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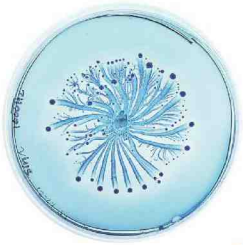
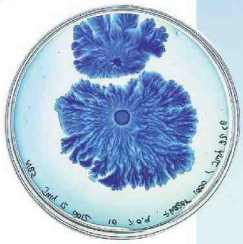




▲ **BIOLOGICAL SCULPTURE** Artist Nurit Bar-Shai created art from the Paenibacillus vortex bacterium. The bacteria work together, sending out 'arms' in search of food; the shape varies widely depending on the environment.

◀ **BAUBOTANIK TOWER** Designed by architects at the University of Stuttgart, Germany, this 29-foot-tall tower takes advantage of the aggressive willow tree. In a few years, the branches should grow to support the tower's three levels, and the metal scaffolding will be taken away.

IT'S ALIVE!

MORE AND MORE, living organisms are finding their way into all kinds of materials and processes—from buildings to clothing manufacturing to art. The new book "Bio Design: Nature + Science + Creativity" by William Myers (Museum of Modern Art, $50) surveys the emerging field. The book is broken into sections, including architecture, industrial applications, experimental technologies and art.

The projects range from the practical (concrete with specialized bacteria that work to fill in any cracks that form) to the sublime (an outdoor chapel in Italy made from live, growing trees). Some of the objects described in the book are more speculative: One proposed clock uses flypaper on a roller mechanism to trap insects, which are then scraped into a microbial fuel cell, powering the clock. "The spread of biodesign promises to be much like mechanization in the 20th century," writes Mr. Myers—helping to shape "an alien way of life."

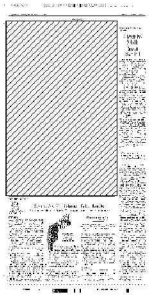
▲ **EDITT TOWER** In this proposed project in Singapore, heavily planted facades and terraces form a continuous spiral to the top. Total planted area: more than 41,000 square feet, or more than half the building's total area.

▲ **SYMBIOSIS** In this prototype for living graphic design, a poster box is repurposed to grow bacteria in the shape of letters. The characters develop in form and color and eventually die as nutrients are depleted.

▲ **BIOCOUTURE** Rather than relying on plant material or petrochemicals, this prototype for a clothing line is based on bacteria in a sugary green-tea solution. After two or three weeks, the bacteria produce a 'skin' on the surface of the liquid that can be dried flat and then cut, sewn and dyed.

▶ **URBAN BEEHIVE** Mounted on a window, this beehive has an exterior opening to allow bees in and out. From indoors, you can watch the bees at work in the glass vessel and harvest the honey.

Nurit Bar-Shai (Biological Sculpture); Designers (Daubetanik); T.R. Hamzah & Yeang Sdn Bhd (Editt); Jelte van Abbema (Symbiosis); Philips Design (Urban Beehive); BioCouture (Jacket)



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