

Graft on Brownbook

Issue 0 – April 2013

GRAFT FRUIT

3 MULTIFUNCTIONAL DESIGN OF FRUITS

Fiber could change its color like the iridescent surface of the bastard hogberry when it is stretched. Furniture is made from bananas. How scientist, engineers and designers make use of the multifunctional design of fruits and plants.

3 NEXT CAR WON'T BE A LEMON

Your next car won't be a lemon. But it might be made from pineapple leaves.

HOPEFULLY FRUITFULLY

— 11 THOUGHTS ON MATERIALS

New material developments at and beyond the bounds of the visible promise to reclaim new parallel worlds in physics, chemistry, and biology for a macro world bumping up against its limits.

14 BERTJAN POT

A material experiment stands at the beginning of each product created by Studio Bertjan Pot. The products show a fascination for techniques, structures, patterns and colors.

14 CHIARA ANDREATTI

Italian designer Chiara Andreotti invented a specific method of printing fruits and vegetables on ceramic surfaces.

5 SOLAR CELL: RECIPE

And so was the dye-sensitized solar cell invented by Professor Grätzel and his team. It basically consists of two glass-plates, fruit juice, graphite and iodide solution. Read the recipe and built your own in 10 minutes.

7 MAREPE: THE NECESSITY OF EVERYDAY OBJECTS

"I see the strange as the new, the diverse, the uncommon, and it fascinates me, like fashion." The fruit collages of Brazilian artist Marepe.

12 DYSCRETE BETON BRUT BLUEBERRY

Beton brut blueberry talks about a new concrete called DYSCrete that is able to generate electricity out of solar energy with the help of berry juice. Similar to photosynthesis DYSCrete is using the generating means of electrochemical reactions of organic dyes absorbing sunlight.







Pp. 7, 8-9, 10:
Marepe, Untitled,
2008

MAREPE: THE NECESSITY OF EVERYDAY OBJECTS

The work of the Brazilian artist Marepe (Marcos Reis Peixoto) fluctuates between the utilitarian and the poetic. He transforms everyday objects from his personal environment in Bahia into artistic interventions. Such tables, tools, or the collages that assemble photography of fruits and vegetables, for example, receive a totally new meaning letting us question their sense, origin, and significance. By combining freely materials and objects Marepe abstracts them from their common context. By doing so and in order to emphasize their social origins he refers to his sculptures, collages or installations as necessities. The materials he appropriates for his work include all kinds of commercially available products as wash basins, tables, chairs, fruits and vegetables. Thus Marepe transforms everyday objects and commodities into abstract interpretations of social and cultural phenomena.

Marcos Reis Peixoto, born 1970 in Santo Antônio de Jesus, Bahia, Brazil. Lives and works in Santo Antonio de Jesus, Brazil.

www.galerialuisastrina.com.br
www.maxhetzler.com



Marepe,
Desempoladeira
(detail) 2003/2006
Wood and metallic
paper (300 pieces)

HOPEFULLY FRUITFULLY — THOUGHTS ON MATERIALS

5 min.

For a long time, mankind had to get along with a limited number of materials; today the “noble” materials have to compete with a proliferation of young shoots—and it is these that form the basis of this edition. At present, materials research has arrived at the molecular level, on which electrostatic natural forces dominate over the forces of gravity and inertia, relevant on the macro level. Many new materials are therefore determined both by their visual and physical macro properties, as well as by micro and nano scale effects. In the words of architect and materials expert Toshiko Mori: “Thus the sea change we sense is subtle and subversive because it is occurring below the surface of visible artifacts.” Surface has become the technological arena in which both the status quo and the improvement of substances can be represented. The design theorist Ramia Mazé describes the shift in attention from the properties (appearance) of a material to their performance with allusion to earlier positions: “As structural, chemical and computational properties are integrated at nano-, micro- and macro-scales, even the most traditional material might become dynamic.” Along with the Italian material researcher Ezio Manzini, we can speak of a technologisation of materials, which increasingly allows designers to determine their behaviour in advance, rather than simply taking it into account. Contrary to earlier assumptions, this has not destroyed the hierarchy of substances. On