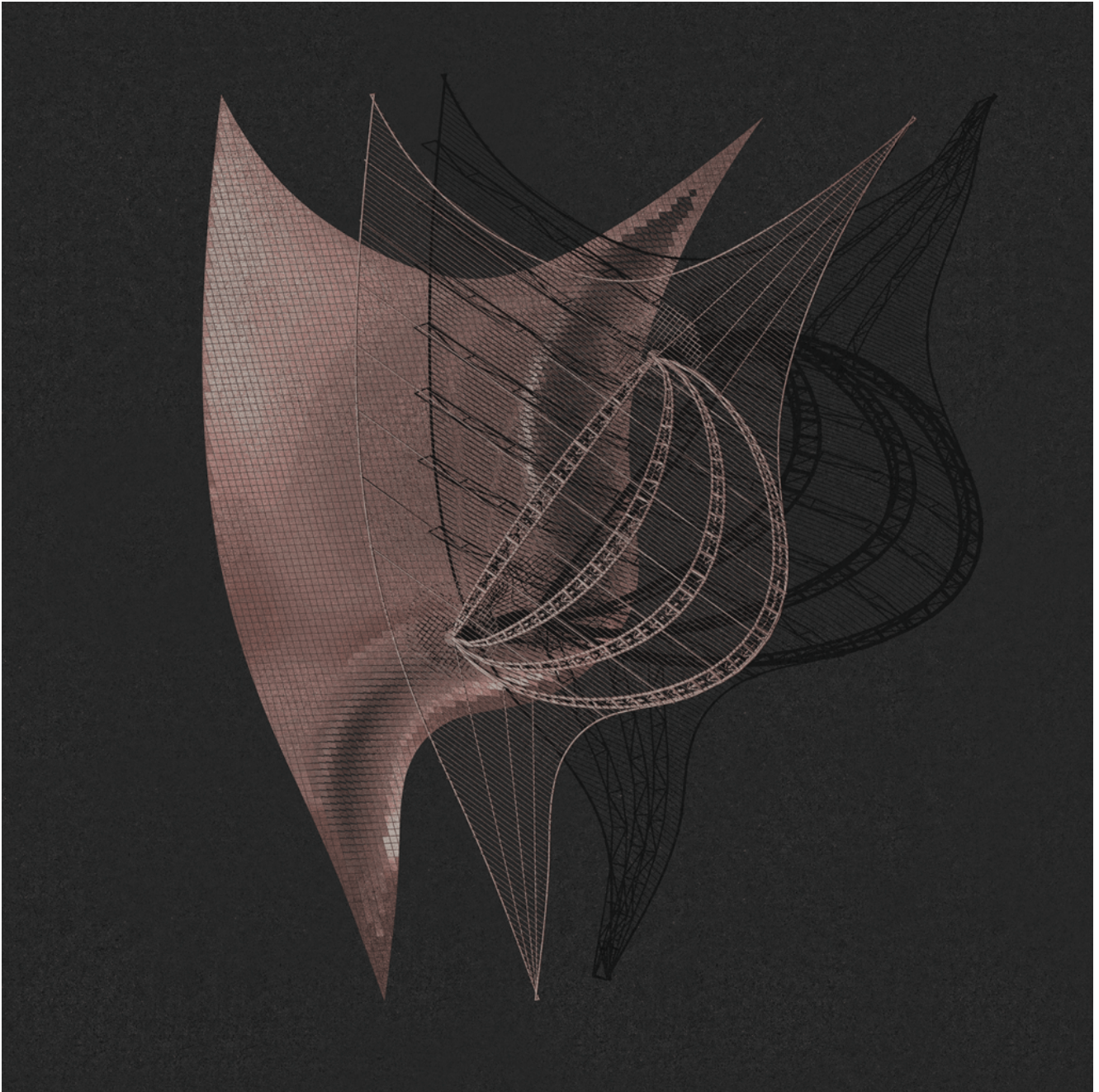
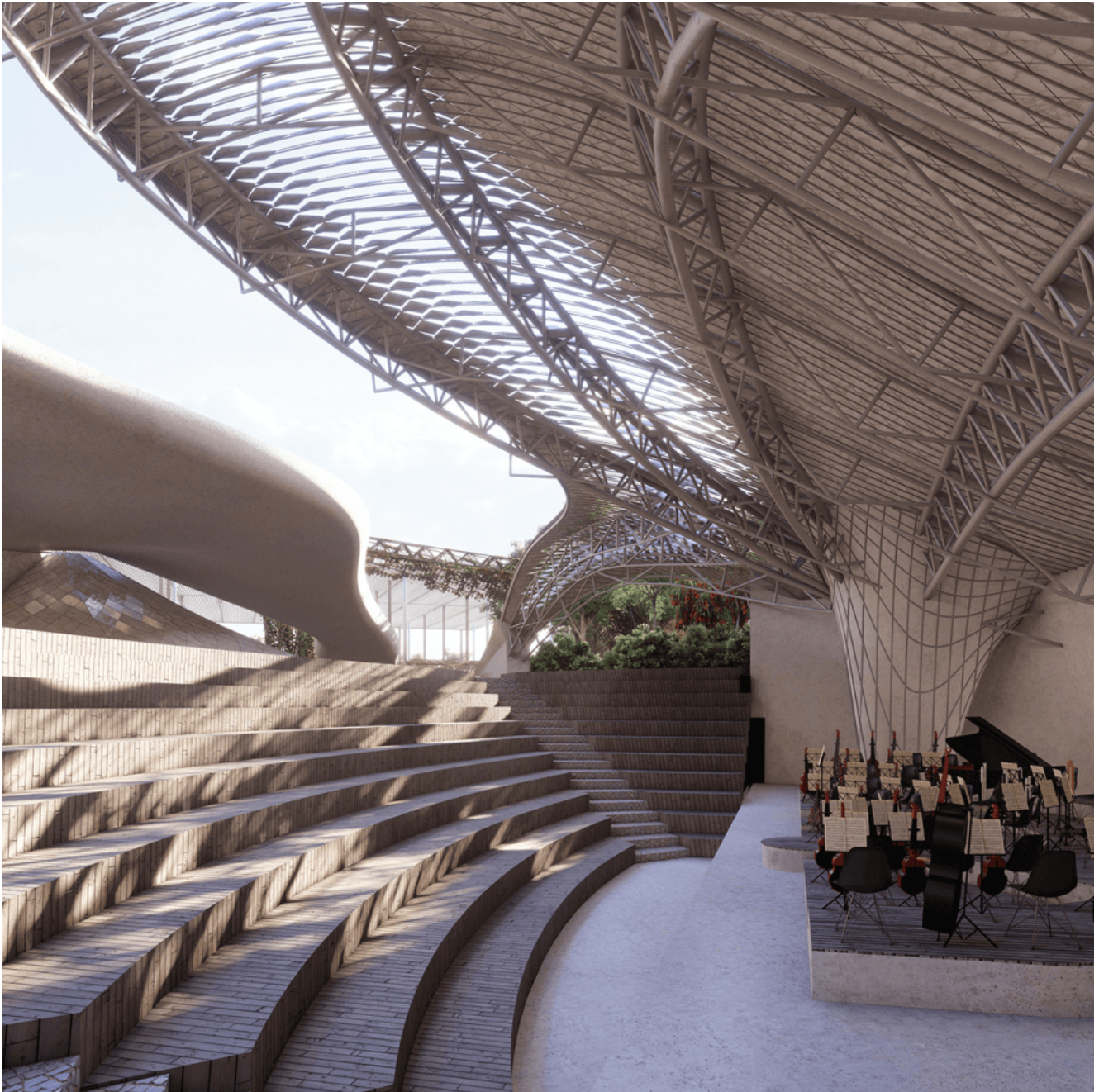


Resonant Landscapes: Architecture in Tune with Sound and Place

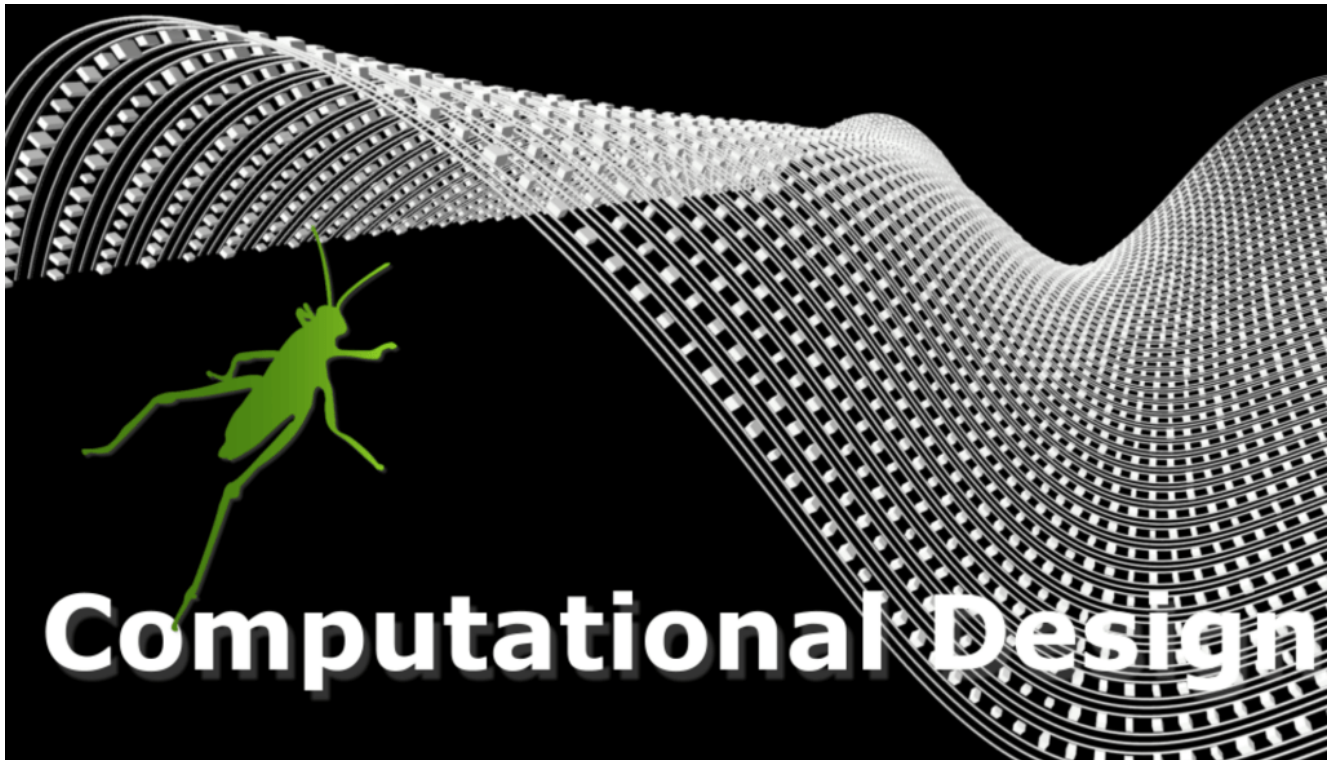
In the cultural heart of Antwerp, where historic theatres and lively markets converge, architectural designer and digital design specialist Diana Fox proposes a bold reimagining of public space. Her project, *Resonance: Harmonising the Theatre District*, transforms the city's Theatreplein into a living, breathing sonic landscape, where architecture becomes both stage and instrument.



Developed during her Master's at the [University of Westminster](#), this conceptual design envisions a series of performance and rehearsal spaces that explore sound not just as a function of space, but as a material in its own right. Informed by Diana's professional experience at [Haworth Tompkins](#), a studio renowned for its work in theatre architecture, the project is grounded in a deep understanding of how built environments shape acoustic experience.



A key design strategy lies in the use of acoustic simulation tools. [Rhino](#) and [Grasshopper](#) were used extensively to drive the spatial logic of the master plan. Pedestrian movement and site access were mapped using magnetic field logic within Grasshopper, while the plugin [Pachyderm](#) enabled precise ray-tracing analysis of reverberation times. [Lunchbox](#) was also utilized.

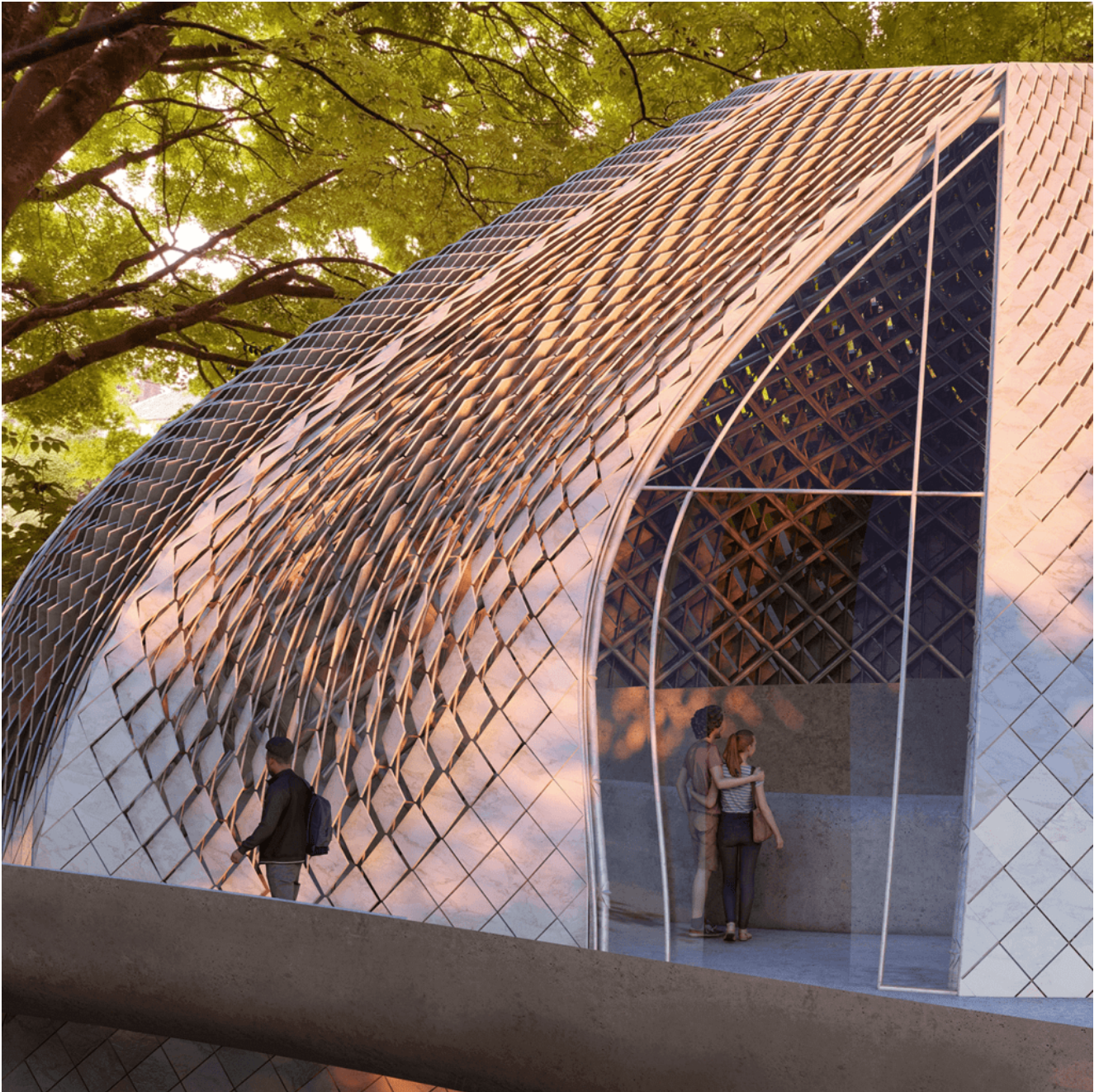


[See Also](#)

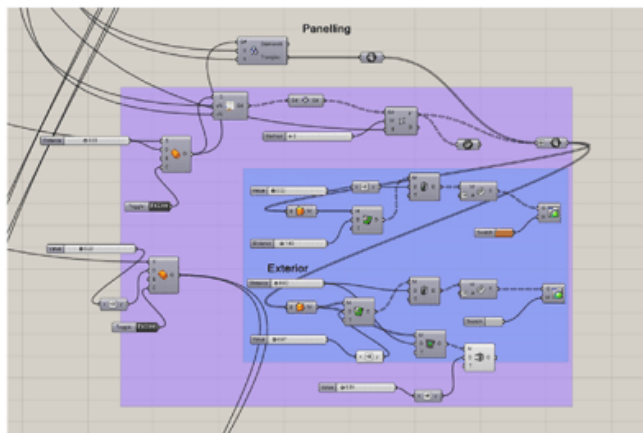
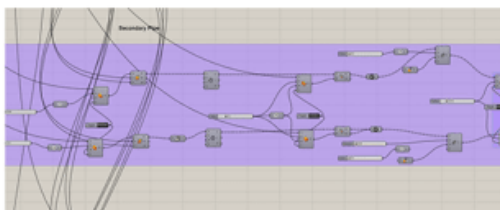
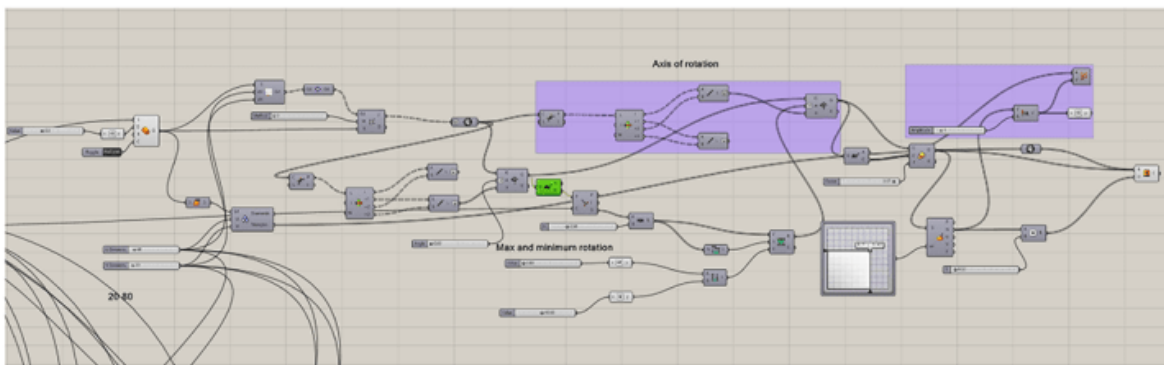
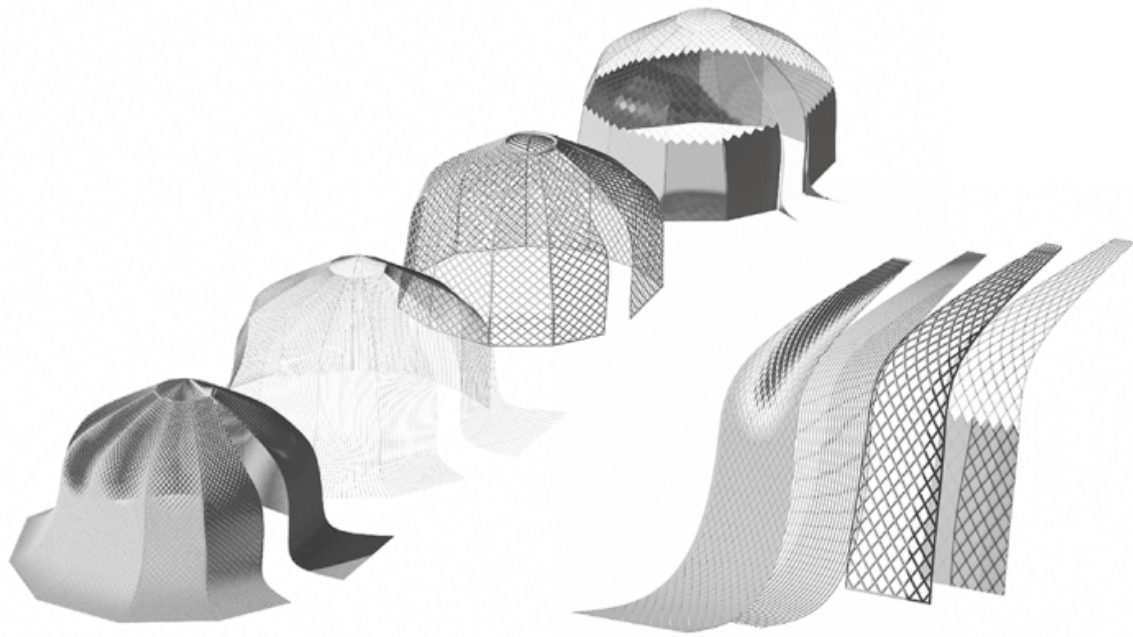
[COMPUTATIONAL DESIGN WITH GRASSHOPPER](#)

These simulations guided both the curvature of surfaces and the selection of materials, ensuring that each structure contributes meaningfully to the overall acoustic performance of the site.

Diana developed flowing, responsive geometries that adjust to sonic demands by combining Graph Mapper with MD sliders. The resulting architectural forms, ranging from an open-air amphitheatre embedded in the topography to smaller rehearsal spaces tailored to specific instruments, support a diverse range of performances. Many of these spaces are intentionally open to the public, removing barriers of access and encouraging spontaneous cultural encounters.



Nature also plays a pivotal role. Gardens and trees are carefully positioned to modulate sound and offer sensory relief from the surrounding urban fabric. This landscape is not ornamental, it participates in shaping the auditory experience. The natural elements collaborate with the built structures to create a vibrant soundscape that echoes through the district.

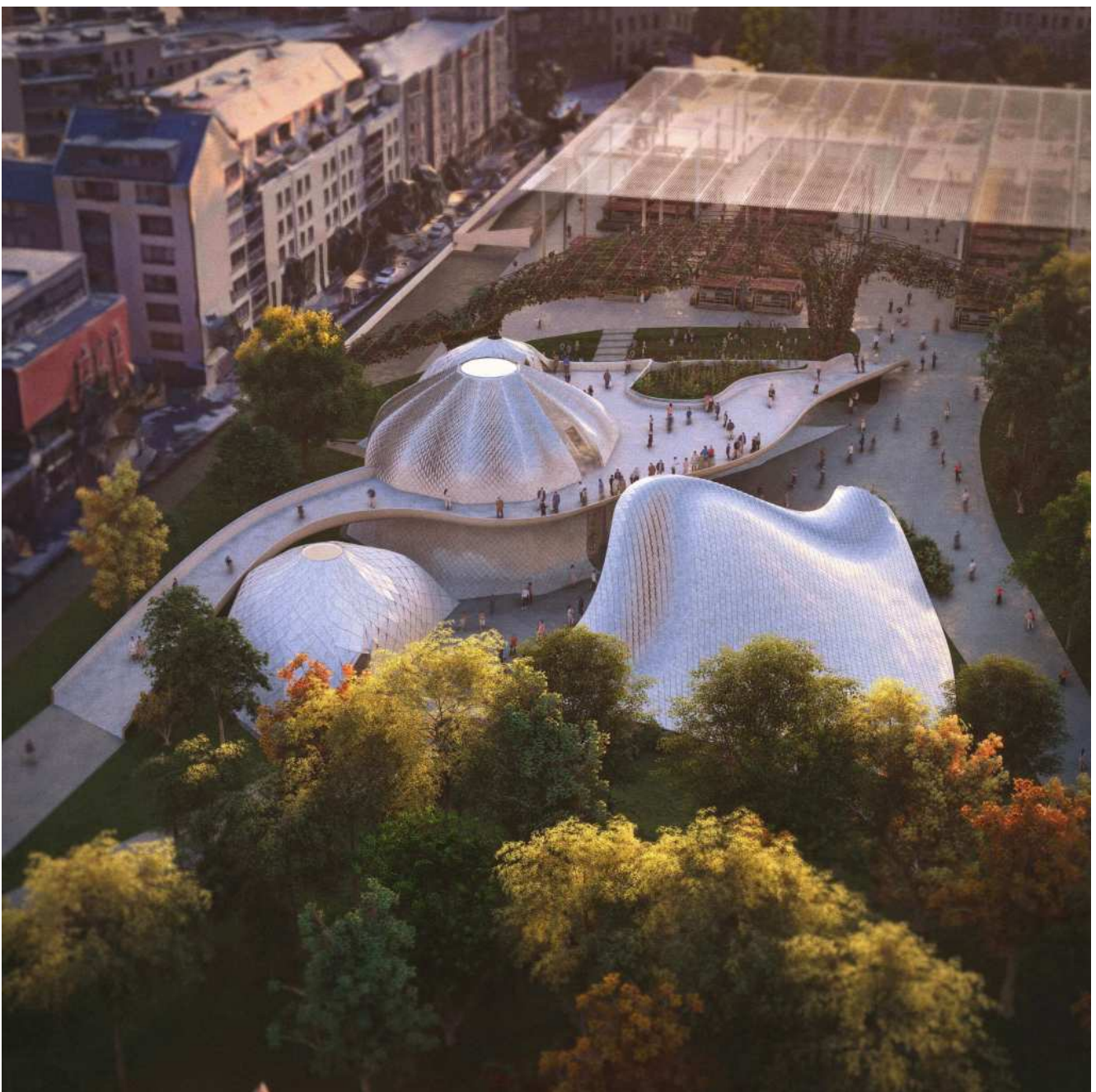


Above is the Grasshopper script I developed to generate the structures for the various buildings within this project.

The project also responds to an ongoing debate in Antwerp: the future of the Stadsschouwburg, the city's main theatre, which faces demolition due to renovation costs. Rather than replace the theatre with a conventional new building, Diana proposes a softer and more experimental approach: blending performance with public life, art with ecology.

Pisa stood out for its prolonged reverberation, enabled by concave surfaces and circular geometry. These insights informed her approach to shaping surfaces that focus and carry sound in subtle but powerful ways.

At its core, *Resonance* is more than a proposal for a performance venue, it's an architectural meditation on how sound can shape memory, movement, and atmosphere. In a city long known for its artistic legacy, the project invites us to imagine a new kind of theatre district: one where public space itself becomes a resonant instrument.



Explore the full extent of [Diana Fox's project on her portfolio](#).

CREDITS

University of Westminster

Tutors: Richard Difford, François Girardin, and David Scott.