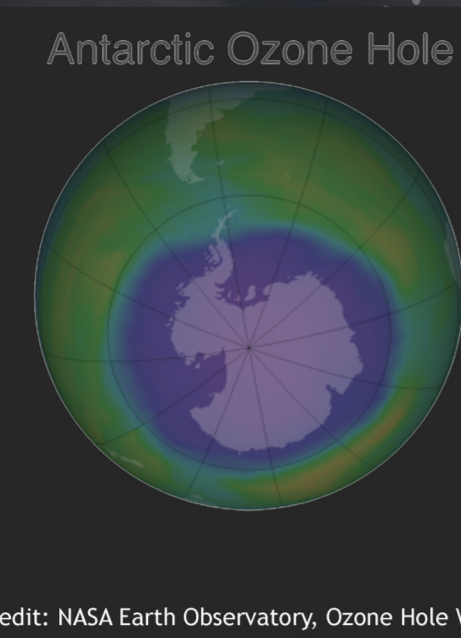
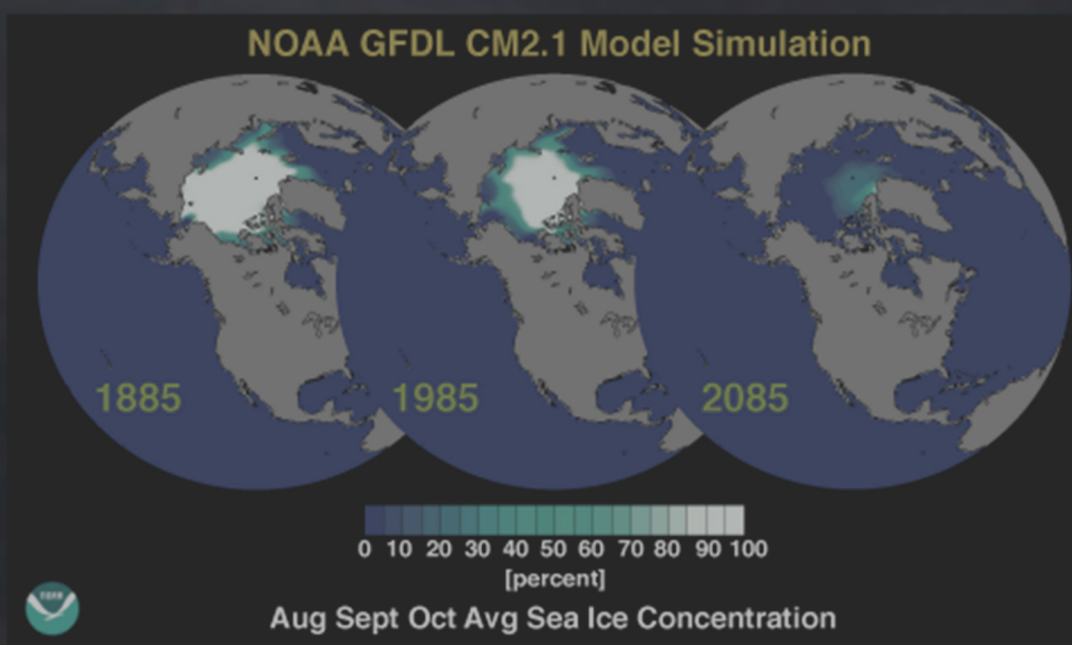


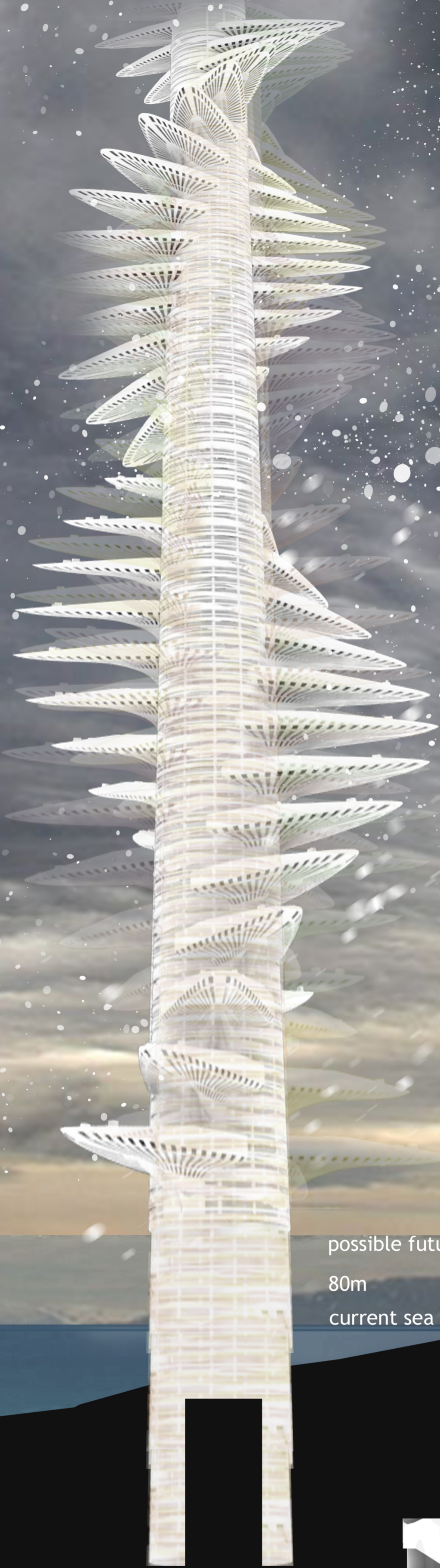
NOMADIC

COMMUNITITES

HANK HUANG | NANCY | ARCH484 | FALL

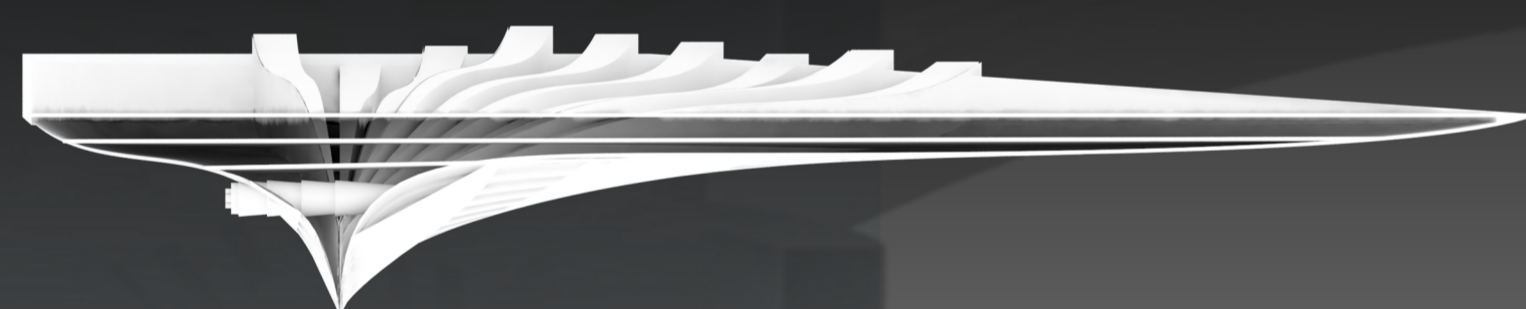


Due to the Industrial Revolution and increase human behaviour, the earth is releasing more CO₂ into the atmosphere. As a result, the earth is experiencing a process of Greenhouse Effect that temperature is raising and the polar ice caps are becoming thinner. Image on the right shows the ozone hole over Antarctica on October 2, 2015, when it had reached its largest single-day area for the year, spanning 28.2 million square kilometers. According to the National Snow and Ice Data Center, since 1979 winter, Arctic ice extent has decreased about 4.2 percent per decade. By 2050, the earth's temperature will rise by 2 degrees Celsius and 3 degrees by 2070. If all the ice on earth melted, the sea level will rise about 80 meters, most of the cities would be destroyed. Human society might encounter an extremely rapid climate change in the future.

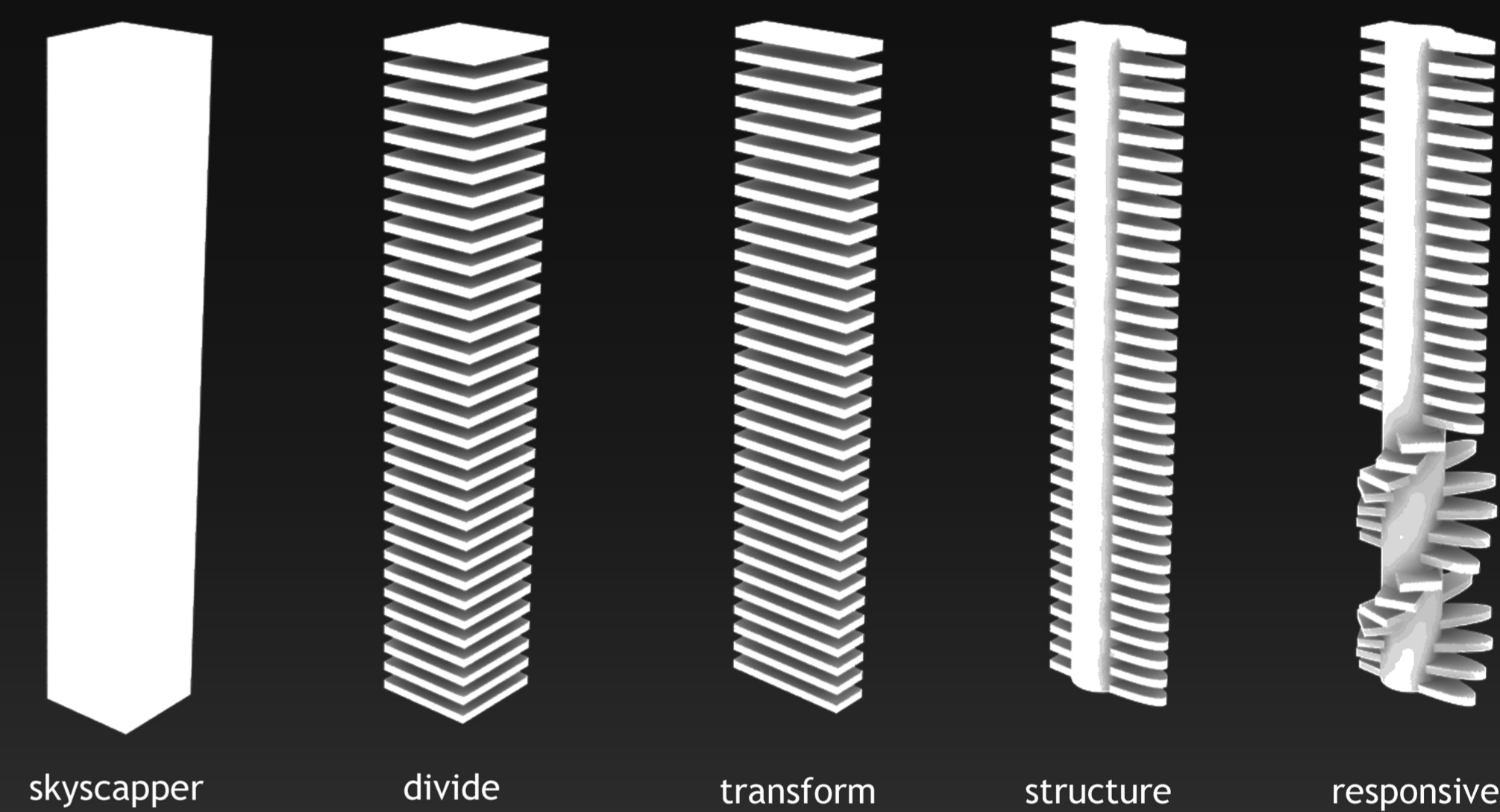
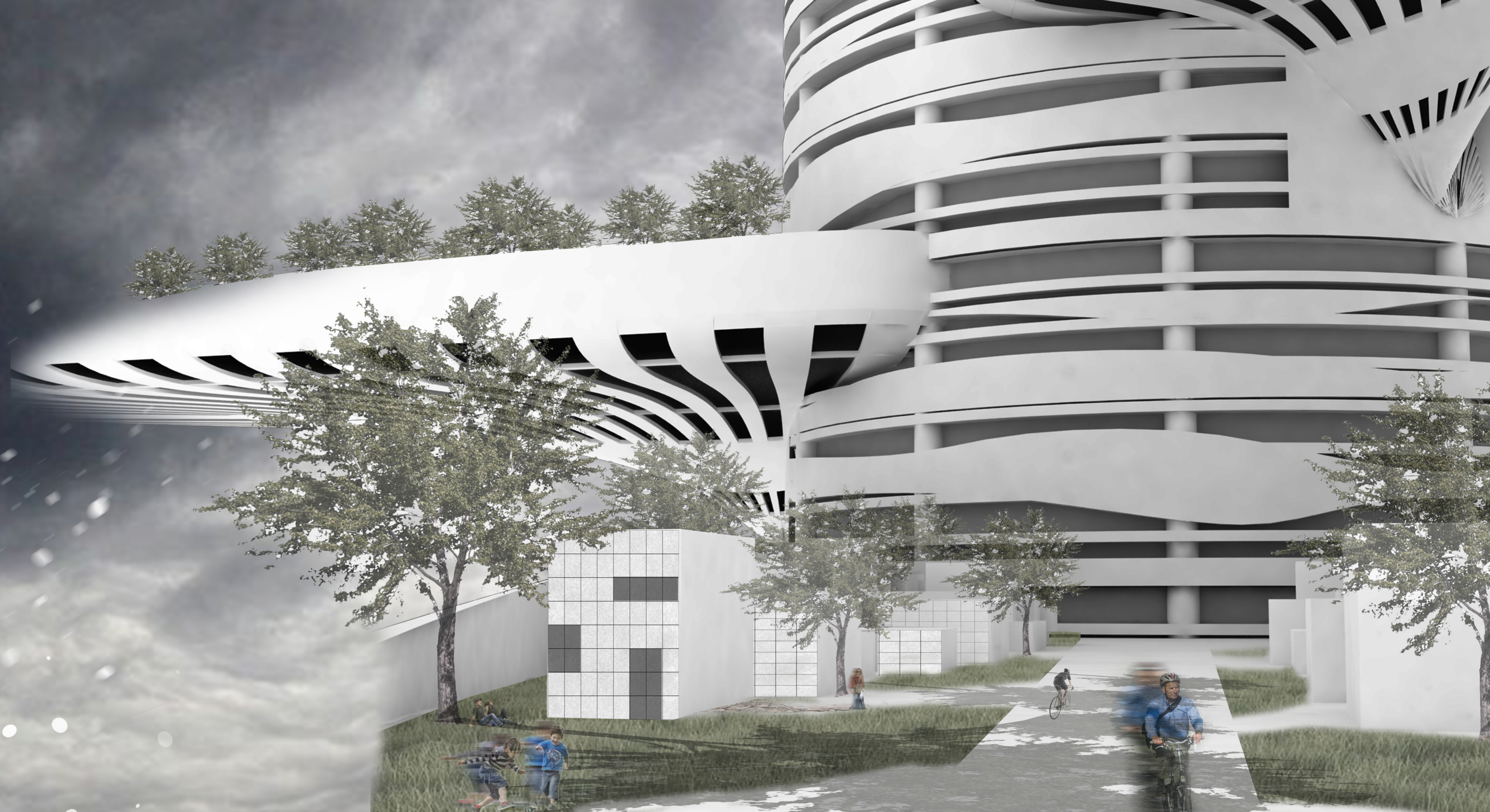
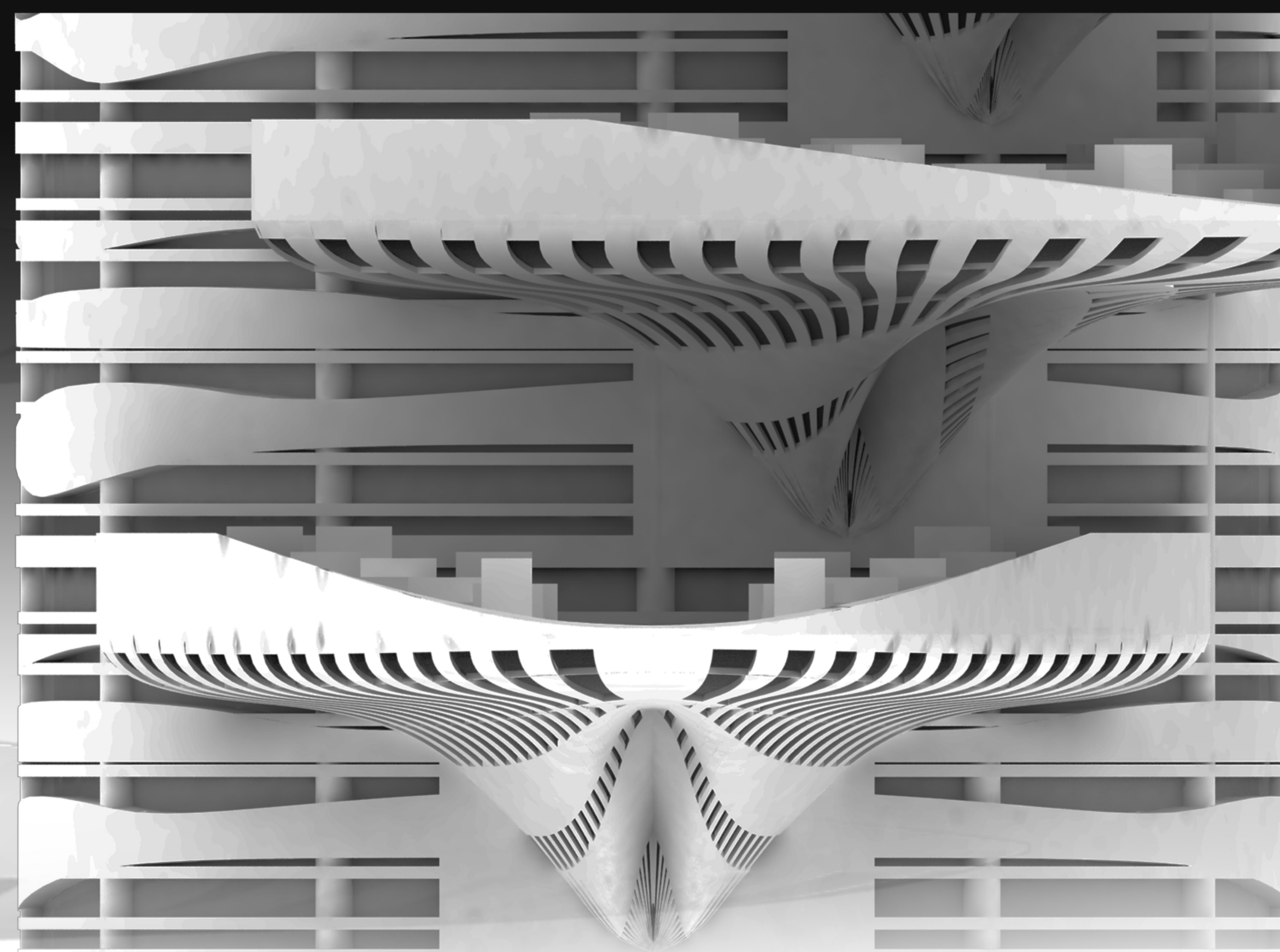


possible future sea level
80m
current sea level

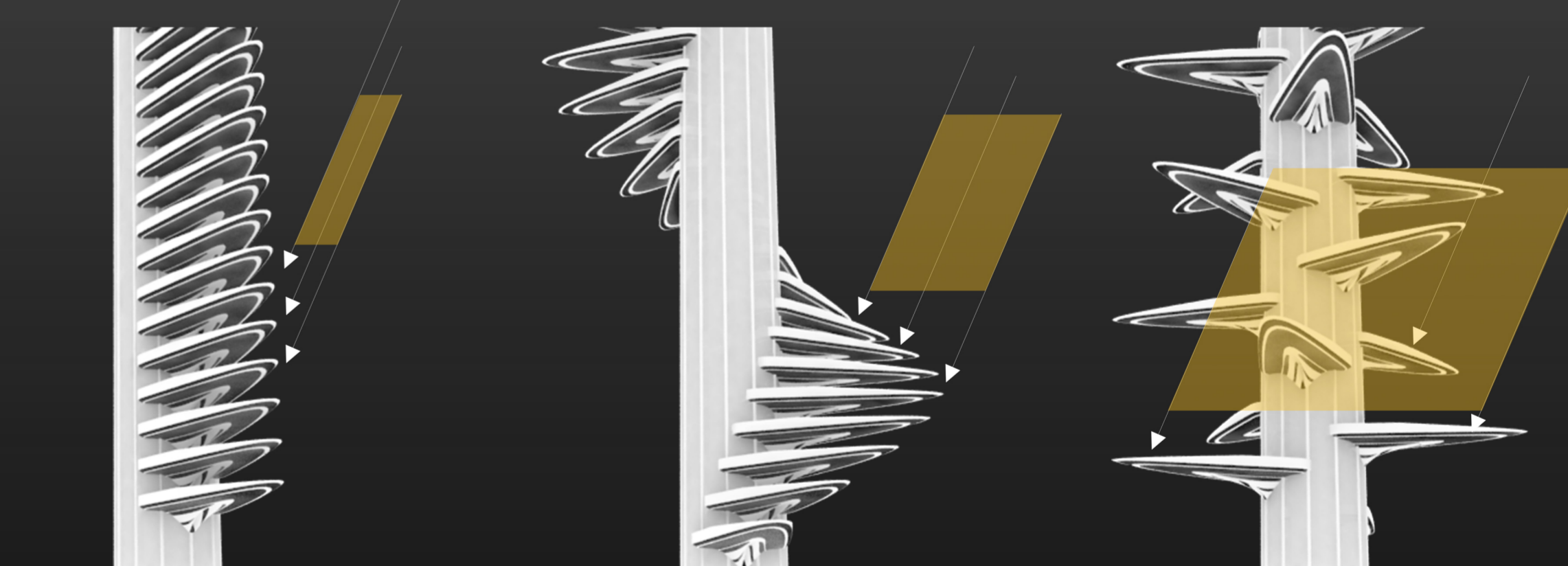
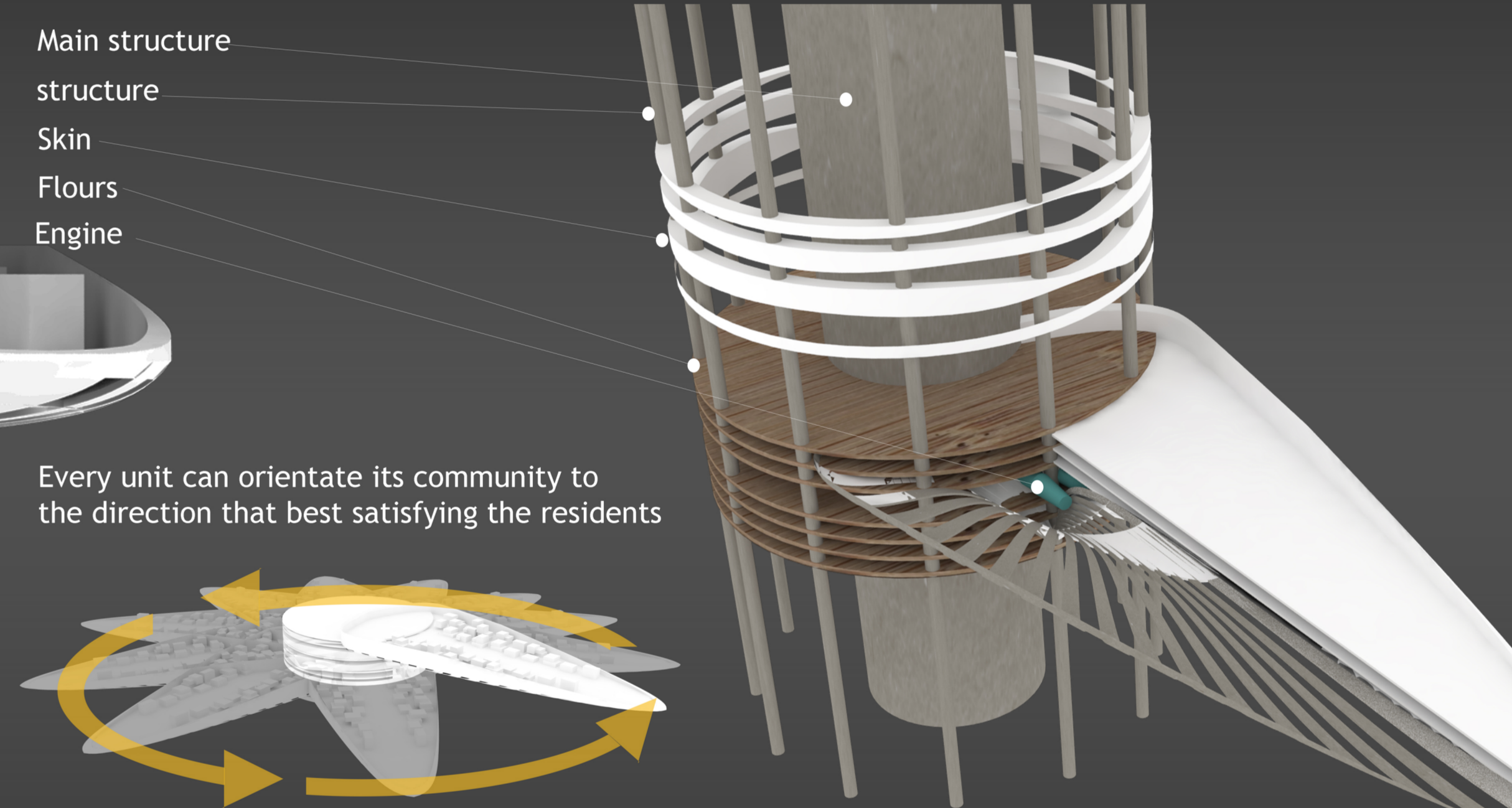
Upon the environmental issue in the future, there will be lots of solution for the problem. However, one of the ways to react to natural change is the Nomadic Communities. The system allows each unit to rapidly react to extreme climate change. By rotating each community, the system can decide how much sunlight the building will get in total. Invisioning the future cities to be submerged under the sea level, the building will be built from the bottom of the ocean floor. The system also allows each community to come down from the building and travel to other towers to get more suitable climate.



The master plan of the unit could be personally designed by different architects based on the neighbourhood's preference. For example, it could be traditional Chinese courtyard design, American dream House or futuristic residential. The uniqueness of every community could form different culture and habits. Every unit could hold up to 50-100 families for working, living, and every other things in daily life.



skyscraper divide transform structure responsive



Shaded by each other to avoid overheat in extremely hot weather

Rotating different angle allow the building responding to the climate change

Fully expanded to receive maximum sunlight during extremely cold season



The climate change in the future might be so extreme that people have to migrate to different regions occasionally to avoid abominable weather

Every unit can come down from the building and travel to another place that is warm to live