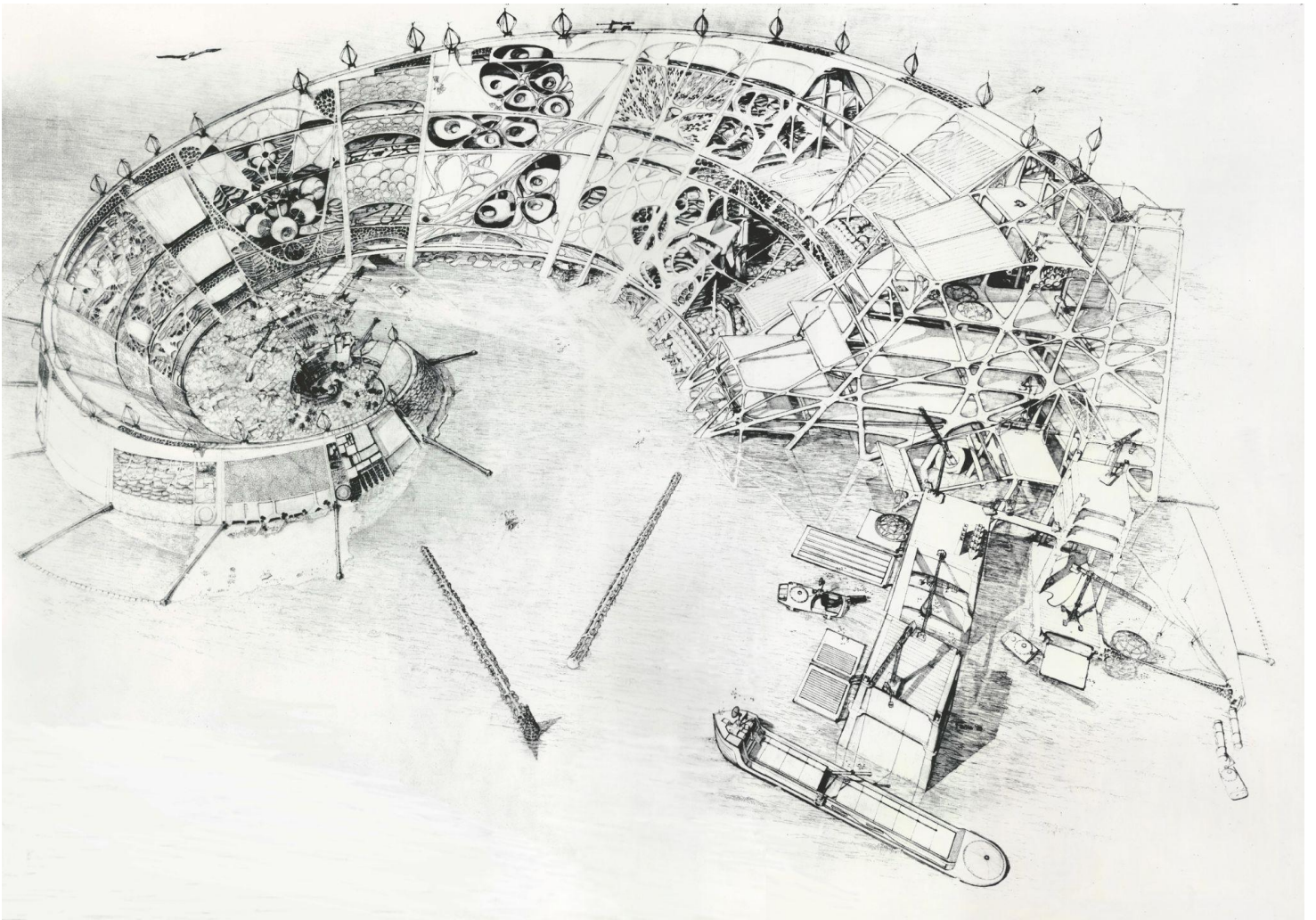


Learn with MoMA



MoMA

Step 1 Look closely

1. What do you notice about the structure?
2. What does the shape of the structure remind you of?

Step 2 Learn

The architect Wolf Hilbertz believed that technological advances would allow humans and their environments to grow and develop together in ways that were not destructive and could even have positive effects on both. One of his designs was his project Autopia Ampere, a proposal for an island habitat that would be constructed by inserting a steel structure into the ocean and then deploying an electric current to speed up the natural process of mineral accretion, which would become part of the structure itself. Because these minerals were plentiful in the surrounding marine environment, these structures could be repaired or altered without cost, Hilbertz argued. In his eyes, this self-adapting, man-coral environment was the next step not only in man's architectural development but in his evolutionary journey as well. Although Autopia Ampere never came to pass, the mineral-accretion technologies that Hilbertz developed over the course of the project's life are now being used to restore coral habitats off the coast of North Bali.

Step 3 Activity: Buildings from natural materials

Suggested materials: paper and pencil or pen.

1. Go for a walk in a natural environment: a park, your backyard, or a garden.
2. Find a natural material, like a leaf, flower, rock, or branch. Look closely at this material and make detailed observational drawings. If possible, try to get a magnifying glass or lens that would allow you to magnify the surface so you can capture additional details.
3. Look at your observational drawings and consider how this material might be used in a structure or how the properties of the material could inspire the form or function of a building.
4. Create a drawing that uses some of the features you observed to create a structure out of this material.

Step 4 Share!

Share your building design with a friend or classmate. Can they guess what natural material inspired your design? Or you can email a photo to us at MoMA: schoolprograms@moma.org.

Step 5 Learn more

Learn more about architecture that is integrated with the natural environment: [James Wines: Building with Nature](#).



Volkswagen of America is proud to be MoMA's lead partner of learning and engagement.

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Image: Wolf Hilbertz (German, 1938–2007) and Newton Fallis (American). *Autopia Ampere*. 1978. Graphite on paper. 36 1/4 x 57" (92.1 x 144.8 cm). Hilbertz estate