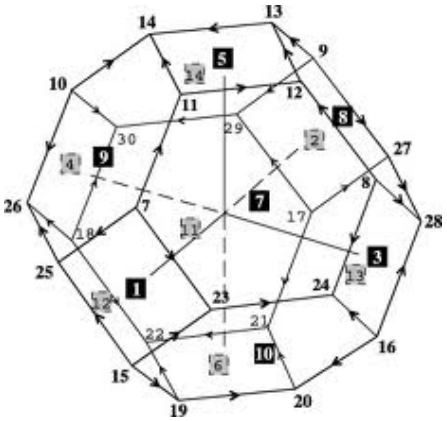
DEEP FUTURES EXPO PROTOTYPES FOR THE FUTURE CITY



INTRODUCTION ASSIGNMENT

The first exercise will be exploring the space-making opportunities of a single component derived from a geometry of space-filling tessellation. The 14-sided truncated octahedron is the only Archimedian solid* that is able to create an endlessly repeating closely packed group. Using the potential of that solid you will be breaking free by its rigidity by exploring its interiority and structure while not loosing its geometrical logic. You can either focus on certain areas (vertices, edges, volume), assign different material qualities and use a set of transformations that are based on mathematical precision to achieve that goal.

Form groups of 3 students and split one truncated octahedron into 4 volumes. Each student picks one of which the 4th is a dedicated void (empy) within the geometrical object. Decipher, represent and reshuffle your part of the geometrical shape without loosing the mathematical precision and not presenting the original object, with following:

- Line(s)
- Surface(s)
- Volume(s)

and add some of following material qualities:

-transparency
-opacity
-colour (white, black, red and move)
-reflectivity

Each group will be presenting their individual parts (which are able to reconnect) in a physical model to a larger geometry and explain their process with a precise linedrawing and digital model.

Deliverables:

4 landscape plots: 120x50
1 physical model

Date: TBD

* There are five **platonic solids**: the tetrahedron, icosahedron, dodecahedron, octahedron and cube.
The cube is the only Platonic Solids that tiles space.
archimedean solids: highly symmetric, semi-regular convex polyhedra composed of two or more types of regular convex polygons meeting in identical vertices.There are thirteen Archimedean solids: the truncated tetrahedron, truncated icosahedron, snub cube, snub dodecahedron, rhombicosidodecahed- ron, truncated icosidodecahedron, truncated cuboctahedron, icosidodecahedron, rhombi- cuboctahedron, truncated dodecahedron, cuboctahedron, truncated cube, and truncated octahedron.
The truncated octahedron is the only Archimedean solids that tiles space.