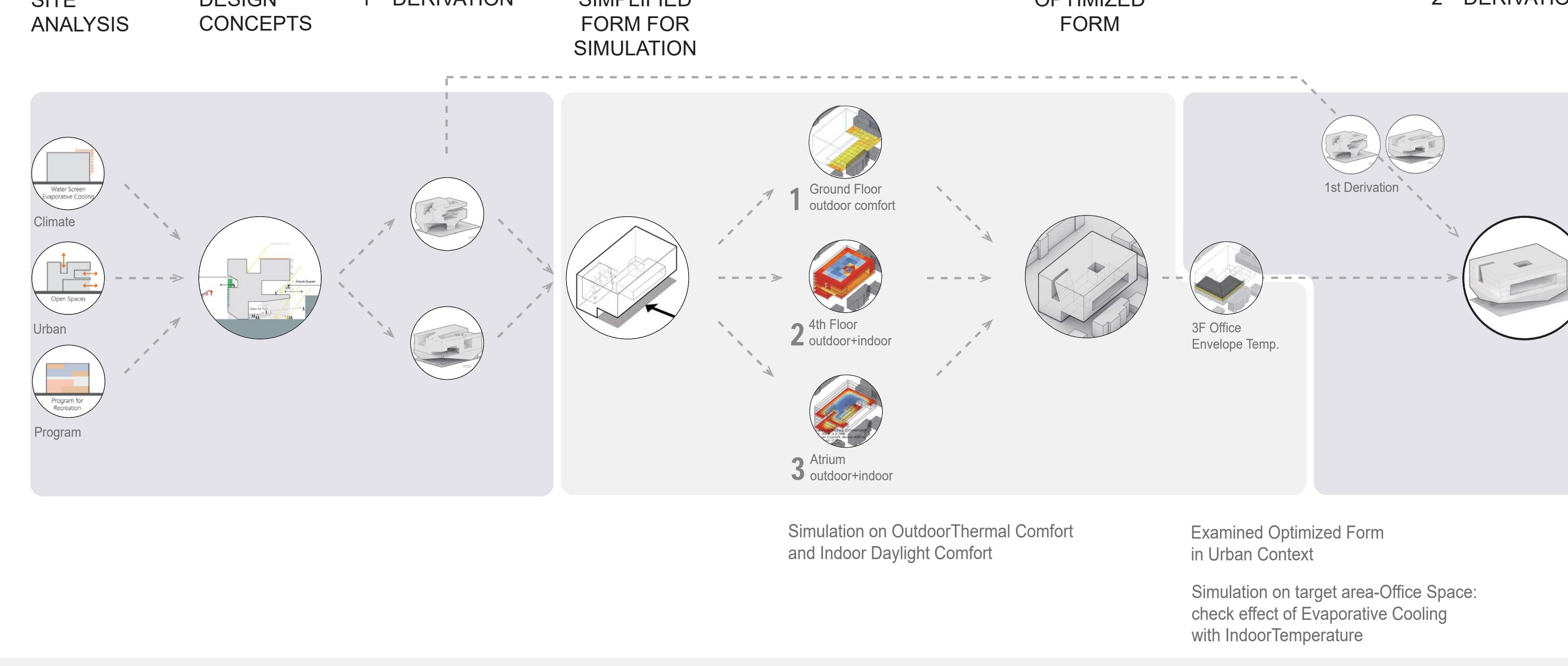


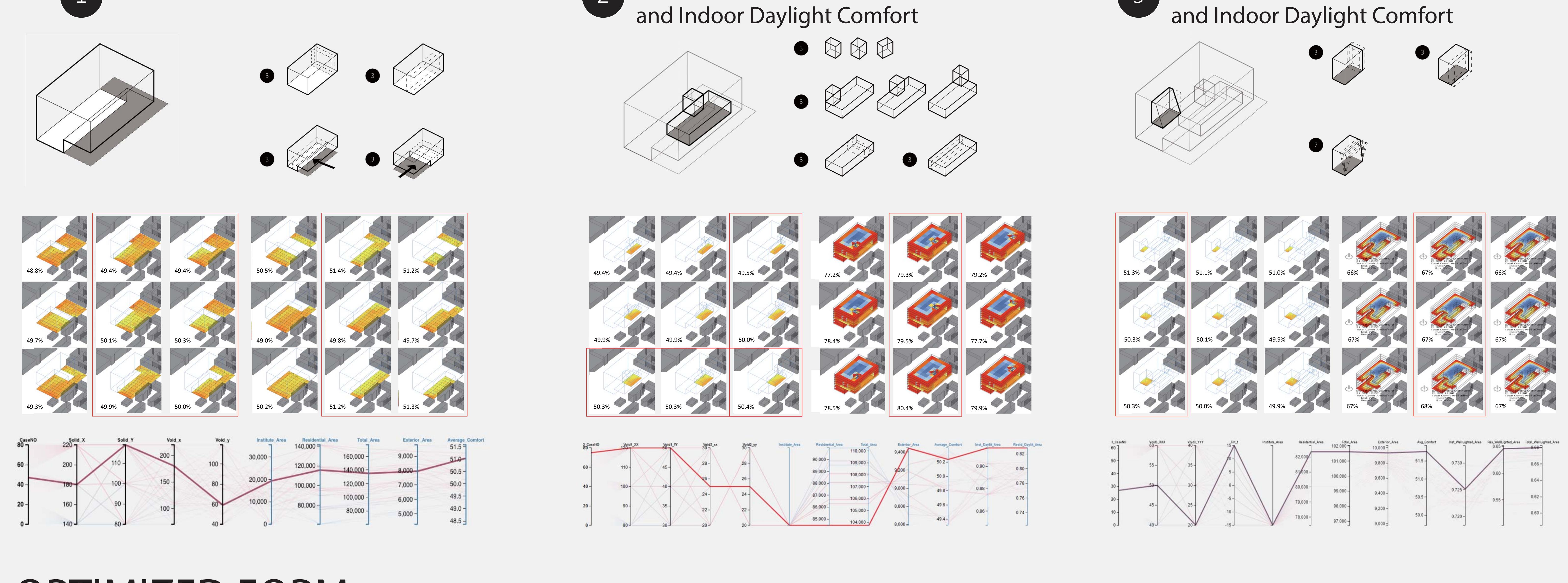
# BIOCLIMATE HYBRIDS

THE NEW CHAUTAUQUA INSTITUTE IN NEW ORLEANS

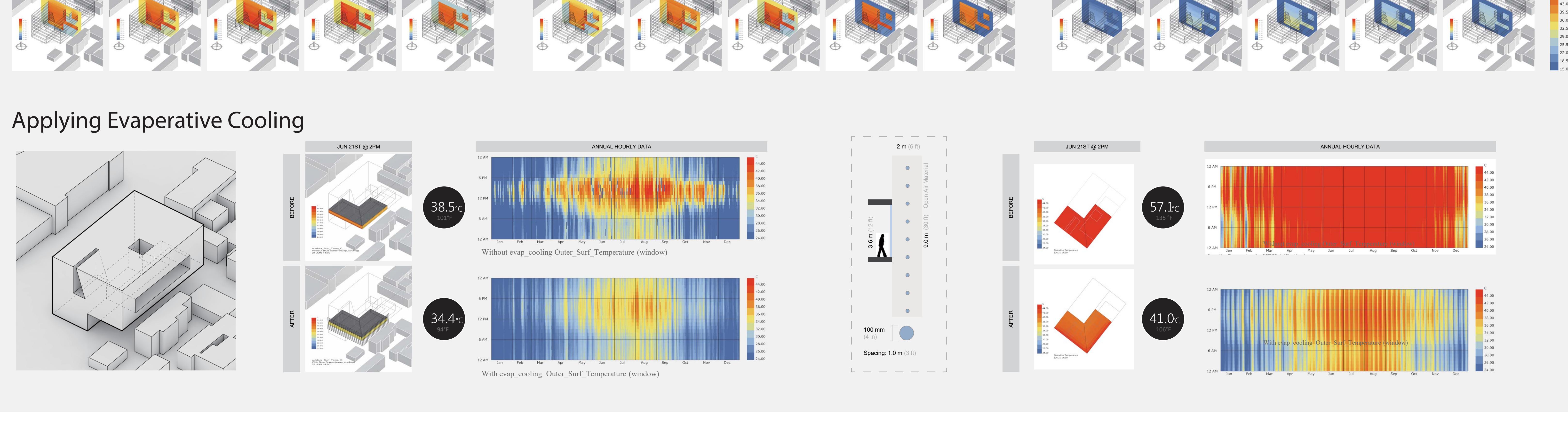
## DESIGN PROCESS



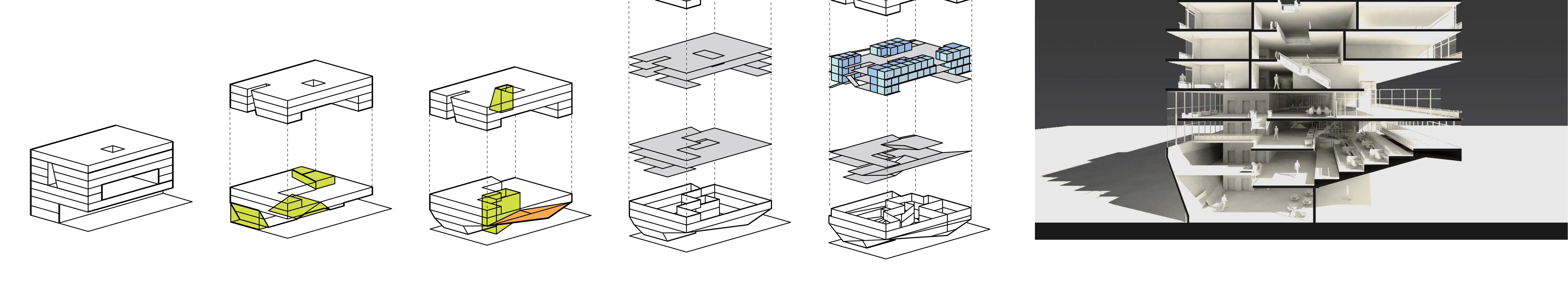
## FORM OPTIMIZATION



## OPTIMIZED FORM



## DERIVATION MODEL

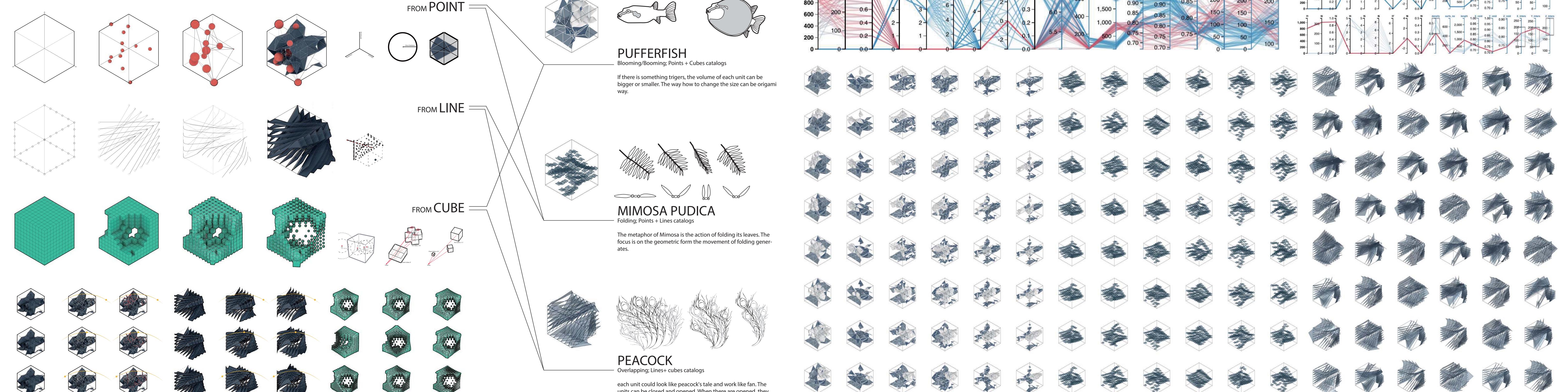


## HYBRID FORMS STUDY

### EVOLUTION

Generate initial catalogs  
The three catalogs are generated from points, lines and cubes.  
Changing parameters to develop first generation of the catalogs.

1 Factor: one attractor point  
Response: (1) distance between panels, (2) panels facing against sun opened  
2 Factor: one attractor point and one line  
Response: (1) form of the louver, (2) curviness of the louver  
3 Factor: four attractor points  
Response: (1) cubes distribution, (2) scale of cubes, (3) angle of cubes



## STATEMENT

"In New Orleans, music is in the air we breathe in." - Allen Toussaint, 2001

In consideration of New Orleans' music heritage and festival atmosphere, the New Chautauqua Institute is a development corporation based on hypothetical research, and focuses on achieving renewable economy.

This project introduces the street characteristics of French Quarter to buildings in the neighborhood, and aims to provide comfortable outdoor conditions for all-year-round festival events.

### Vertical Street Feelings of French Quarter

In public zones such as building's first floor and roof, café, retail stores and bars can be seen. The usage of second to fourth floor includes flexible offices for innovators to run businesses. As for fifth to seventh floor, residential area with balconies and skylight is planned, and the design style resembles the open street spaces of French Quarter.

### Comfortable Outdoor Environment

There are three main outdoor areas. The one on the first floor is for people to gather and hold festival events. The second is on the fourth floor, where people can look out and see French Quarter. Lastly, the outdoor roof garden serves as a thermal mass that balances temperature. The conditions of outdoor spaces and atria are optimized with outdoor comfortness simulation.