

# Update

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# Reprotech:

## BUILDING BETTER BABIES?



Mark Kessell,  
*The In-Betweens* (2002)

exiled from fairy tales?

With the bio-printing of replacement organs and tissues on the research horizon, at what cost is this quest for immortality? What social consequences are in store when wombs can be rented through surrogacy

Sandy Skoglund, *Maybe Babies* (1983)



**F**ROM CONCEPTION TAKING place in test-tubes, to nuclear transfers in petri dishes, to embryos that have been cryogenically stored like so much frozen food — high-tech ways and means are expanding far beyond the old carnal way of making babies. When posed with the classic quandary (where do babies come from?), will the mythology of life's creation soon also include laboratory glassware and the bio-lab? Has the bundle-carrying stork been



Steve Miller, *Origin du Monde* (1994)

contracts and children become the genetic product of three parents? When virgins can give birth and corpses can be fathers, what's next?

In an age of digital Darwinism reproductive technologies are, to say the least, controversial. Pundits and spin-meisters on all sides fervently approach this issue from a variety of positions, often divided along a religious/scientific axis.

Two recent events should be noted as part of this ongoing debate. South Korean scientists have reportedly "cloned 30 human embryos and harvested stem cells from them" (*Nature*, Feb. 12, 2004). To scientists, stem cells — the yet undifferentiated blastocysts of proto-life — are bonanzas that have the transformative power to develop into virtually every human cell type. Thus they are a fecund source of bio-material for replacement tissue and organs for the living. And a proclamation signed into law in Italy on Feb. 19, 2004, banned all sorts of assisted reproduction, including egg and sperm donation (*New York Times*, March 2, 2004).

Although therapeutic and reproductive cloning fashion different agendas, the fact that embryos are created in each case is of significant social concern. Is a blastocyst a sacred, spiritualized entity? Or is it a soulless bundle of cellular mass?

The fetus has appeared and reappeared throughout history in diverse works of art and medical texts. From Leonardo's anatomical drawings to the wax panoramas in 18th century vitrines to the "babies in bottles" residing in medical museums, the fetus is a highly charged icon carrying embedded narratives addressing the "miracle of life."



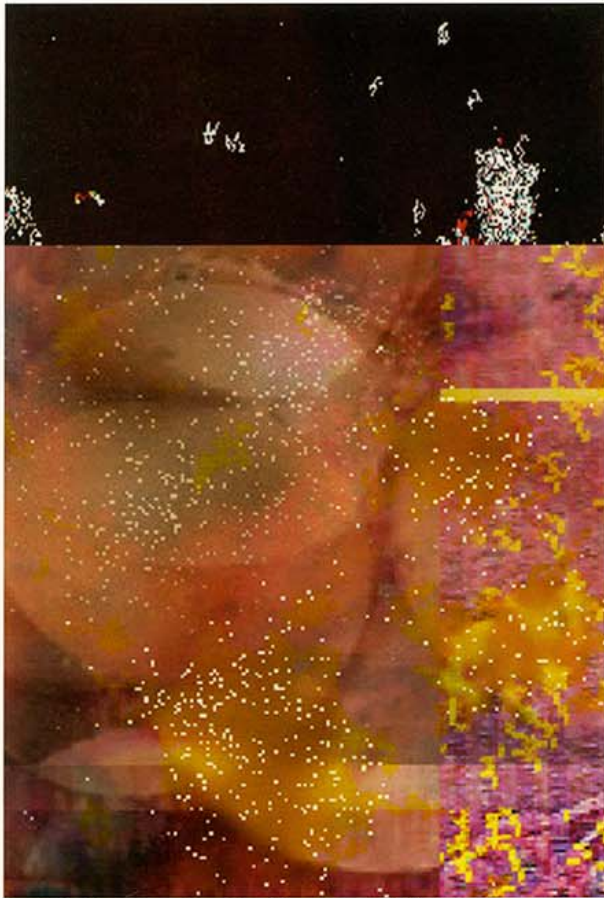
Akin and Ludwig, *Fetus* (1986)

Although the molecular building blocks of life have been decoded for many organisms (including humans) and are data-based as archives, research scientists as yet have not been able to “quicken” life from “scratch” in a test tube.

*Reprotech: Building Better Babies?*, an exhibition in the Academy's Gallery of Art and Science from April 8 to June 11, concentrates on a range of themes concerning the unborn. It focuses on the status of the unborn, in-vitro visualizations of the soon-to-be born, genealogical and breeding directives and manipulations, and other scenarios for the future of life — artificial and otherwise.

Akin and Ludwig, through their elegant platinum-palladium photographic process, capture images of the “never born.” Suspended between life and death, the “would-be” sentience of beings in bottles recall many science fiction stories of the 1920's about alternative methods of reproduction. Mark Kessell's works also make reference to in-between states of being. In *The In-Betweens* (2002) the artist explains that “the healthy human neonate foot exhibits a primitive reflex.” This reflex, which is only present in newborns, harkens back to our evolutionary simian ancestors. In Gina Marie's fossilized embryos, rarified information concerning early skeletal development and its forensics is in evidence.

Sandy Skoglund's *Maybe Babies* (1983) pictures pink and blue babies as free-wheeling spirits in an anxious environment. Employing



Joseph Nechvatal, *marie maubrun (lamentO scurry)*, (2003)

color-coded gender signs, Skoglund's work refers to the ways in which prospective parents sometimes wish for a boy or girl. The new science of sex selection referred to as PGD (*Newsweek*, Jan. 26, 2004) now makes



Gina Marie, *Fossilized Fetus* (1993)

it possible for parents to choose the gender of their offspring with high probability (and cost), by separating sperm into those that produce male and those that produce female babies.

However, sex selection, as evidenced in India and China, also carries with it imbalances for the larger global order.

Steve Miller's *L'Origin du Monde* (1994) employs the sonogram, an intrauterine imaging technique that peers into consenting pregnant women. Produced by sound waves that register on computer screens, sonograms' ultrasound capability provide the viewer a clear look at uterine life in real-time. Joseph Nechvatal works with computer assisted AI programs to create images reflective of complete life cycles. Like Miller, he invokes a form of tech-eroticism in which sexuality is fused with procreation and the unknown. Nechvatal's testicular forms create reveries of the flesh orchestrated in dynamic rhythms. In my own *Origins and Futures* (2003) pyrite is juxtaposed side-by-side with rapid prototyped



Suzanne Anker, *Origins and Futures* (2003)

digital sculpture of embryos. Invoking A.G. Cairns-Smith's theory of “genetic takeover,” the question at hand addresses the making of life forms in the future.

—Suzanne Anker

*Suzanne Anker, artist and curator of the Reprotech: Building Better Babies? exhibition, is chair of the Art History Department at the School of Visual Arts in NYC. She is coauthor, with the late Dorothy Nelkin, of The Molecular Gaze: Art in the Genetic Age, published by Cold Spring Harbor Press in 2004. She is also a member of ArtFlask, a group of artists, writers and scientists who meet regularly to discuss ideas at the intersections of art, culture and science.*

In conjunction with this exhibition, the Academy will host two symposia consisting of artists, scientists, historians and ethicists who will address issues raised by reproductive technologies. Watch the Academy's online calendar, [www.nyas.org](http://www.nyas.org), for dates and times.