Prospective readers should be aware that *Scientific Europe* is strongly dominated by descriptive elements, the author having been present at all major events. Over long stretches, it reads like a veiled autobiography with the rich material collected personally over time. Illustrations show many big names and machines. Madsen presents the story without strong underlying hypotheses or basic theoretical assumptions. The latter are imported with the many policy papers to which he extensively refers, which leads to a mix of explanatory approaches. The author is not the first “hard” scientist who in writing about politics and policy analysis seems to stick to the way of thinking he has used throughout his life. He should not be blamed for doing so, but social scientists can and will use his book for the material portrayed and not for the conceptual approaches presented. In any event, the book largely looks around big machines, and authors should not be overly criticized for the things they love dearly.

References

10.1126/science.1192324

**ART EXHIBITION**

**Shared Resources**

**Andreas Keller**

The belief that a dialogue between science and the arts could benefit both sides has led to numerous projects that look beyond the differences in approach to find some commonality between these two creative endeavors. A good starting point for interdisciplinary communication is the shared objects and materials that can be and are used in artistic as well as in scientific projects. *Dead or Alive*, an exhibition at the Museum of Arts and Design in New York, offers diverse and interesting works made from biological materials by 37 artists from 12 countries. Among other materials, the installations incorporate seeds, leaves, spices, horse hair, anchovies, moth cocoons, eggs, bones, feathers, and thousands of dried insects.

The exhibition reflects the cultural history of the curiosity cabinets (Wunderkammern) of Renaissance Europe, where intricate shells, colorful bird feathers, and stuffed exotic animals were displayed for their aesthetic value and to satisfy scientific curiosity. In the 18th century, the acceptance of the Linnaean taxonomy put all living organisms in categories; from then on, a display of biological samples was considered scientific only if a taxonomic order was enforced on it.

The distinction between artistic and scientific use of natural objects remains superficial at best, however: New York’s Metropolitan Museum of Art displays *The Physical Impossibility of Death in the Mind of Someone Living* (1992), a tiger shark in formaldehyde by British artist Damien Hirst (who also contributed to *Dead or Alive*). Similar sharks in formaldehyde can be seen in natural history museums around the world. Presented as art, biological material can be idiosyncratic and endorse ambiguity, whereas a scientific context requires that the same material be presented with objectivity that excludes personal bias. Nonetheless, these differences are small compared to the powerful emotions—like fear or awe—that the spectacle of a 14-foot shark will evoke in any context.

*Dead or Alive* explores the gray area of biological objects that is shared by scientists and artists as the starting point of their respective processes. Some works would not be out of place in a Renaissance curiosity cabinet. Jan Fabre, the Belgian artist whose *Heaven of Delight* (2002) previously covered parts of the ceiling of the Hall of Mirrors in the Royal Palace of Brussels with over one million jewel beetle wing cases, contributed *Skull* (2001): a flying humanoid skull made from iridescent golden and green beetles, which carries a limp stuffed pigeon in its jaws. Other installations are less literal in how they arrange or transform their animalic subjects. In Claire Morgan’s *On Top of the World* (2009), 3375 black flies with red eyes and a single spider are tangling on nylon threads to form a cubic swarm of fly carcasses. Some of the flies are missing wings, legs, or their head, and the faint but distinct smell of dead flies frames the sculpture. Morgan tries to tame the constant movement and the decay of the natural world by arranging it in idealistic geometrical structures. The German artist Jochem Hendricks goes one step further by reducing entire animal bodies to their principal chemical constituent: carbon. In *Hansi* and *Bubi*, two works from his Cold Bird series (2002–2005), Hendricks presents two diamonds on black velvet cushions surrounded by yellow (*Bubi*) or blue (*Hansi*) feathers and fluffy white down. The tiny, yellowish diamonds were made from two pet parakeets, whose bodies were transformed under pressure, allegedly in “two former Soviet research institutes”—the same institutes that, the artist reports, transformed the amputated right leg of a soccer player into a diamond for his *Left Defender Right Leg* (2002–5).

The other installations in this fascinating exhibition deal with biological material in similar ways. Animal and plant parts are taken out of their normal context and arranged or transformed for various effects. At no point will visitors feel like they accidentally wandered into a natural history museum. The power of biological materials in the hand of artists to evoke emotions from disgust to empathy—and sometimes both—is present throughout *Dead or Alive*.

10.1126/science.1193016

---

*Therevieweris at the Laboratory of Neurogenetics and Behavior, Rockefeller University, 1230 York Avenue, Box 83, New York, NY 10065, USA. E-mail: kellera@mail.rockefeller.edu*