

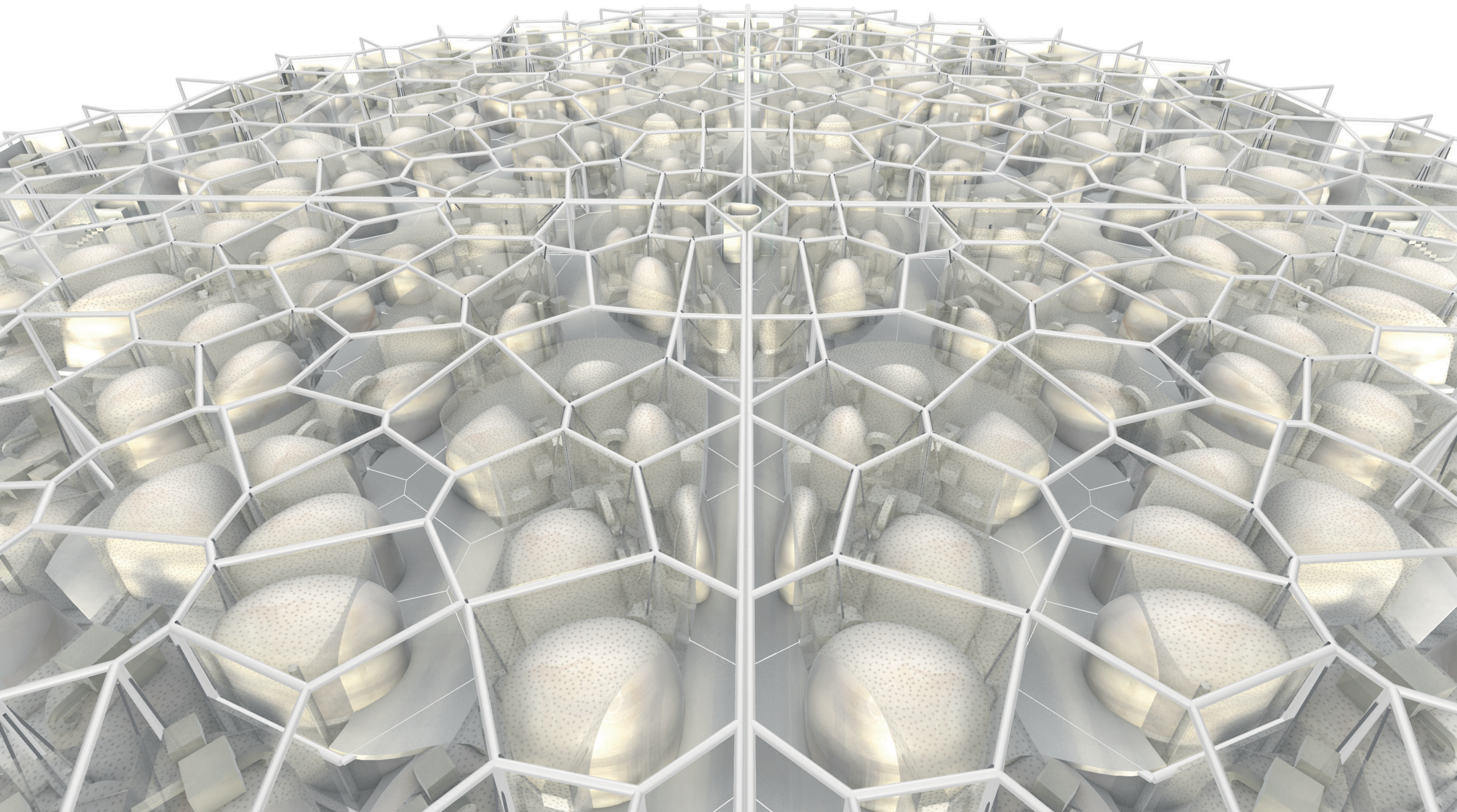
# Enhanced REALITY

Ofek Raz  
Final project

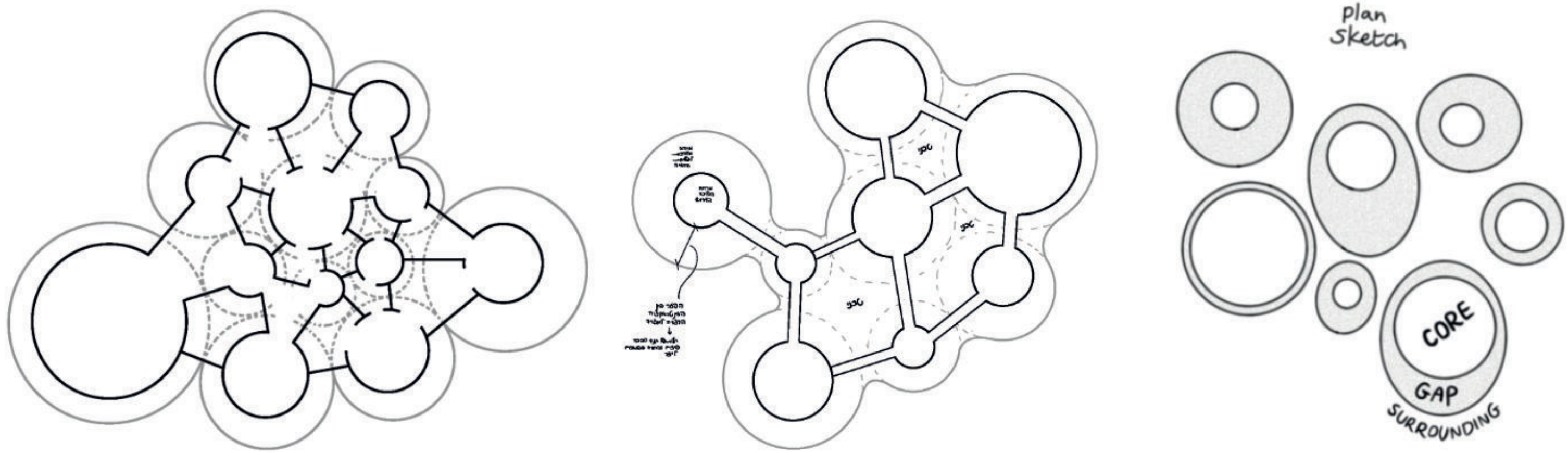
How will the physical environment planning change, when essential parts of it can be replaced with virtual material?

As time passes by, the balance between the physical and virtual space is a subject to change, and the boundaries between them blur. Even though today a huge amount of thought, effort and resources are invested in creating comfortable environments, the existence of digital material can meet some of our needs, therefore, parts of the built physical material

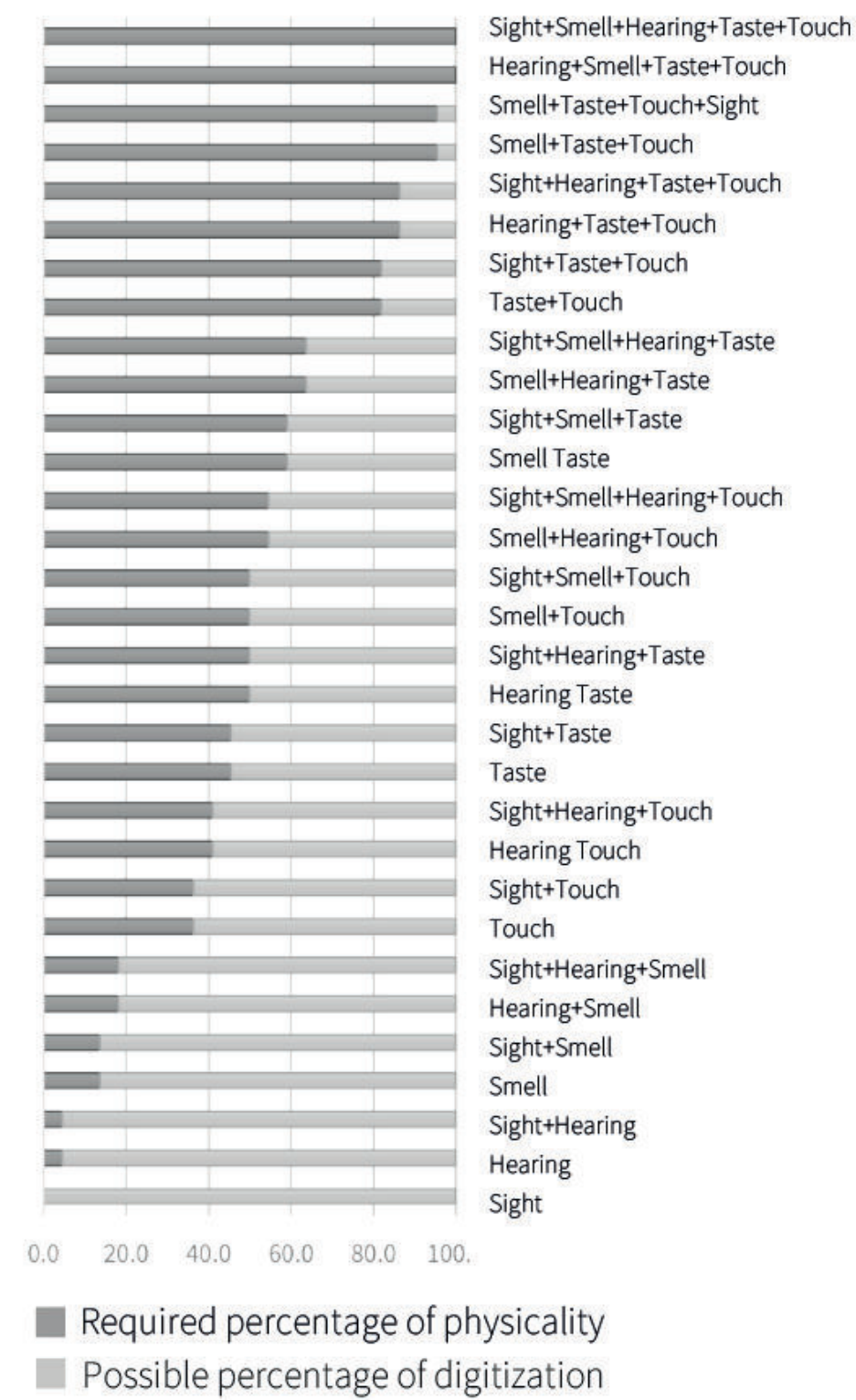
are redundant. As space can be reduced due to the existence of the digital material, The architect's job will be to plan the balance of the physical and digital material in space according to physical limitations and the wanted experience. It's also possible to create a variety of environments in one physical space - without moving a bit.



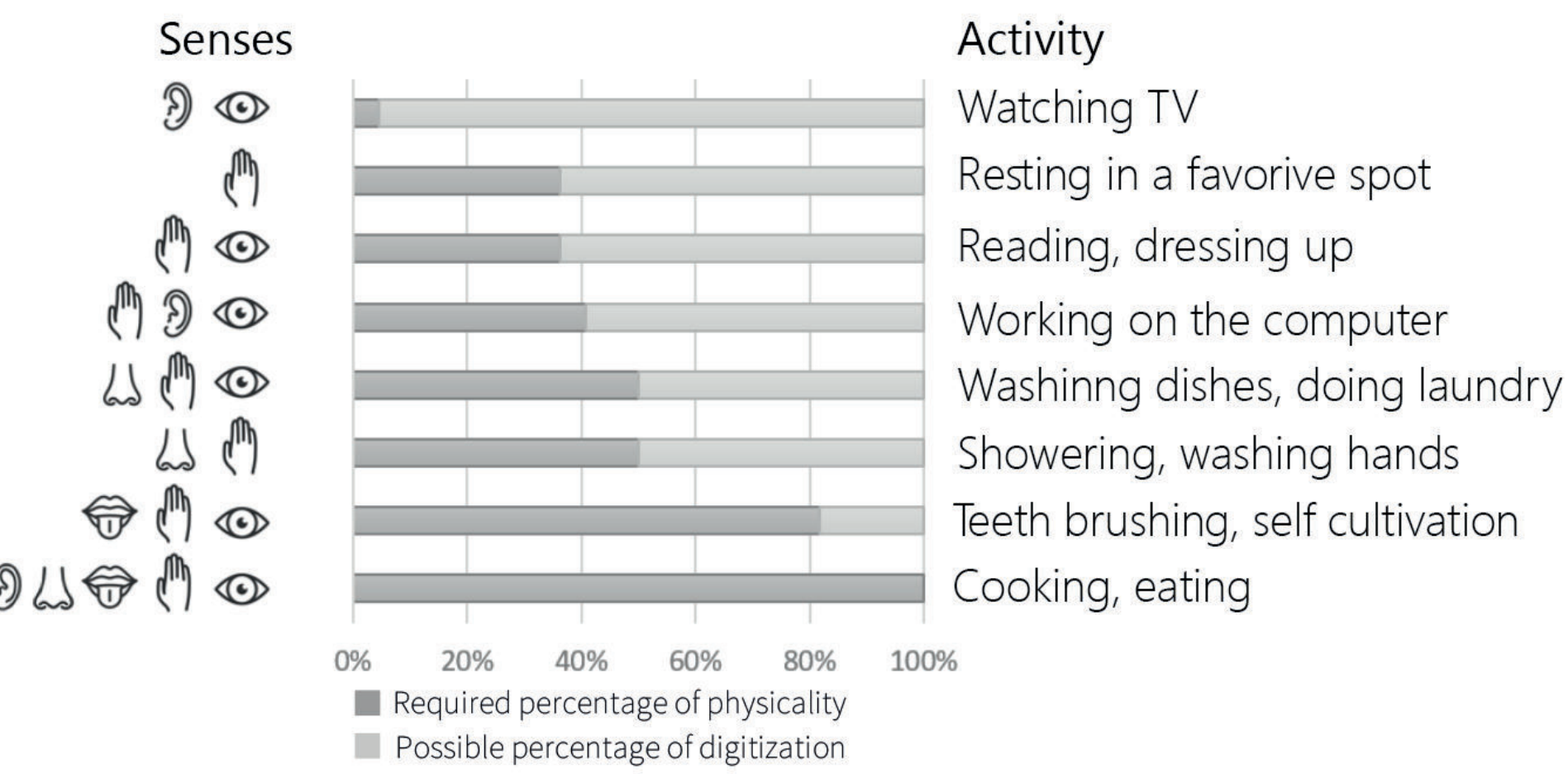




### Universal Sensory Index

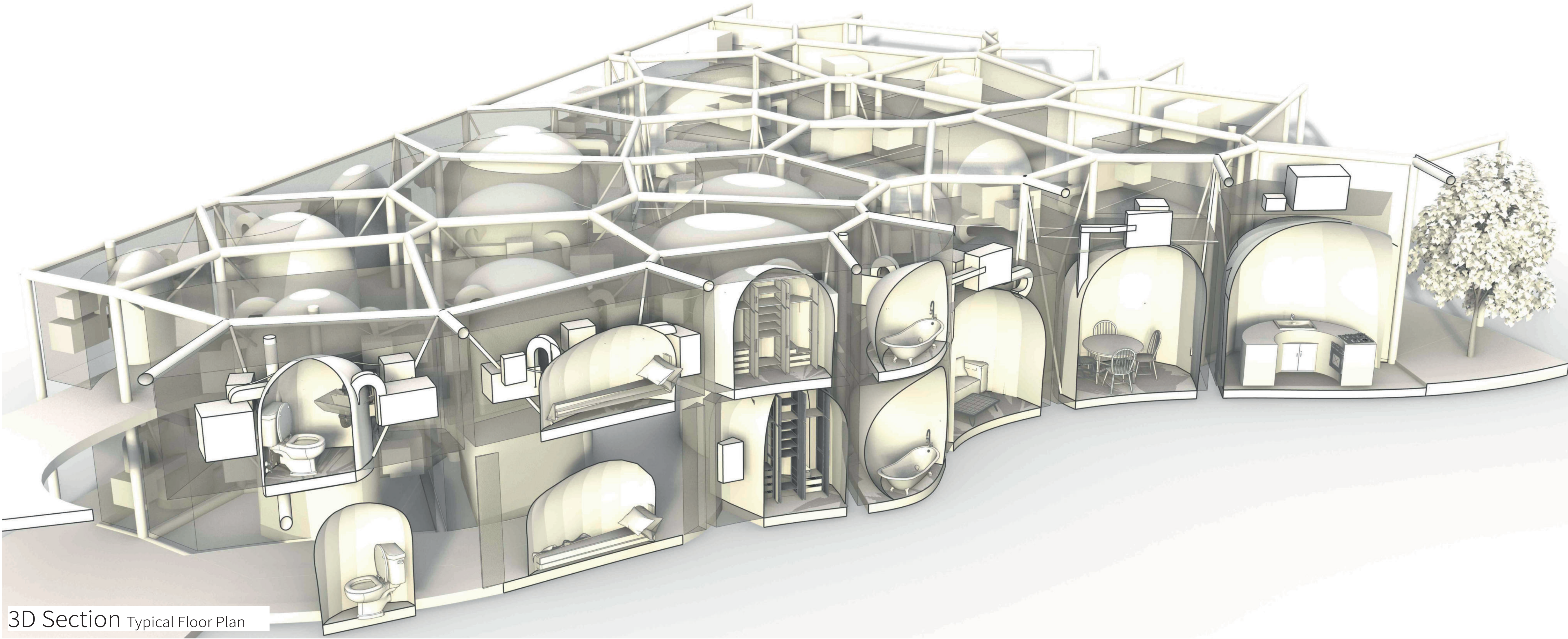
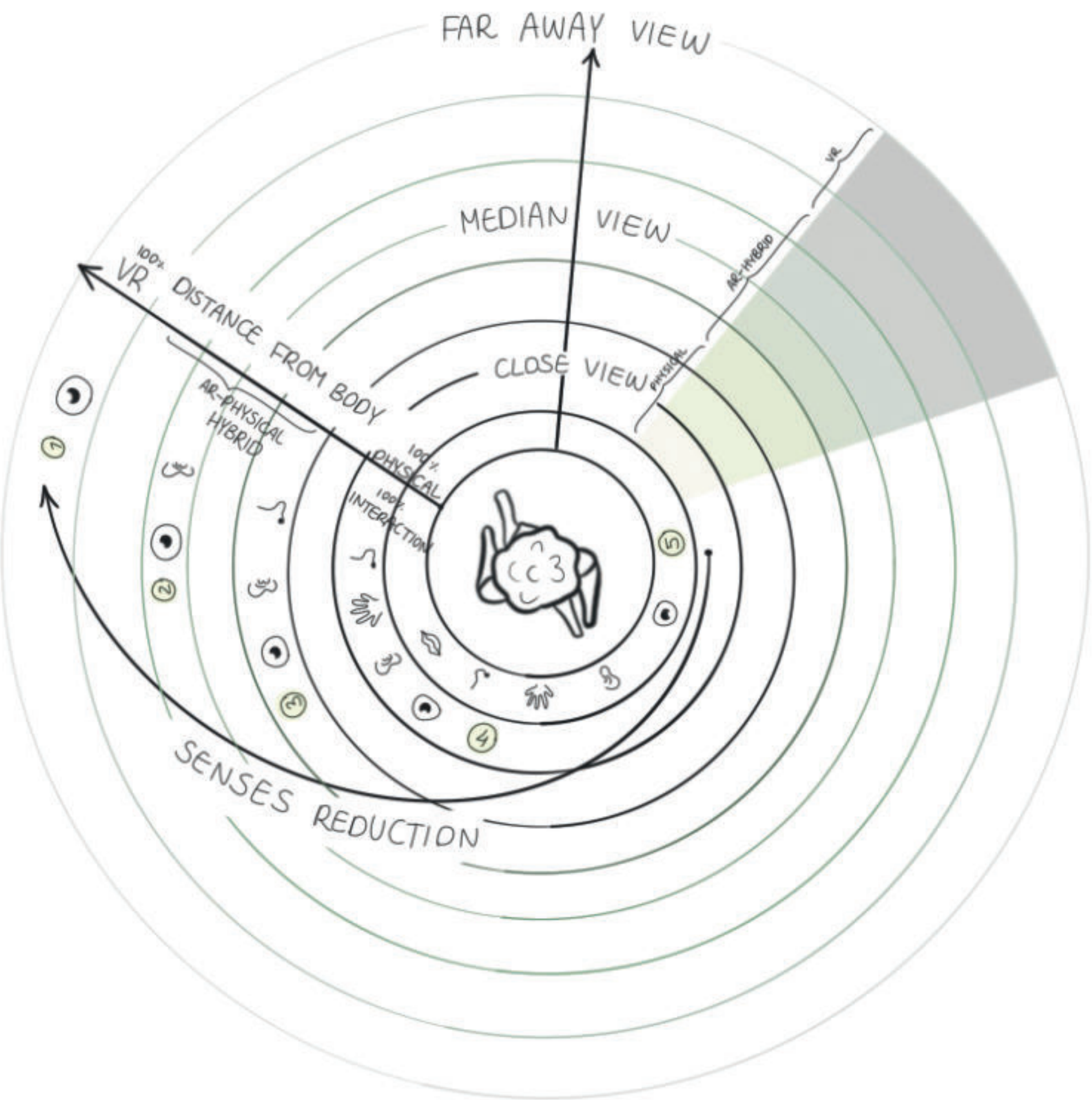


The index is a mathematical algorithm, made by ranking different senses according to their range of activity. By doing that, all of the sensory combinations can be made and evaluated numerically. By that, the hybrid-ness of the hybrid world can be defined, as we can now tell by percentage how physical does the space for a specific activity has to be, and how virtual it can be. This is the potential physical matter redundancy in every action we do. My specification was for house activities.

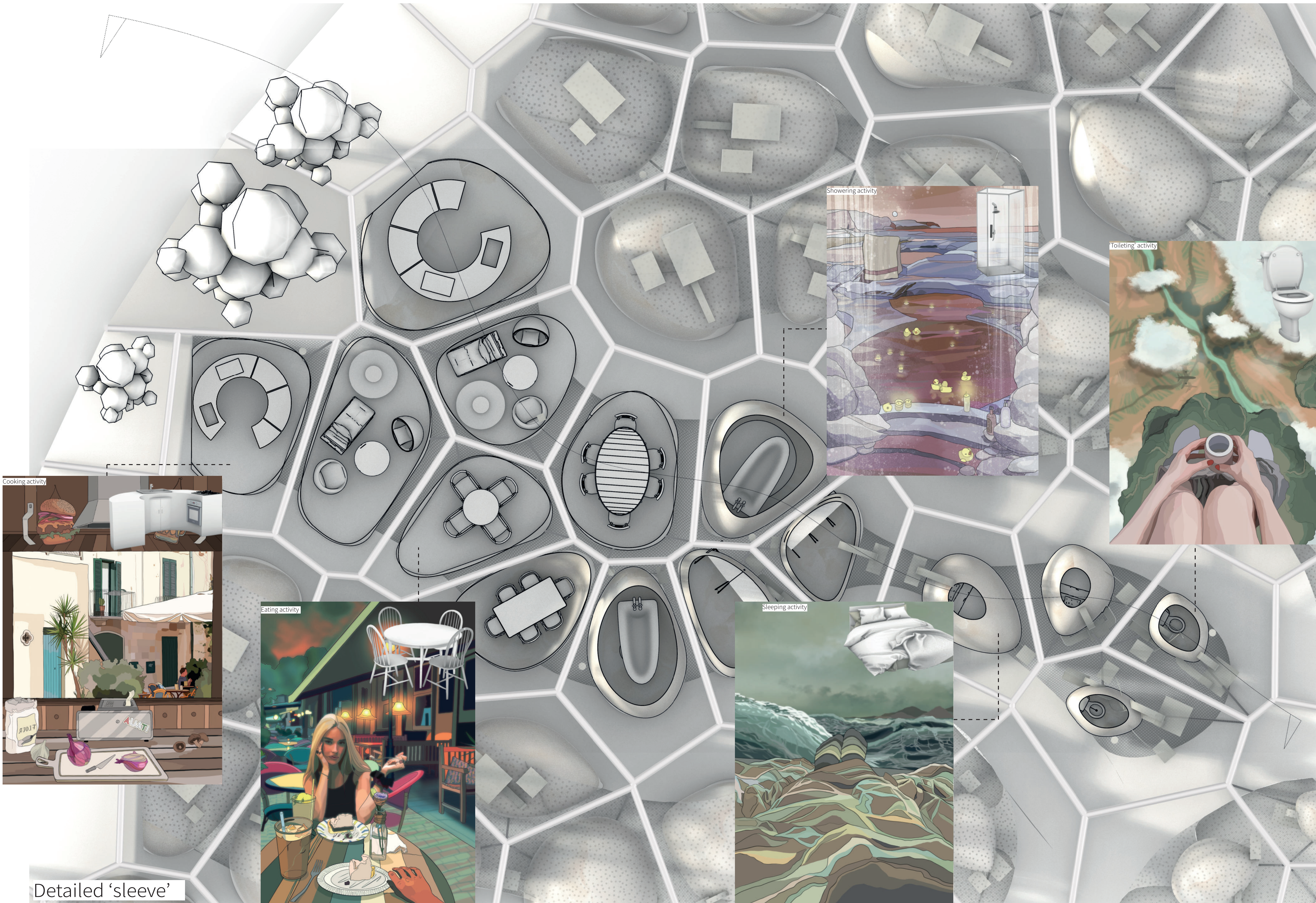


### Floor plan

Different activities claim different combination of senses, different physical matter and different space to move in. Therefore, each will be balanced differently with the amount of physical space and virtual matter. The more “virtual” activities claim a smaller physical space for movement and a larger space for systems that support a higher leveled virtual matter. The senses involved are ranked low on the universal sensory index. For example, watching tv or working on the computer. On the other hand, the more “physical” the activity is, the more physical space it consumes and less systems it requires. In a floor plan, the activities get more physical and big as they get closer to the facade, and more virtual and small as they get closer to the core

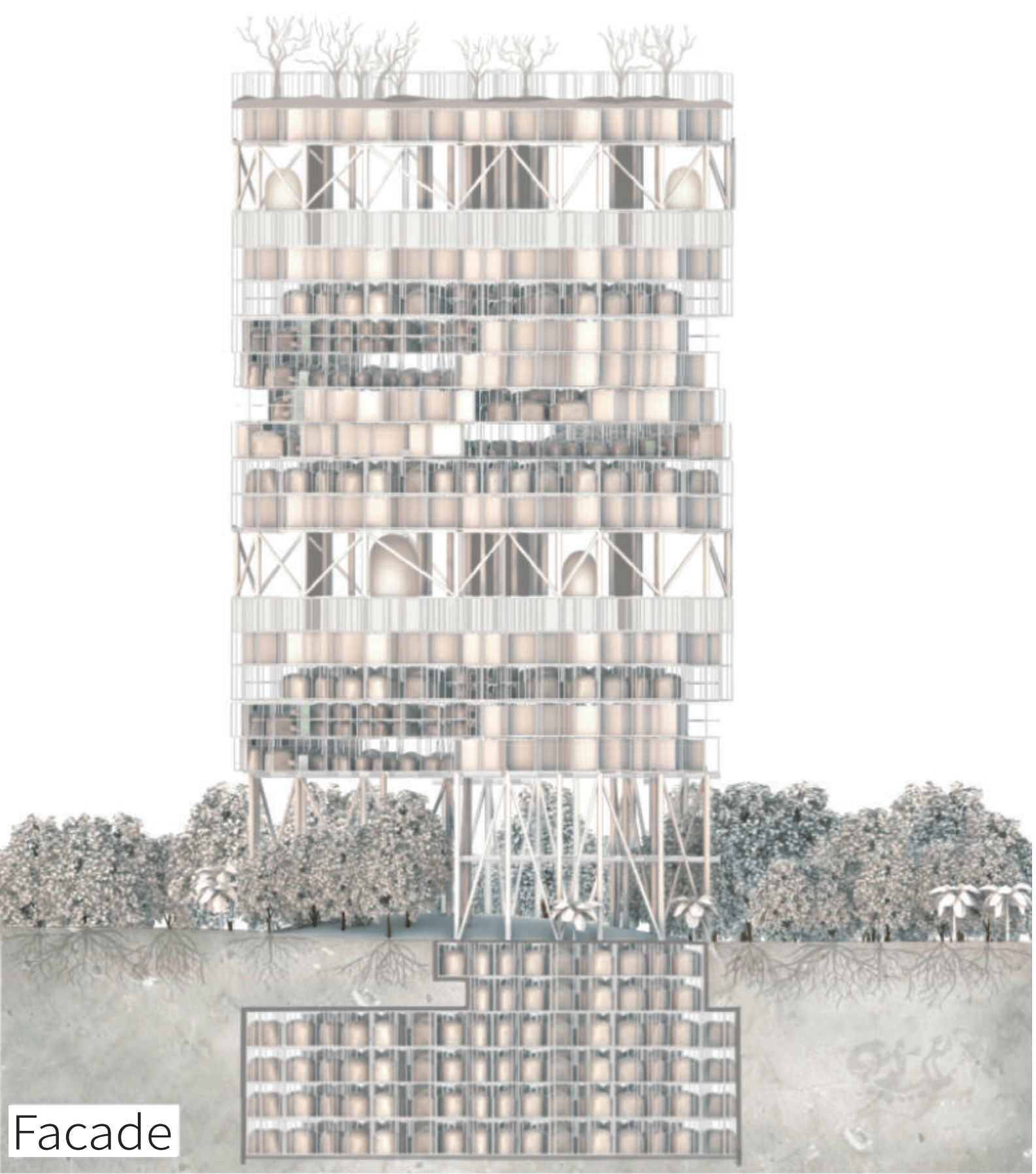


3D Section Typical Floor Plan

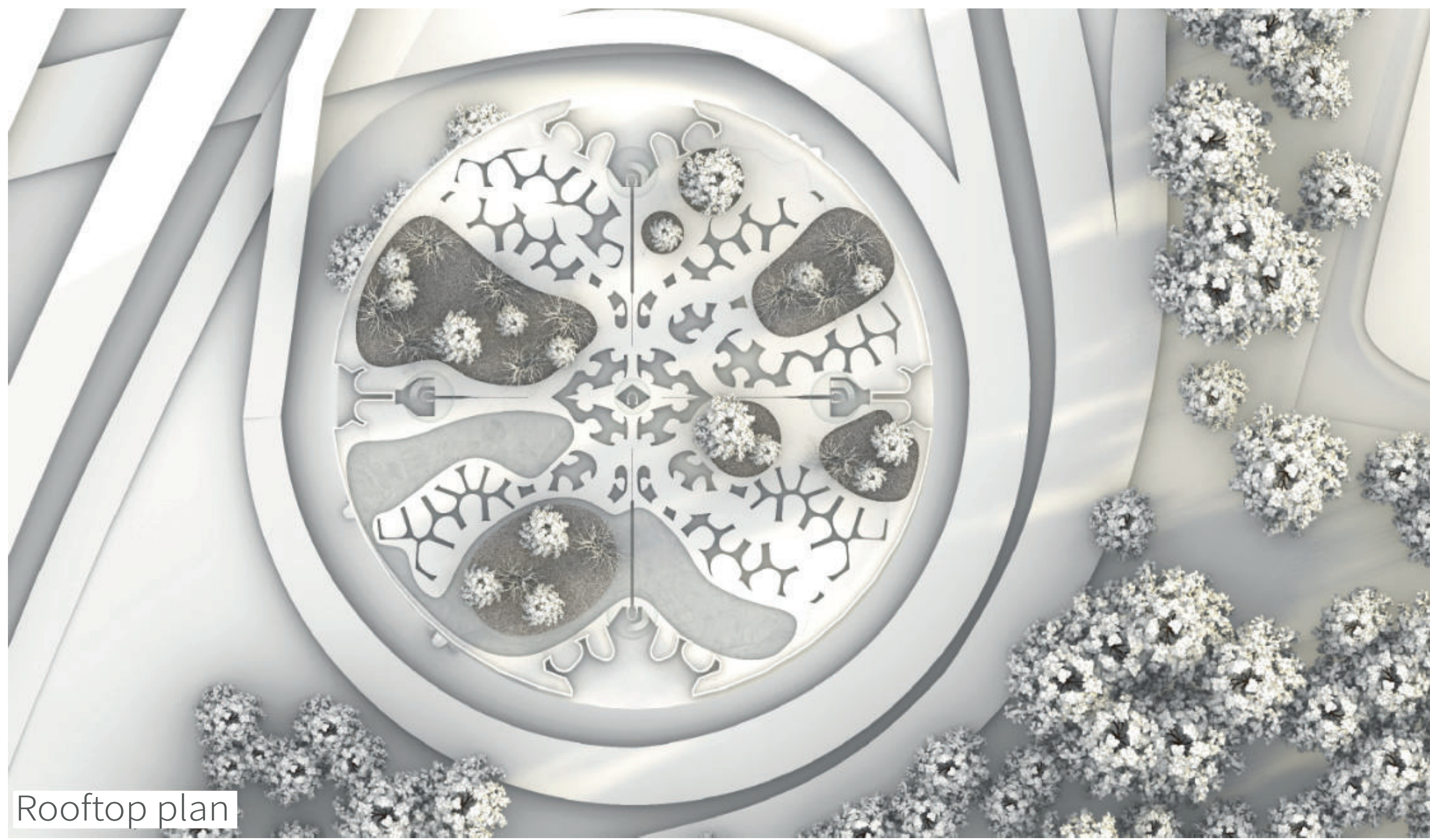


Detailed 'sleeve'

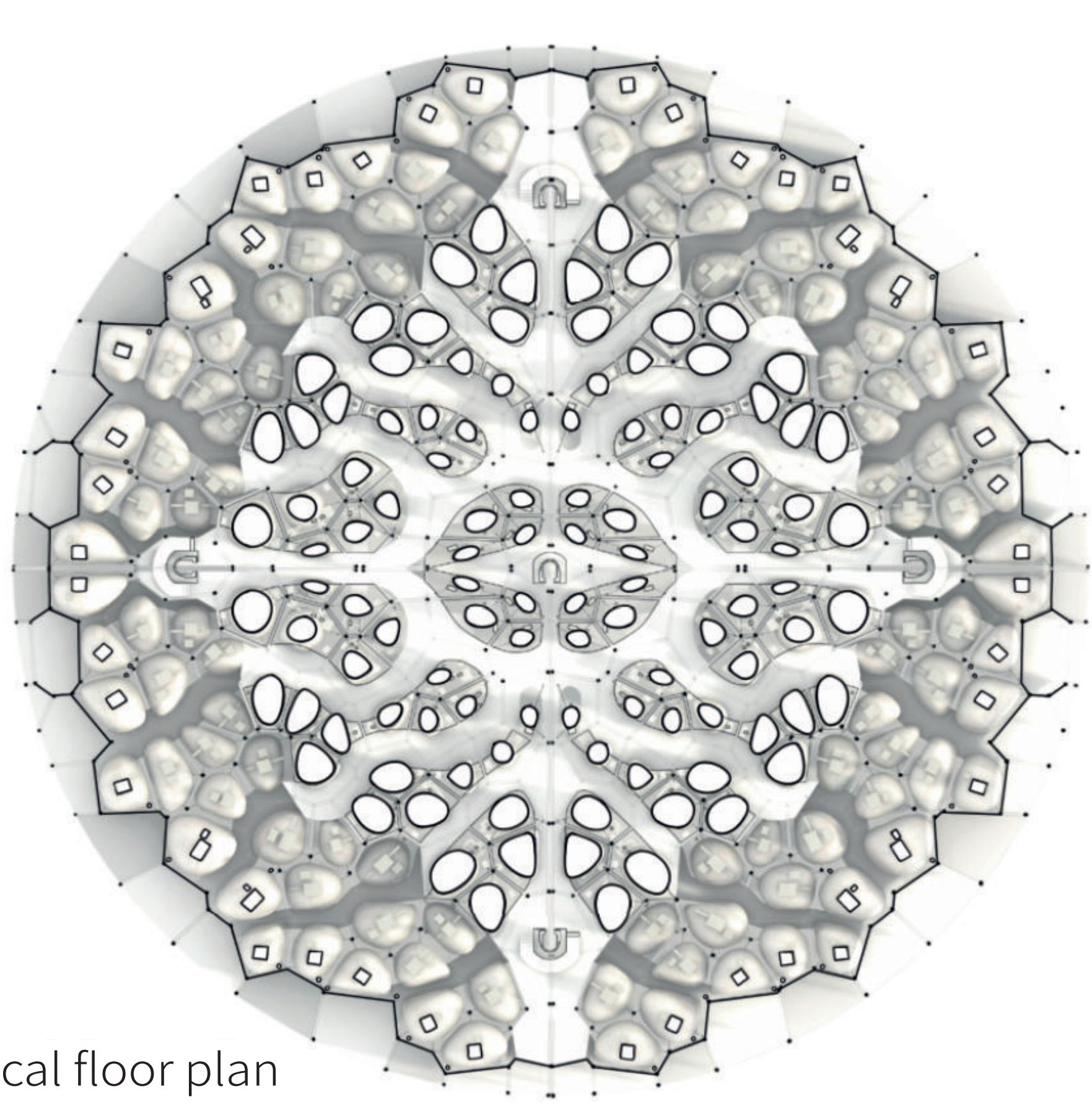




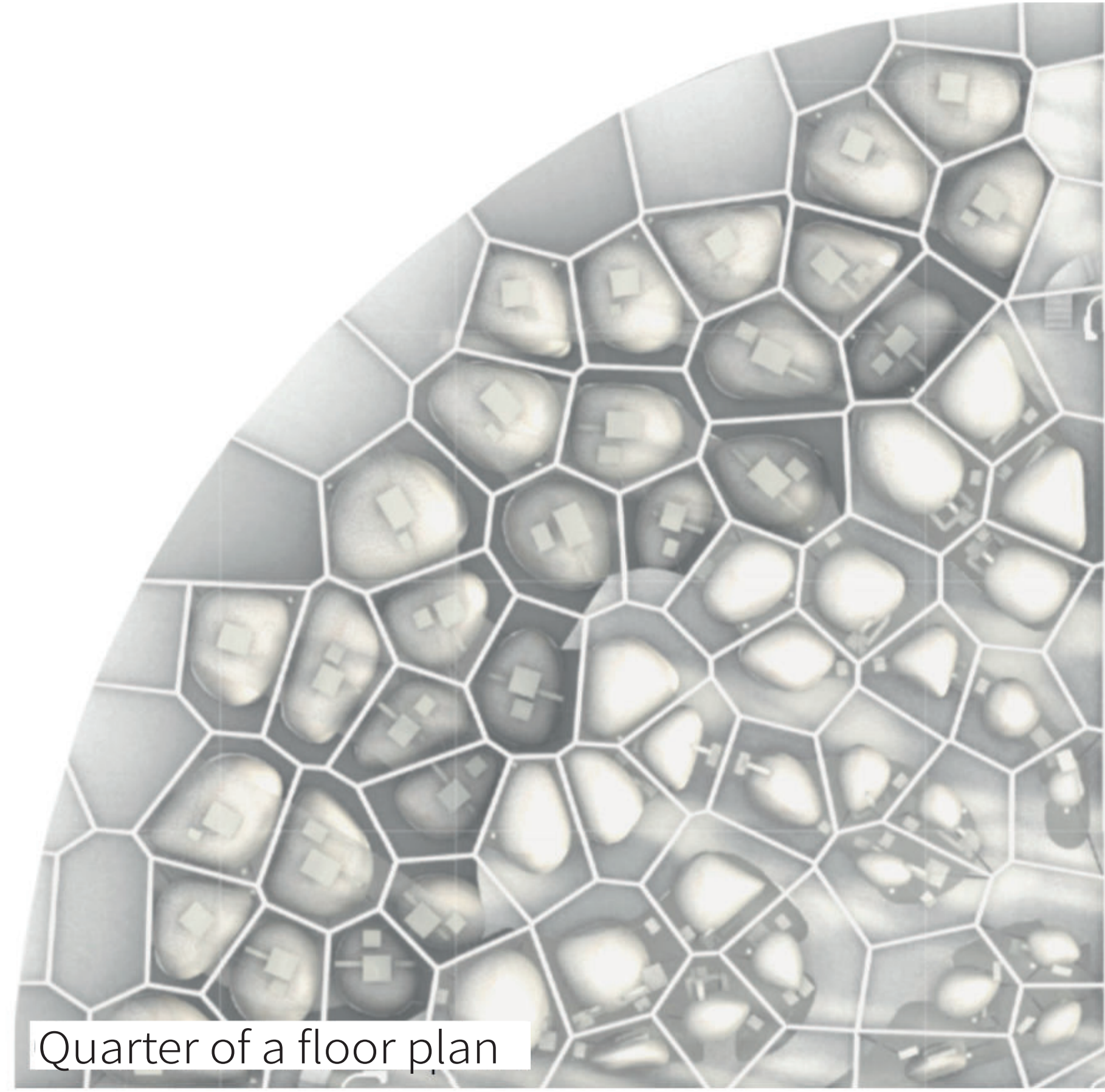
Facade



Rooftop plan



Typical floor plan



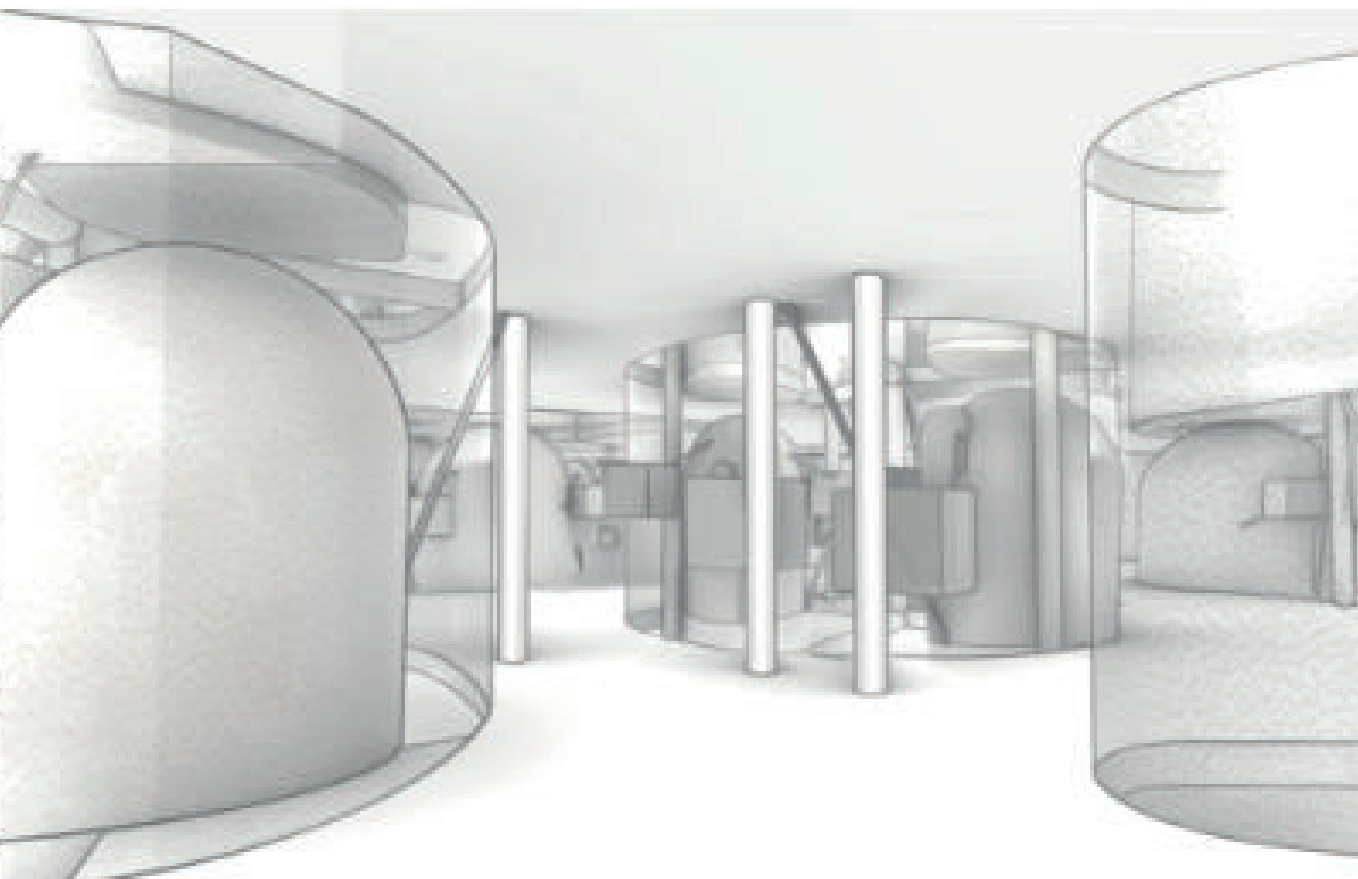
Quarter of a floor plan



Hallway view - With and without AR lenses



Hallway view - With and without AR lenses



Hallway view - With and without AR lenses



Sleeping activity - With AR lenses



Without AR lenses

