



RIVERS IN MINIATURE

{ Film and Photography }

The Center for Land Use Interpretation - Research and education organization; founded 1994; based in Los Angeles, USA - www.ccli.org

»This is a video transfer of a 16mm film made to describe the purpose and function of the Mississippi Basin Model, the largest hydraulics model in the world. Built by the U.S. Army Corps of Engineers, and constructed continuously from the 1940s to the 1960s, it is a 1:2,000 scale physical model of the entire Mississippi River drainage basin, an area that represents almost half the landmass of the continental United States. Located outdoors in an open field outside of Jackson, Mississippi, it was built primarily to model the flood characteristics of the river, in order to aid in the design and placement of flood control structures. By the time the model was completed in 1966, the automation was complete, and the entire model could be run off a central clock. Water would flow through the model in proportionally compressed time and volumes. 15,000 miles of river channel were represented by 15 acres of interlocking sculpted concrete slabs and log-day beds 5-6 minutes. An engineering marvel, and an unrivaled monument of miniaturization, the model is now obsolete, and lies abandoned and degraded to a point beyond repair - a relic from the apogee of the analog era. Despite this and other considerable earthmoving efforts of the Army Corps, whose largest work was the Mississippi River, flooding continues.«

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SOLAR THERMAL FLOWERS

{ Modell and Image }

»**The Why Factory** - Think tank on urban futures, MVRDV together with Delt University; based in Delft, The Netherlands - www.thewhyfactory.com

»Imagine giant water lilies, floating in the sea off the coast of Thaingai, Thailand. Over the course of the day, they slowly open and close their blossoms, catching the sunlight and turning it into valuable, clean energy that feeds the coastal towns. The *Solar Thermal Flowers* are a beacon of a new green infrastructure that goes beyond bio-mimimry and creates its own esthetics from nature and technology. It uses the known principles of solar thermal energy generation: the flowers blossom leaves are large mirrors that reflect the sunlight and focus it on an absorber in the middle of the structure. At the focus point, temperatures of 500 degrees Celsius and more can be achieved. Instead of using solar collectors, heat transfer fluid, transporting the captured heat into the base of the flower. Here, gas turbines are transforming the heat into electricity, which is brought to the coast by undersea cables. The solar thermal generation of energy is different from photovoltaic techniques. PV cells directly generate electricity, which is difficult and expensive to store. Solar thermal structures generate heat, which can be easily kept with little loss of energy. With good insulation, the molten salt can hold its heat for several days, allowing the flowers to reliably provide electricity also during night and on overcast days. Underneath the large blossom leaves, there are artificial beaches, restaurants and even hotels. The newly created biotope becomes a tourist attraction celebrating a New Green« that ignores any notion of 'artificial versus natural', that is large and visible, economic and effective and that amazes with its beauty.«

*Giant Water Lilies in Phuket is a project by Ulf Hackland, Pirjo Hakola and Gonzalo Rivas for The Why Factory / Delft University of Technology. The proposal is based on based on a design that inventor Bill Gross [www.billgross.com] presented at a TED talk in 2006 (www.ted.com)

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TROPICAL

{ Modell }

»Tryptique - Architecture studio; founded in 2000; based in Sao Paulo, Brazil and Paris, France - www.ryptique.com

»The french-brrazilian architecture practice Tryptique is based on the idea of authorial dissolution, where the different participants mix ideas and debate. The name of the office is a literal translation of the french word 'triptique' which appears in various parts), referring to the idea of a dissolving of the different repertoires and cultures of the participants into a single cohesive work. The project *Tropical* understands itself as a critical about ecological normatives. It is a reflexion of how far those rules could restrain architecture and how the power of the nature could take back its place.«

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EXTREME PROSTHESIS

{ Modell }

»**Mas Yendo** - Artist, architect; born 1957 in Tokyo, Japan; lives and works in New York, USA - www.masyendo.com

»Its labyrinthine, steel filaments mesh together like roots of an overgrown tree. The structure is made of steel and concrete structures. Naked pipes wrap around each other in depth. Loose wires, rusted steel panels, chipped paint, and layered walls capture the essence of the city.

Extreme Prosthesis embraces the irrevocable change of reality by enhancing abilities and providing new experiences. A symbiotic relationship between organic entity and machine must be developed in order to accomplish this. Only then can the changes once considered adversity, be seen as opportunity and possibility.«

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SPECIMENS OF UN NATURAL HISTORY

A NEAR FUTURE BESTIARY.

{ Taxidermy }

»**Liam Young** - Architect, designer; born 1979 in Australia; lives and works in London, United Kingdom - www.tomorrowsthoughts.todag.com

»...from so simple a beginning endless forms, most beautiful and most wonderful, have been and are being evolved.«

Charles Darwin

»Now, as we stalk the savannas of science fiction, robotics and biological invention, we begin to wonder how to encounter the novel reality of engineered 'monsters'. Throughout history we have always invented monsters and myths as our way of coming to terms with phenomena we don't quite understand. They are fictional tales of the natural world but at the same time they channel the dreams and anxieties of the everyday. With these stuffed and mounted specimens from a new bestiary of unnatural history we see the speculative offspring from the interbreeding of biology and technology. These monsters may be hopeful inventions or unexpected by-products, wondrous possibilities or dark cautionary tales of a day that is already here.«

duction, biodiversity and climate protection. The space will help them adapt to climate change and learn about healthy eating, sustainable living and a future-oriented urban lifestyle. With this project, we will, with time, modify our understanding of what is natural and beg the question, what is Nature.«

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STUDY MODELLS

{ Modell }

Greg Lynn - Architect, writer; born 1964 in North Olmsted, USA; lives and works in Los Angeles, USA - www.gflorn.com

»Greg Lynn, who graduated with degrees in Architecture and Philosophy, is distinguished for his use of computer-aided design to produce irregular, biomorphic architectural forms, as he proposes that with the use of computers, calculus can be implemented into the generation of architectural expression. Lynn has written extensively on these ideas. Lynn's latest works begin to explore how to integrate structure and form together as he discovered some biomorphic forms are inherently resistant to load. He is also one of the forerunners in exploring and integrating the tools of digital fabrication, into the process of design and construction.«

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EI-PD

{ Sculpture }

Ton Matton - Urban planner and artist; born in 1964; lives and woks in Wendorf, Germany - www.mattonoffice.org

»I am the Old-World Flycatcher and I am a looser, not a fashionable cosmophile just as conservative, from the countryside. When I return from the warm south, there is nothing left to eat, I am the Rose-Ringed Parakeet and I am a real winner. I escape from your warm loft to go out for dinner. Outside it is as warm as in Amazonas. I don't eat nuts, I prefer the leftovers from McDonald's. People say the city is no good for nature, but I don't agree. It's a matter of behaviour. If you earn your money with emissions on stock exchange, why shouldn't I be the winner of climate change? The winner takes it all the looser standing small«

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LEVEL GREEN

THE CONCEPT OF SUSTAINABILITY

{ Modell }

Jürgen Mayer H. - Architect, born 1965 in Stuttgart, Germany; lives and works in Berlin, Germany - www.jmayerh.de

»The offices of J. Mayer H. Architects and Art+Com Berlin were commissioned to develop the permanent exhibition *Level Green* the topic of sustainability for the Autostadt in Wolfsburg, Germany. The architectural design of the exhibition takes the numerous interdependencies of the topic as a starting-point and translates this quality into the metaphor of the web. Similar to a continuous organism, the single elements of the exhibition are connected into one homogeneous structure that houses all content and technical installations. As one of the first prominent signs of the growing consciousness for environmentally friendly consumption, the well known PET-sign was taken as a starting point from which the metaphor of the extensively branched web was developed. This originally 2-dimensional sign was extended into the third dimension and through a series of step by step manipulations a complex structure was created, which allows for an abstract poetry of the topic to be experienced on a spatial level.«

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CHLOROPHYLL SKIN

{ Film }

Lucy McRae - Artist, designer; lives and works in Amsterdam, The Netherlands - www.lucymcrae.blogspot.com

»As a body Architect, the Australian designer and artist Lucy McRae, invents and builds structures on the skin that re-shape the human silhouette. Her design research focuses on themes associated with 'breed' (art) which is one of the most extreme forms of human amalgamation; organic mutations of human with machine, plant and animal. Running alongside her design research, Lucy art practice visually crystallise's her vision and provocation' for new human archetypes through imagery that is often grotesquely beautiful. Trained as a biologist and architect, she is inherently fascinated with the human body.«

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RESPONSIVE SURFACE STRUCTURE

{ Modell and Films }

Achim Menges - Architect, born 1975; lives and works in Stuttgart, Germany - www.ica.uni-stuttgart.de

»Wood differs from most building materials in that it is a naturally grown biological tissue. This wood displays significant differentiation in its material makeup and structure as compared to most industrially produced, isotropic materials. Upon closer examination wood can be described as an anisotropic, adaptable, natural fiber system. Because of its differentiated internal capillary structure wood is also hygroscopic. It absorbs and releases moisture in exchange with the environment and these fluctuations cause differential dimensional changes. This project investigates alternative design strategies that take an understanding wood's differentiated material make up as its major capacity rather than a deficiency. Utilizing wood's intrinsic material characteristics a surface structure that responds to changes in relative humidity with no need for any additional electronic or mechanical control was developed. The resulting 'Climate Responsive Skin' investigates the ecological potential of meso-structures that form the natural yet unexplored link between an integral understanding of the micro-structure of materials and the macro-structure of the built environment, in order to achieve a direct response to environmental changes.«

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PRINZESSINGÄRTEN

{ Installation }

Nomadisch Grün - Non-profit company for mobile urban farming; based in Berlin, Germany - www.prinzessiningarten.net

»Nomadisch Grün (Nomadic Green) launched *Prinzessiningärten* (Princess gardens) as a pilot project in the summer of 2009 at Moritzplatz in Berlin Kreuzberg, a site which had been a wasteland for over half a century. Along with friends, fans, activists and neighbours, the group cleared away rubbish, built transportable organic vegetable plots and reaped the first fruits of their labour. *Prinzessiningärten* is a new urban place of learning and exchange. The aim was to come together to experiment and discover more about organic food pro-

duction. No mystical father to fashion delude prosthetics of feathers and wads. Aspirations futile it seems. »Is this our natural facts. Now, 150 years later, the collections represented far more than facts, they record our relationship to the natural world as well. Beyond the science, the historic and contemporary motivations for collecting, preserving, cataloging and systematizing the natural world ultimately say as much about Homo sapiens as they do about the specimens presented in these vast holdings. Chronicle behind the scenes is a complex web of science, history and human desire.«

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VEGETABLE CITY

{ Photography }

Terunobu Fujimori - Architect, writer; born 1946 in Nagano, Japan; lives and works in Tokyo, Japan

»A half century ago, when I was a student of architecture, avant-garde architects all over the world conceived future images of cities and architecture. Archigram in London, Metabolism in Tokyo, etc. Their proposed images were different to each other, but one thing was common in basic concept; that is the progress of science and technology. They dreamed that dreams would come true in the future with the science and technology. All of them, however, have passed since then. Nobody doubts the indispensability of science and technology, but science and technology already lost the motive power to produce the future images. What could be clues for us, architects, for our wings of imagination to fly over to the future? When I was thinking of this, images of woods and pieces of animals, all lawlessly sewn together, came into my mind. Instead of science and technology, 'vegetables' could lead us to a new imaginary world. Thus, in 2009, the concept of *Vegetable City* was born.«

— 20 —

MISFIT (PARAKETT/MOLE)

Thomas Grünfeld - Artist, born 1956 in Opladen, Germany; lives and works in Cologne, Germany - www.galeriemichaeljanssen.de

I escape from your warm loft to go out for dinner.

»Thomas Grünfeld's anomalous creations are some of the strangest and most surreal of contemporary taxidermy. The creatures from his appropriately titled *Misfit* series are composed of bits and pieces of animals, all lawlessly sewn together to create entirely new species: a doberman pincher with a calf's head, a beast combining monkey and parrot, another creature, part mule, part giraffe, part ostrich. The *Misfits* are reminiscent of early natural histories in which absurd architecture, art, and ecology. For the exhibition *Eilingsen* contributed a sculpture as well as personal voice-recording of Kurt Schwitters 'Ur Sonate.«

— 21 —

TREE REVOLUTIONS

{ Photography }

Ilkka Halso - Photographer, artist, born 1965 in Orimattila, Finland; lives and works in Orimattila, Finland - ilkka.halso.net/

»Making nature obey man's will has been central in the history of mankind. Ability to guide growth of living things has provided us many important food sources, but has also shown its darker side in animal breeding and genetical manipulation of plants. Growing trees into a full circle is probably not the most urgent in line of research projects, but makes one think or...Not?«

— 22 —

GARDEN BUILDING WITH HOST AND NECTAR PLANTS FOR CALI'S BUTTERFLIES

{ Film }

Husos (Diego Barajas and Emilio Garcia) with Francisco Amaro - Platform for spatial interventions and research projects in architecture and urbanism, based in Madrid, Spain - www.husos.info

»The *GHN/PCB* houses living, production and retail space for TallerCrocus, a small design and atelier in Cali. At the same time it works as a biometer, by means of hosting and feeding butterflies, which are effective bioindicators of the environmental quality and biodiversity of the local ecosystem and are particularly important in this region that has the greatest diversity of butterflies on the planet. It also serves the business as an indirect marketing strategy forming part of a spatial exploration of a multifarious Caleño identity for the atelier, which is faced with the challenge its expansion entails, both locally and transcriptionally. Through lists of local host and nectar plants written on the facade, the role of the atelier is highlighted and the importance of preserving the urban biodiversity, it fosters a potential network of environmentally aware citizen-gardeners in Cali.«

— 23 —

STRANDBEEST

{ Film }

Theo Jansen - Artist, engineer; born 1948; lives and works in The Netherlands - www.strandbeest.com

»Legs prove to be more efficient on sand than wheels. Wheels have to work their way through the sand and shift relatively more of it as a result. Try pulling a cart through loose sand and it's hard work. The advantage of wheels, however, is that they are light, they are flat and at a constant height, which saves energy. But the legs of the strandbeest have this same advantage; they don't lurch either. The upper and lower leg parts move relative to one another in such a way that the hip joint (at the juncture with the upper leg) remains at a constant height, just like the axle of a wheel. But they don't have the wheel's disadvantages; they don't need to touch every inch of the ground along the way, as a wheel has to. Legs can leave out patches of ground by stepping over them. Which is why you can better have legs than wheels on sandy ground.«

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LIVING DRAWING

{ Film, Image and Modell }

Christian Kerrigan - Digital artist and architect; lives and works in London, United Kingdom - www.christiankerrigan.com

»*Living Drawing* is a film using 'Living Technology' as a two-dimensional drawing technique. Live recordings exist at nano-scale are captured through high powered microscopic zoom. The 'Living Technology' in the film is a programmable cell which exists by manipulating organic chemistry in order to create a program of movement. The recording monitors the 'droplets' moving within a fibre glass landscape. The movement of the droplets is activated using UV light activates the spontaneous drawing process. Kerrigan's work

tions. Radically different from the random oddities of 17th century cabinets of curiosity, royal cabinets were founded on the belief that they were a collection of scientific and natural facts. Now, 150 years later, the collections represented far more than facts, they record our relationship to the natural world as well. Beyond the science, the historic and contemporary motivations for collecting, preserving, cataloging and systematizing the natural world ultimately say as much about Homo sapiens as they do about the specimens presented in these vast holdings. Chronicle behind the scenes is a complex web of science, history and human desire.«

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AIR TREE

MADRID PAVILION PUBLIC SPACE - EXPO 2010 SHANGHAI (CN)

{ Photography and Image }

Ecosistema urbano - Architectural firm; founded 2000; based in Madrid, Spain - www.ecosistemaurbano.com

»The *Air Tree* emerges as an experimental prototype of intervention in contemporary urban public space, capable of re-activating sites and creating the conditions to empower the use of the collected energy of 20th century. A half century urban furniture, a self-sufficient climatic comfort generator, that is being used not only as a breathing space but as well interactively. The *Air Tree* with its different technical layers supports multiple final configurations and a myriad of intermediate positions (opaque, translucent, transparent, bright, interactive, open, etc.). Different technical layers and connections allow an unlimited combination of scenarios adaptable to citizen needs. By sensors it is connected in real-time with the climatic conditions of Shanghai, constantly adopting the optimal physical configuration and energy consumption to generate climatic comfort for the citizens.«

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SPECIES OF SPACE

{ Sculpture and Soundpiece }

Eric Ellingsen - American architect, landscape architect, teacher; lives and works in Berlin, Germany - www.speciesofspace.com

»*Species of Space* is a continuous experiment in design founded by Eric Ellingsen in 2009. It is conceived as a biological seeks to explore an ecology of experiments, constraints and pressures. His experiments takes place in public spaces, where he makes self-organizing, self-structured architectural models while engaging with strangers in conversations about architecture, art, and ecology. For the exhibition *Eilingsen* contributed a sculpture as well as personal voice-recording of Kurt Schwitters 'Ur Sonate.«

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OSCILLATING BETWEEN BLINDNESS AND ILLUMINATION

{ Photomontage }

Love Enqvist - Artist; lives and works in Stockholm, Sweden - www.loveenqvist.se

»I dug a large hole, approximately two feet wide, two feet long and one foot deep. I planted four tree whips to be grown into a chair. A living tree chair. I sat down to read my book but as I touched the cover, I suddenly remembered my mind dissolved into the book. The words vanished and the print became physical. Only three dimensionally existing experiences remained... She walked down the steep wild wooden path to read in the apple tree chair. She sat down in the luminous shadow from the apples growing at the top of the tree. Her comprehension of the book was complete, even though she was blind. It was as if if the book had melted into her hands. Beyond words, the visible and the invisible there were actual physical changes to her brain just like the thin tapestry is woven together by numerous threads. One could say it was like an autobiography where she for a moment was no longer dependent of anyone else... You are looking for the right spot where to plant your tree chair. In your hands is a triangular metal object. You hear the traffic as a distant sound of the world beyond your garden. It is sometimes as if you could see yourself from the outside. The shape of life: your life given form in an apple tree chair.«

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CHAPEL VERTEX

PROJECT FOR THE BENEDECTINE ORDER

{ Modell }

finsterwälderarchitekten - Architectural firm; founded 2000; based in Stephanskirchen, Germany - www.fensterwälderarchitekten.com

»The chapel is twisted around a courtyard with a tree in the centre. Once you enter the building you are on a path of deceleration. The route becomes darker and quieter, until you find yourself in the main space, which is lit from above, like a small pantheon. Along the path the space widens from a first wide space offers a bench to sit on with a view, through a window, to the tree. The second also offers a bench opposite a window. This window is connected with a glass, giving the observer an interesting, cloudy view to the tree. The complex form can be easily assembled, since every piece of timber is the same as the one below. The pieces are joined similar to traditional block-houses, with a timber dowel used to connect the layers and avoid leaks.«

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SPACE PROJECT

{ Photography }

Vincent Fournier - Artist, photographer; Born 1970 in Ouagadougou, Burkina Faso; lives and works in Brussels, Belgium - www.vincentfournier.co.uk

»The work of Vincent Fournier is offering a photographic journey at the edge of the utopian. He is recording alternative movements. Depicting five experimental architecture projects (Arcosanti; Earthships; The Lama Foundation; Nader Khalili and LA's Dome Village) or their pioneers' own words, the documentary examines applied utopian thinking in a desert built structures and concurrent ways of living, from a both macro structure to a homestead inspired by ancient Persia and NASA research.«

— 18 —

THE PARALYTIC ORNITHOLOGIST

{ Image }

Lynn Fox - Director and animator; based in London, United Kingdom - www.lynnfox.co.uk

»A frail shadow roams the infinite depth, alone. Staggering closer it amounts to little. Only a vain sheen, glistening under the dim light. A crisp figure drawn by a shimmering weight; limp, alling. Torn his twisted existences

glass-like fragility of this artificial forest is created by an intricate lattice of small transparent acrylic meshwork links, covered with a network of interactive mechanical fronts, filters, and whisks. The environment is similar to a coral reef, following cycles of opening, clamping, filtering, and digesting. Arrays of touch sensors and shape-memory alloy actuators create waves of diffuse breathing motion, luring visitors into the shimmering depths of a forest of light. The project's title refers to *Hylozoism*, the ancient belief that all matter has life. *Hylozoic Ground* offers a vision for a new generation of responsive architecture. The *Hylozoic Ground* environment can be described as a suspended geotextile that gradually accumulates hybrid soil from ingredients drawn from its surroundings. Akin to the functions of a living system, embedded matter intelligently reacts to human interaction to trigger breathing, caressing, and swallowing motions and hybrid metabolic exchanges.«

— 07 —

THE TURTLE THREE

{ Installation }

Luis Berrios-Negrón - Architect artist; born 1971 in Puerto Rico; lives and works in Berlin, Germany - www.luisberriosnegrón.org

»The *Turtle* series are mobile curatorial units. The *Turtle Three* has a system of swiveling doors that are both pin-up and sketching surfaces. The modules and the doors form a variety of spatial configurations that allow its users to provide indoor and outdoor activities, such as workshops, student lectures and exhibitions. Considering our proliferating, customized reality, as an opposition to its virtual counterpart, The *Turtles* aim to house emerging labor societies exploring ever-more accessible knowledge and technologies, not only to transform the output and scales of city, but fundamentally question traditional values of what production is. In all, as war machines, The *Turtles* are evolving centers of knowledge serving their users as cultural equipment to build the institutional memory of events and audiences.«

— 08 —

THE FUTURE AND THE NEST

{ Object }

Friedrich von Borries - Architect, writer; born 1974; lives in Berlin, works in Hamburg and Berlin, Germany - www.friedrichvonborries.de

»The nest is the ideal of the capsule, a world in which we feel safe and comfortable. Currently, the western world is encapsulating itself in a continuous quest of wealth and prosperity, violently protecting our consciousness against poverty and global social injustice. Do we want to live in a world which is encapsulated? Finally the nest is nothing else than an imagination.«

— 09 —

HYDROGENASE

{ Image }

Vincent Callebaut - Architect; born 1977; lives and works in Paris, France and La Louvière, Belgium - www.vincent.callebaut.org

»Between engineering and biology, *Hydrogenase* is one of the first projects of bio-mimimry which draws its inspiration from the behavior of plants. It is conceived as a biological and especially from the qualities of its materials and its self-manufacturing processes. The new green revolution is really in progress and enables us to design the air mobility of the foil after shock, 100% self-sufficient in energy and zero carbon emission! This inhabited vertical aircraft inaugurates a clean and healthy mobility to meet the needs of the population in distress touched by natural and sanitary catastrophes, and all that without any runway! Its architecture is subversive and fundamentally critic of the ways of living of our contemporary society that we have to reinvent totally! Let's take off thanks to biofuel and let's propel to the eco-responsible transport of the future!«

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THE ELECTROCYTE APPENDIX

{ Image }

Revital Cohen - Designer; born 1981; lives and works in London, United Kingdom - www.revitalcohen.com

»The *Electrocyte Appendix* is an artificial organ that could be implanted into the body to allow people to become electric organisms. Inspired by the electric eel and the way it uses electrocyte cells to produce electrical current from its abdomens, the organ is constructed of artificial cells' that mimic and improve the electrocyte mechanism by converting blood sugar into electricity. Replacing the vestigial appendix, the artificial organ brings a new functionality to the human anatomy, giving humans the ability to farm and produce electricity directly from their body. By discarding the remains of redundant anatomical functions in favour of new abilities, the body is redesigned in order to sustain its new way of living. Bio-technology could allow us to transform our genus into something else. The idea of our species changing from Homo-Sapiens into Homo-Evolutis (the human as a species controlling and designing its own evolution) is materialising quickly in research labs.«

 »Based on the research *Designing artificial cells to harness the biological self-concentration gradient* by Jian Xu and David LaVan, Nature Nanotechnology, September 21, 2008.

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COUNTER-COMMUNITIES