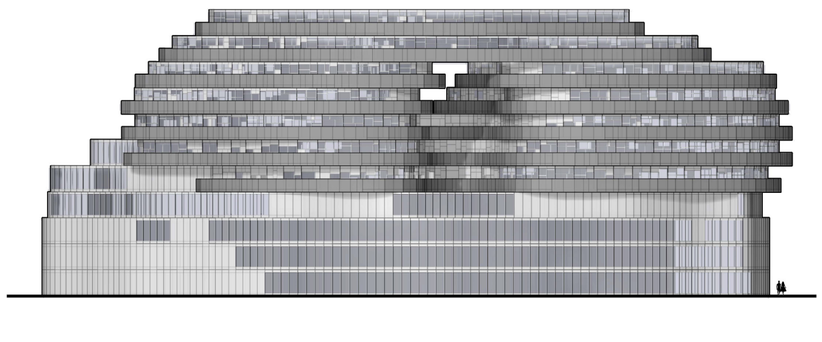
Design Principle Free up Top Space

Design Principle Zoning

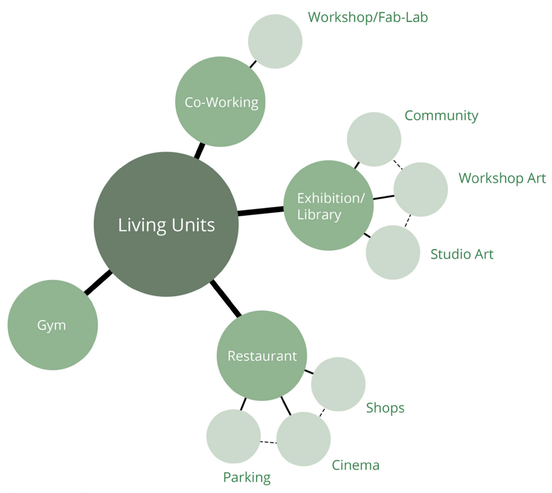




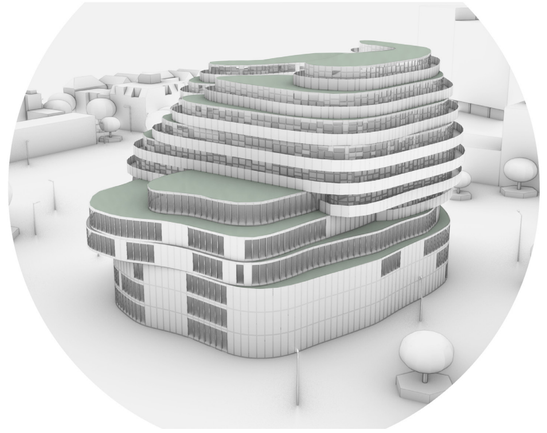
Planning Voxel Dimensions



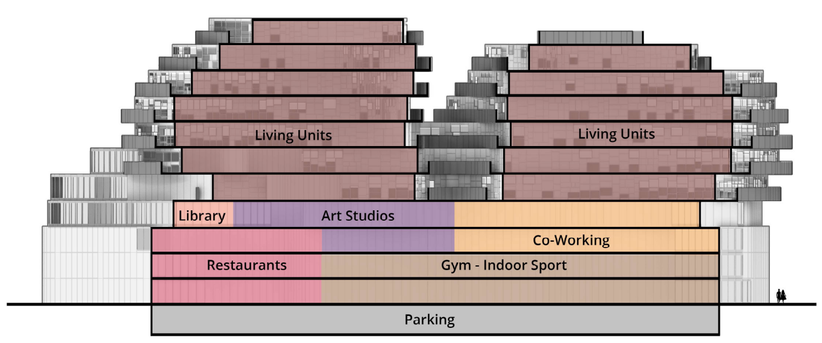
South Elevation 1:500



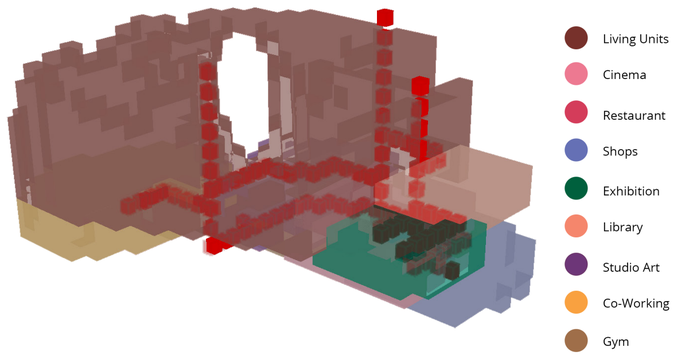
Network Relation of Functions



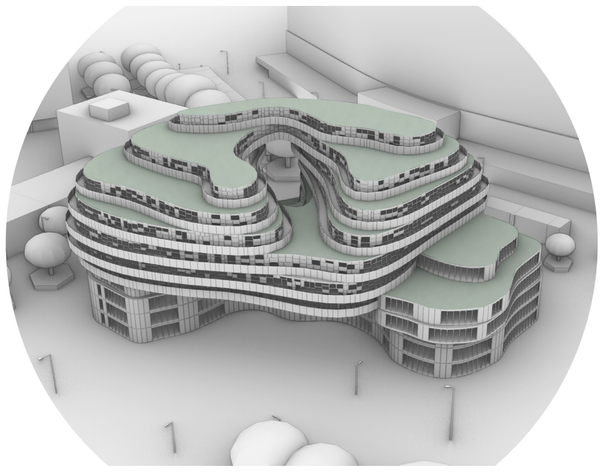
Perspective West Offices View



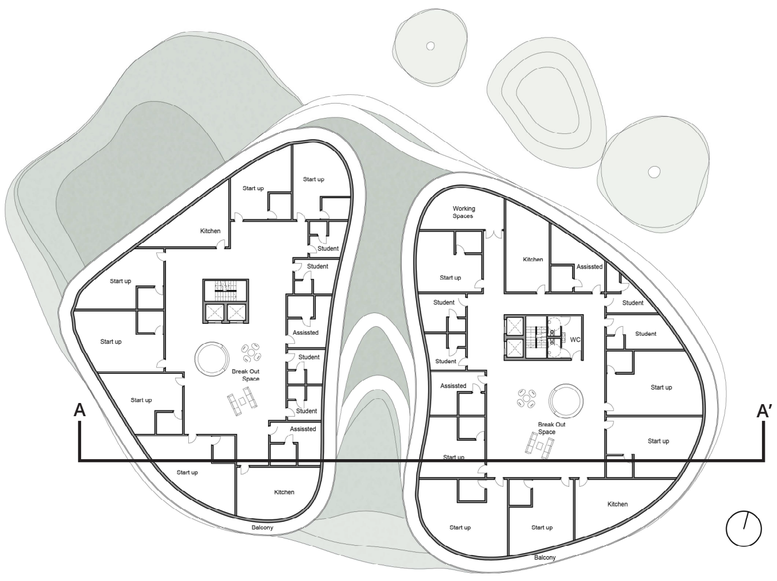
Section AA’ 1:500



Circulation Internal Pathways



Perspective Birds View



7F Floor Plan 1:500

Perspective Front Facade