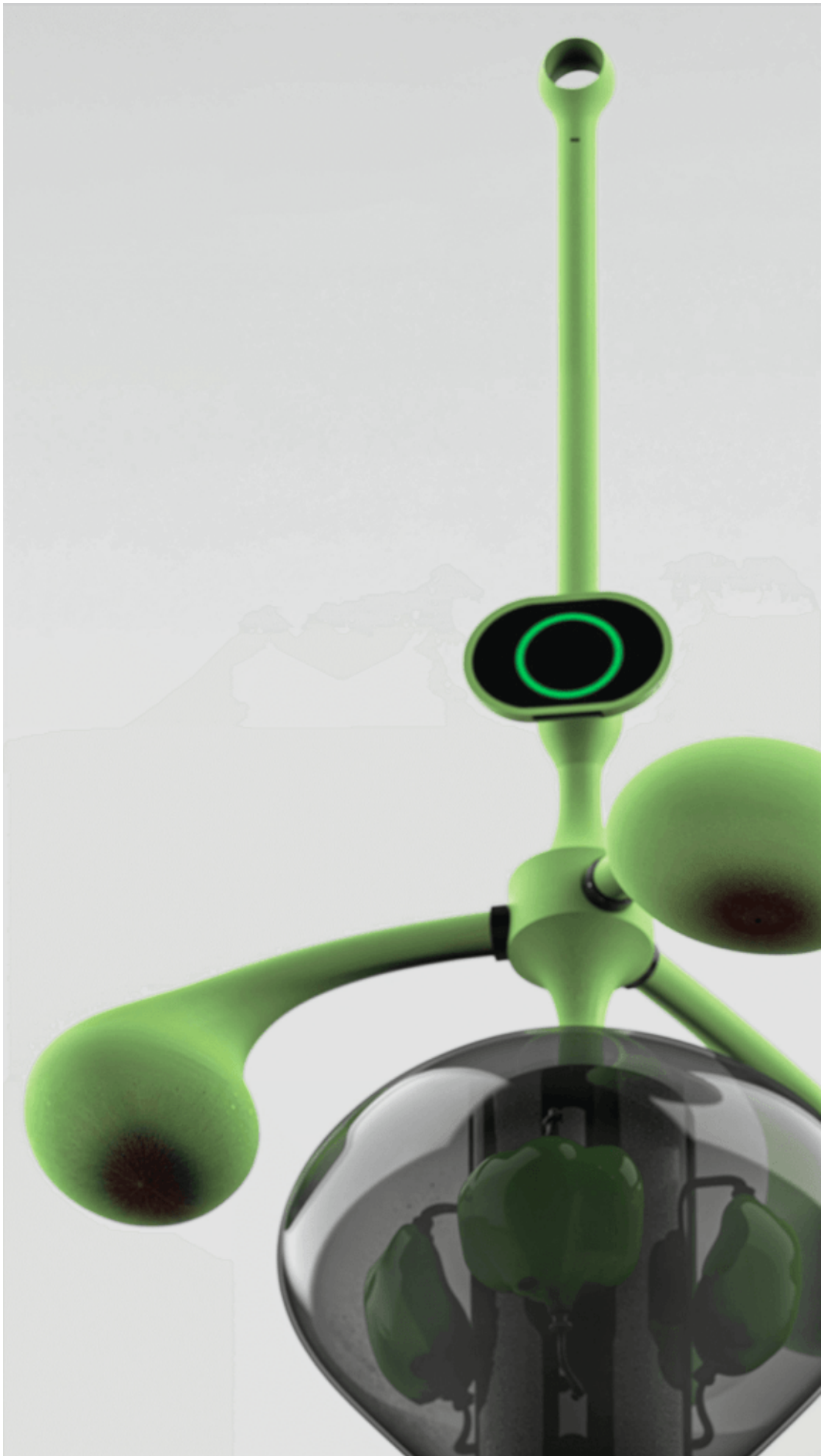


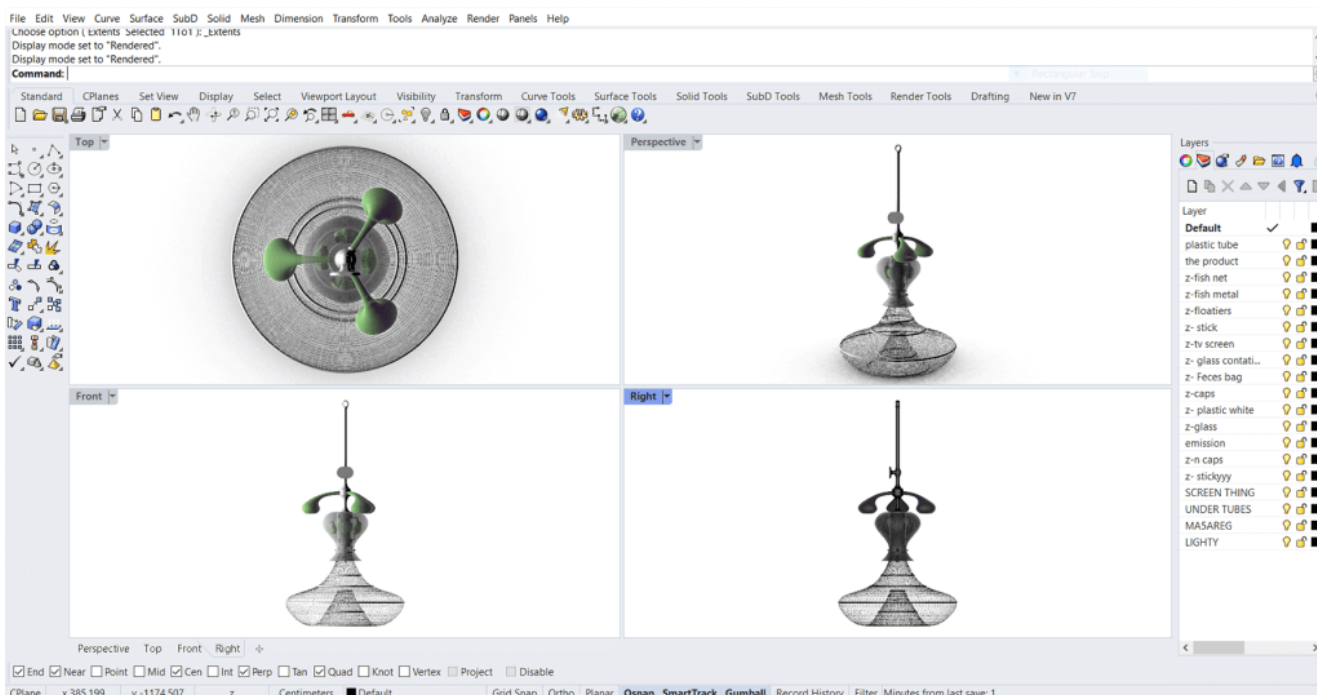
Speculating Futures: DeNile's Vision for a Water-Adapted Egypt

What if the Nile's waters continued to rise? How would communities respond, and how could design play a role in shaping their survival? These are the questions at the heart of *DeNile*, a student-led speculative design project developed at the School of Design & Media at Coventry University's Cairo branch, based at The Knowledge Hub Universities. Imagining a future where climate change reshapes the geography and livelihoods of Egypt, *DeNile* offers bold proposals centered around aquatic adaptability, drawing inspiration from indigenous knowledge and environmental urgency.



The project was developed as part of the UNFOLD Exhibition, curated by Domus Academy in Milan, and was showcased during Milan Design Week 2025 at BASE Milano. At the center of the project is a multifunctional fish farming device that does more than harvest aquatic life. The system is designed to support both agriculture and aquaculture through built-in filtration and waste management systems. This speculative object forms the core of a broader vision: floating farms, vertical aquaculture structures, and hybrid professions capable of surviving a world transformed by rising seas.

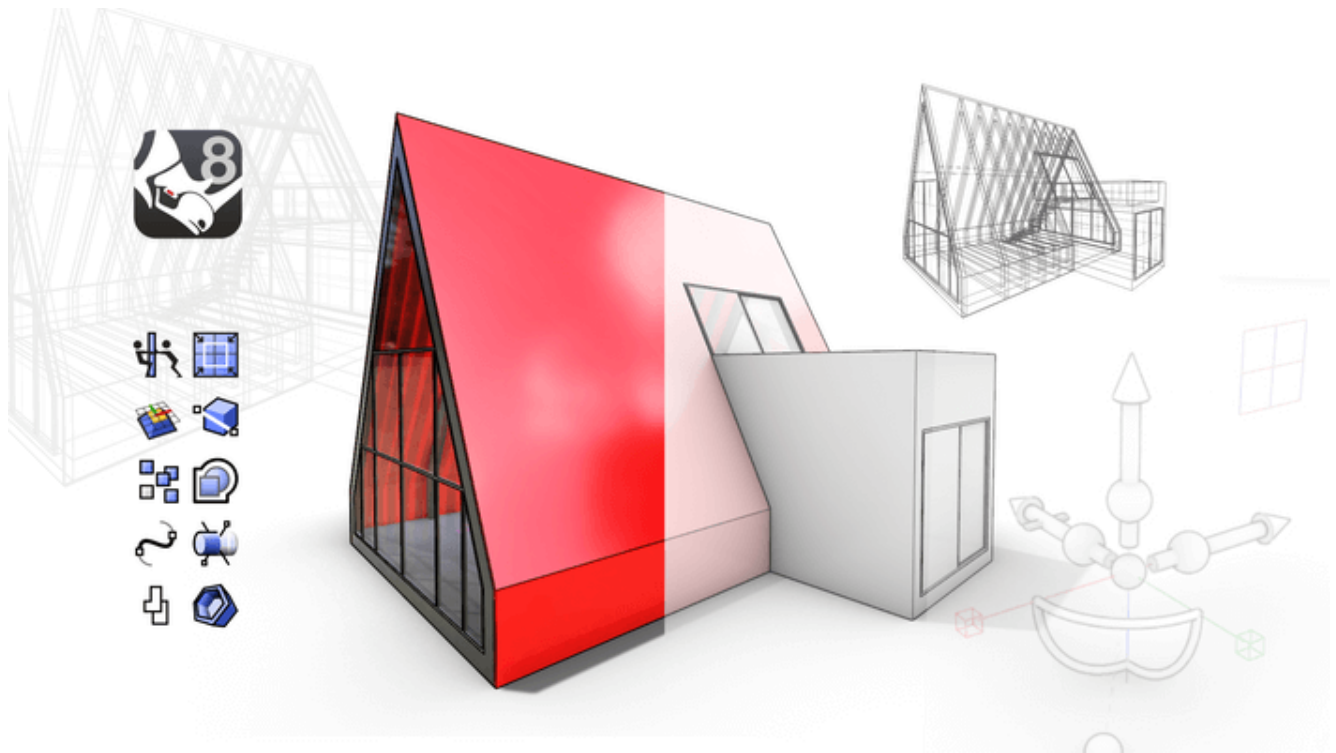
The students behind *DeNile*—Mariam Bayoumy, Mireille Hossam, Mourad Massoud, Robana Omar, and Zeyad ElRawy—developed the project in two key phases. In the first phase, they participated in a critical design workshop, diving into research and speculative futures grounded in Egypt's unique socio-cultural and geographic context. This stage was driven by rigorous questioning, scenario-building, and a deep engagement with alternative visions for climate-resilient living.



The second phase translated conceptual ideas into tangible outputs. Through sketching, modeling, rapid prototyping, and iteration, the students evolved their designs using a range of digital tools.

Rhino played a particularly vital role in this process. Its precision and modeling versatility allowed the team to shape organic forms such as the floating support structures and the soft sacks that collect aquaculture byproducts. Working with NURBS enabled the creation of high-quality Class A surfaces and complex geometries, pushing the

boundaries of form development in the digital space.

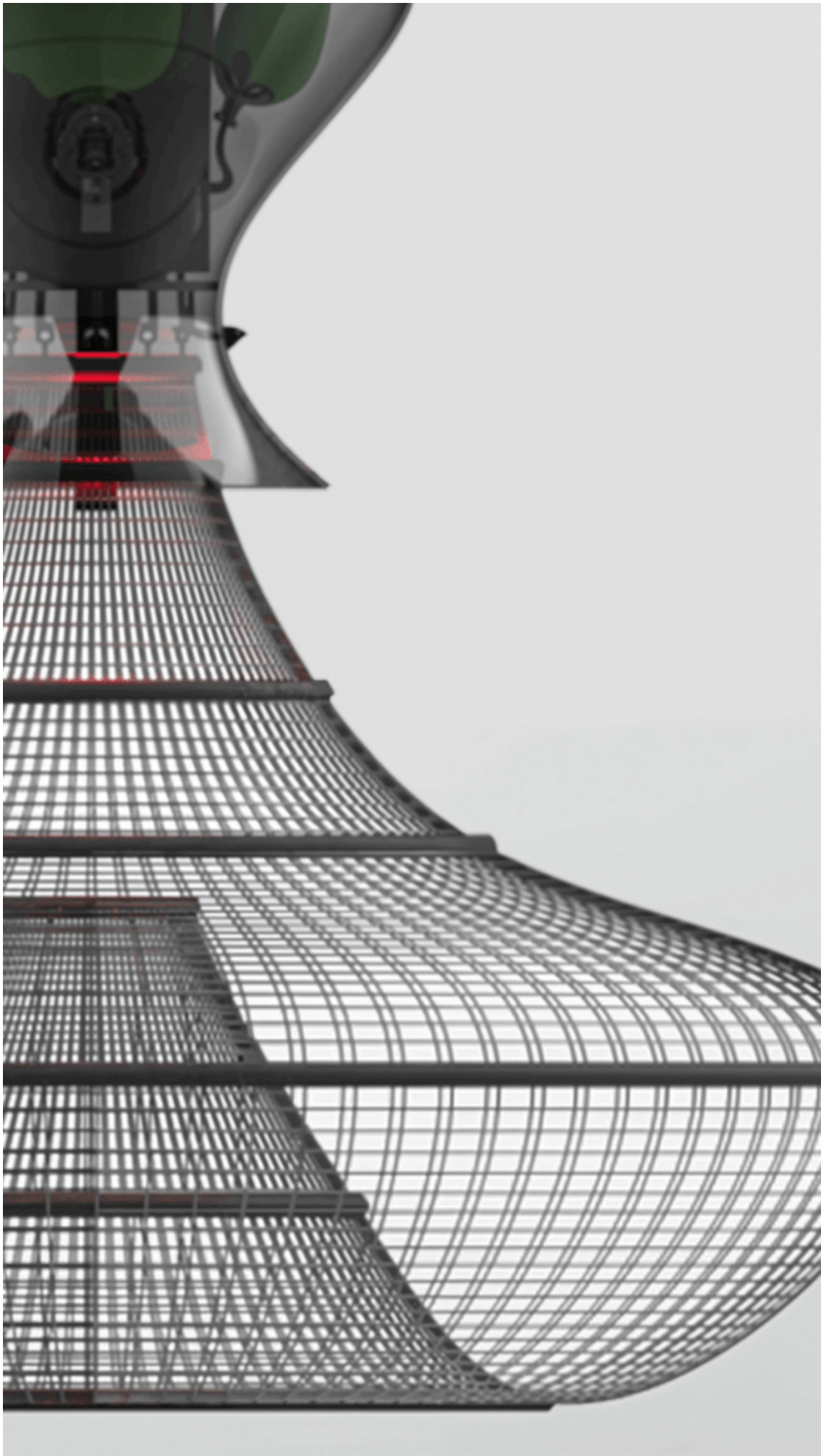


[See Also](#)

[RHINO 8 INTERMEDIATE](#)

Much of this form generation happened directly within Rhino, often bypassing traditional sketching methods. This presented challenges in translating freeform ideas into 3D space. Yet by leveraging tools like *CageEdit*, *PointsOn*, and *SeLUV*, the team found flexibility in adjusting and refining their designs, ensuring that the resulting 3D prints maintained detail and structural clarity.

Rendering was carried out in KeyShot, giving material weight and visual presence to the speculative prototypes. These digital outputs culminated in highly detailed models, ready for CAM workflows and physical realization if ever pursued.



Beyond its technical accomplishments, *DeNile* reflects the School of Design & Media at The Knowledge Hub Universities' ethos: a commitment to critical thinking, experimental design practices, and socially conscious creativity. In just six years, the school has become a leading force for interdisciplinary design education in Egypt, backed by the legacy of Coventry University in the UK.

With open studios, advanced fabrication tools, and a vibrant academic community, the institution provides fertile ground for projects like *DeNile*—visionary, rigorous, and deeply engaged with global challenges.

REAFFIRM DESIGN

In 2020, as the world faced yet another global crisis, designer and theorist Tony Fry republished "Defuturing: A New Design Philosophy", a radical text first written in 1999. In its new introduction, he argues that design has historically been both a defuturing and futuring force—meaning it has contributed to unsustainable conditions while also holding the potential to shape viable futures. As he states:

"Design either goes on becoming trivialized, technocratic, invisible and elemental to the unsustainable, or it becomes a pathfinding means to sustain action countering the unsustainable while also creating far more viable futures."

UNFOLD 2025 builds on this urgency, calling for creatives to return to the fundamentals of the discipline—rethinking frameworks, challenging conventions, and reaffirming design's potential for real impact.

The complexities of our current moment—where social, ecological, and political urgencies intersect—call for a reassessment of design's role as a driver of change. In this context, design must be understood not solely by its physical outcomes, but as a practice capable of navigating its political, social, and cultural charge.

UNFOLD 2025 invites this potential to challenge dominant systems and reimagine the possibilities and features of reimagined futures.

Three intertwined directions: acts of resistance, expressions of agency that empower individuals and reclaim histories, knowledge, and practices, and a call for participants to approach design from both a bottom-up drive and active involvement with

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DeNile is more than an academic exercise; it's a provocation. It invites us to imagine—not just survive—the world that climate change is bringing forth, and challenges us to shape it with thoughtfulness, ingenuity, and design.

CREDITS

Students: Mariam Bayoumy, Mireille Hossam, Mourad Massoud, Robana Omar, and Zeyad ElRawy

Project Developed at: School of Design & Media, Coventry University Cairo, The Knowledge Hub Universities