

Bodies



of Wor

How
contemporary
artists are
exploring
reproductive
technologies

Words by
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Lauren Lee McCarthy,
Surrogate, part of "Data
Relations" on view at *Australian
Centre for Contemporary Art,
Melbourne*, December 2022-
March 2023. Photo by Andrew
Curtis, Lucy Foster, Casey
Horsfield. Courtesy of *Australian
Centre for Contemporary
Art, Melbourne*.

WRITING ON THE INTERRELATIONSHIP between biotechnology and power in *Artforum* in 2018, Paul Preciado touched on the societal implications of new reproductive technologies.¹ Between technological advancements, increased infertility rates, and various lifestyle shifts, like parents deferring birth to a later age and same-sex couples wanting to have babies, assisted reproductive technology (ART) is becoming increasingly prevalent—to the tune of a \$27.9 billion global industry. Preciado highlighted ways in which such technologies have severed sexuality from reproduction and pointed to their embeddedness in far-reaching chains of labor and consumption; more darkly, he framed the womb as a cold war battleground where the nation-state and the biomedical industry vie for control. It's fitting that Preciado's essay was published in an arts magazine, as artists today are likewise exploring reproductive technologies like in vitro fertilization, surrogacy, and gene editing in their work, parsing the complicated realities, fantasies, and possibilities

that such technologies (re)present. To paraphrase Leonora Carrington, these artists put one eye to the microscope and one to the telescope—considering, on one hand, the lived experience of those who use or participate in these technologies, and on the other, the broader societal structures in which ART and reproduction itself are mired. How can their work help us to see reproductive technologies and their effects more clearly?

Lauren Lee McCarthy recently presented herself as a “physical, emotional, and conceptual surrogate for understanding reproduction and technology’s role in it.” The Boston-born, Los Angeles-based artist and programmer has long been drawn to the knotty ways in which automation, algorithms, and surveillance inform our conceptions of our own identities, shape our bonds with one another, and even morph into love objects themselves. In this vein, she has previously employed Mechanical Turk’s online contractors to direct her first dates with individuals she met on dating

—1 Paul B. Preciado, “Baroque Technopatriarchy: Reproduction.” *Artforum* 56, no. 5 (January 2018): <https://www.artforum.com/features/baroque-technopatriarchy-reproduction-237175/>.



Lauren Lee McCarthy, *Surrogate*, 2022. Photo by Boaz Sender, courtesy of the artist.



Lauren Lee McCarthy, film still, *Intended Parents*, 2022, part of the series *Surrogate* (2022–ongoing). Direction and image by David Leonard. Courtesy of the artist.

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apps, and she has served as a human Amazon Alexa, managing smart homes in response to the closely surveilled inhabitants' needs. For her most recent project, *Surrogate* (2022–ongoing), the artist acted as a participant in the assisted reproductive industry in an effort to unpack the role that technologies of control—ranging from sperm donor databases to pregnancy surveillance—play in reproduction today. “What happens as we are able to exert increasingly more control over the bodies of pregnant people or life before it’s born?” McCarthy asks me.

Surrogate—which sprawls across a live-action role play-cum-durational performance, an app, videos, sculptural installations, and performance lectures—began with McCarthy offering herself as a gestational surrogate to friends. The prospective parents would have 24/7 real-time access to her biodata (heart rate, step count, food logs, and more) and calendar via a custom-designed app. As it tethers the health data of a pregnant woman to surveillant control, the project implicitly brings up concerns around the digital privacy of birthing people in light of the US Supreme Court’s devastating decision to overturn *Roe v. Wade* in 2022; data stored in period-tracking apps, for example, could

be subpoenaed or sold, making users vulnerable to prosecutors in anti-abortion states. On a more affective level, *Surrogate* poses open-ended questions about the ways in which our personal relationships—including our definitions of family and kin—have evolved in response to what McCarthy calls “rapidly developing reproductive technologies and greater access to data.” The artist pursued the surrogacy with her friend Dorothy until they were stymied by the mental health industrial complex; a psychological evaluation deemed McCarthy unfit for surrogacy because she had never had a baby of her own. Throughout the simulation, the two exchanged messages via the *Surrogate* iOS app, entering into intimate conversations that touched on, for example, the ways in which the surrogacy process reimagined or queered notions of parenthood, or the blurry boundaries between management and control in interpersonal relationships (it’s a scalable phenomenon). As part of the project, McCarthy took “womb walks” wearing a motorized prosthetic belly; using another app, prospective parents could deploy the “baby” to administer “kicks” that determined McCarthy’s direction. The womb walks, and the *Surrogate* project more broadly, ask about the directional flows of control in surrogacy and pregnancy, the

Ani Liu Ecologies of Care

"In our society, there seems to be a general rule that the more intensively one's work benefits other people, the less one is likely to be paid for it."

— Karl Marx, *Grundrisse*

"Everyday life is the primary terrain of social change."

— Hans-Jürgen Lauth, *Stimmen der Zeit*

Ecologies of Care discusses a variety of new works created during the artist's pregnancy, presented as a constellation of the labor of mothering. Reflecting the material culture of infant and children, the works draw from objects such as breast milk, formula, diapers, breast pumps, toys, feeding spoons, and women's care.

Taking inspiration from the exhibition, the sound of a pump that could draw milk within the gallery space. Created as a material reference to the artist's intimate experience with breastfeeding and pumping, the volume of milk pumped is linked to feeding through Sures and formula changes that the amount produced in a single session of feeding to a mother's supply of lactation.

Labor of care provides a data portrait of the enormous amount of invisible labor that perpetuates caring for a newborn. Building on the historic devaluation of "women's" work, this sculpture documents the labor often made invisible, questioning the types of work we value, and the care that we often take for granted.

The *Surrogacy* questions the relationship between technology, reproduction, and the biopolitical control of bodies as a means for production.

Finally, a series of AI-generated toys lose the relationship between the construction of identity and movements of play, while exploring the cultural and psychological influences that inform caring for children. Created using a machine learning algorithm named on a toy product marketed as "toys" and "gifts" from their essential first exposure to the gendered social values that we place on children and critically ask how we might rewrite and redesign play.

These works are part of a larger body of work that explores the relationship between the artist's pregnancy and the labor of mothering. The artist's work is a material reference to the artist's intimate experience with breastfeeding and pumping, the volume of milk pumped is linked to feeding through Sures and formula changes that the amount produced in a single session of feeding to a mother's supply of lactation.



(top) Installation view, Ani Liu, "Ecologies of Care," on view at Cuchifritos Gallery + Project Space, New York, May 27–August 6, 2022. Photo by Brad Farwell. Courtesy of the artist.

(bottom) Ani Liu, *The Surrogacy* (bodies are not factories), 2022. Photo by Brad Farwell. Courtesy of Cuchifritos Gallery + Project Space.



technological interfaces through which such control moves, and, ultimately, *cui bono?*

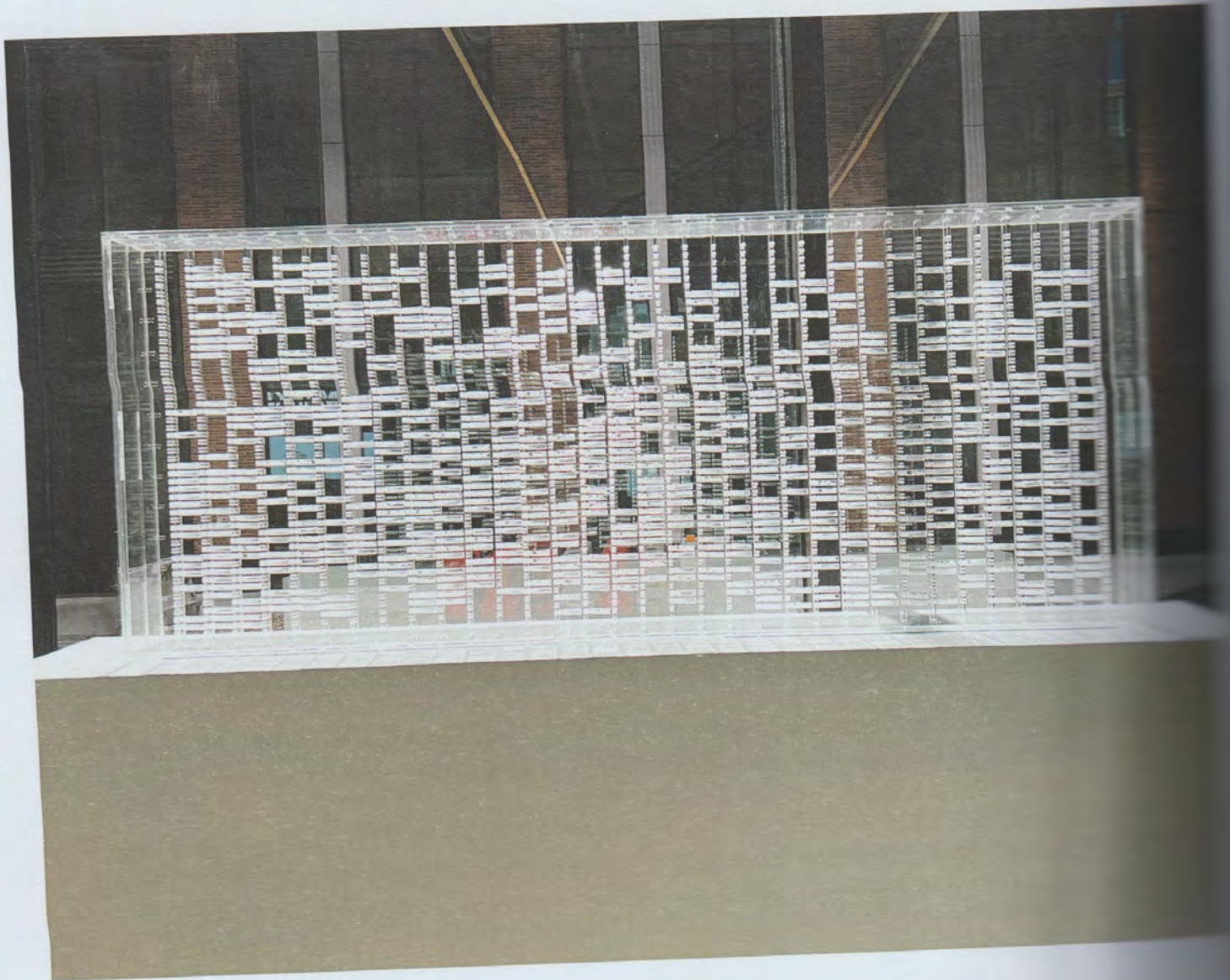
Writing in 1970, radical feminist Shulamith Firestone controversially made the (essentializing) argument that the womb was a major source of women's oppression and advocated for technological solutions that might free women from the burden of reproductive labor or at least distribute that labor more equitably among the sexes.² Firestone is not the only one to pin dreams to the artificial uterus; for example, some transhumanists and techno-solutionists today argue that

if legislative barriers were removed, new advances in ectogenesis, or gestation in an artificial environment, might redefine the landscape of the abortion "debate."

"There are so many systemic changes we could make to support reproductive bodies—changes that don't involve artificial wombs," says Ani Liu, a Queens-based artist and technologist who, during her graduate studies at MIT, taught a course on engendering empathy through speculative design. After enumerating the need for better paid postpartum parental leave and accessible, comfortable lactation rooms, among

—2 Shulamith Firestone, *The Dialectic of Sex: The Case for Feminist Revolution* (New York: William Morrow, 1970).

Ani Liu, *Untitled (Labor of Love)*, installation view, Cuchifritos Gallery + Project Space, 2022. Breastmilk, diaper hydrogel, diaper cotton, glass, acrylic. Photo by Ani Liu, courtesy of the artist.





Lucy Beech, *Flush*, film still, 2023. 4K video, 15 minutes with 7.1 surround sound. Image courtesy the artist and Kunstinstituut Melly Rotterdam.

other transformations, she added, “But unfortunately engineering an artificial womb feels more achievable than gender equality at times.”

Liu’s sculpture *The Surrogacy (bodies are not factories)* (2022), which was on view in her 2022 exhibition “Ecologies of Care” at New York’s Cuchifritos Gallery + Project Space, is a 3D-printed model of a porcine uterus. The bulbed chain contains facsimiles of both human and pig fetuses—a reference to xenopregnancy, in which an embryo from one species is implanted into the uterus of another. Thus far, it seems that interspecific pregnancies have been used predominantly in endangered species protection programs, but it’s not hard to extrapolate and imagine people (ab)using genetically engineered livestock as an alternative to human surrogates, as suggested in *The Surrogacy (bodies are not factories)*. The glossy, elegantly folded sculpture visually riffs on the allure of sleek new technologies as its content challenges the notion that technology might offer a one-and-done fix to a problem as complex and intractable as gender inequality. The piece also gestures toward the exploitative treatment of human surrogates in positions of economic precarity, as well as the link between modern

reproductive technologies and negative effects on animal welfare (for example, the brutal lifestyle often endured by the mares whose urine is used in hormone-replacement drugs).

In *Untitled (Labor of Love)* (2022), which was also included in “Ecologies of Care,” Liu, like McCarthy, explored datafication in an intimate context. (A version of this piece was also included in “Designing Motherhood: Things That Make and Break Our Births,” a group show of the same year at Boston’s MassArt Art Museum.) In the first thirty days of her daughter’s life, Liu turned to a “baby tracking app” to record the infant’s feedings and diaper changes. When she pulled up the app at the end of the month, she was struck by the “data portrait” of her time and labor—labor that is often made invisible in a society that systematically devalues childcare, among other forms of feminized care work. *Untitled (Labor of Love)*, which is indebted to Mary Kelly’s *Post-Partum Document* (1973–79),

is a large acrylic rectangle structured by hours of the day on the Y-axis and number of days on the X-axis. Small glass vials, each equal to half an hour, are filled with either breast milk, formula, or diaper fragments to represent



(top) Lucy Beech, *Flush*, film still, 2023. 4K video, 15 minutes with 7.1 surround sound. Image courtesy the artist and Kunstinstituut Melly Rotterdam.

(bottom) Lucy Beech, *Reproductive Exile*, film still, 2018–23. 4K video, 26 minutes with 5.1 surround sound. Image courtesy of the artist.



the nature of the labor performed in that period. In highlighting the work that goes into infant care, this data portrait might prompt viewers to consider additional forms of invisible labor—like the precarious data labor executed for Silicon Valley tech giants by “ghost workers” worldwide, many of whom are older women of color, as Catherine D’Ignazio and Lauren F. Klein point out in their book *Data Feminism*.

For Lucy Beech, a British-born artist-filmmaker based in Berlin, previous video works that explored emotional or intimate labor (mourners-for-pay, women’s empowerment groups), as well as a growing interest in the figure of the “broker,” pointed her in the direction of global fertility chains. Beech’s half-hour docufiction *Reproductive Exile* (2018) follows a woman named Anna as she undergoes treatments at an upscale fertility clinic in the Czech Republic, a country whose lax surrogacy regulations make it a popular pick for international consumers. A film in which money and whiteness are omnipresent, *Reproductive Exile* coolly draws out the ways in which geopolitics, legislation, and capital choreograph the movements of the reproductive bioeconomy; it also alludes to longstanding concerns that in vitro fertilization might be put in service of eugenics.

The looping work repeatedly returns to the ways in which reproductive technologies link people to one another—and for that matter, to animals and machines—in surprising ways. Anna becomes increasingly fixated on “synching” with her host using a device called Eve that acts as a personalized model of her reproductive tract, a real-life techno-solution to the exclusion of females from fertility research due to the ethical quandaries around testing on a potentially pregnant person. She sees herself within a grand flow, buoyed along by urine from pregnant mares and urine from menopausal women (both of which are used in IVF

drugs), and eventually reaches an ecstatic climax as Eve’s metal cavities overflow with liquid.

Beech’s interest in the productive capacities of biomatter and bodily waste has since oozed into other arenas, as in *Flush* (2023), in which she explores the figure of the freemartin, or infertile, intersex cattle that result from a female cow being exposed to a male twin in utero. Freemartins, a longtime subject of scientific research, led to a hormonal understanding of the body and advanced awareness of the ways in which “the body is made up of non-self cells,” says Beech. “Freemartin research disrupted stable concepts of the individual as a closed and autonomous system and revealed the limitations of scientific models that had been committed to genetically homogeneous selfhood.”

Beech’s films make space for the meaningful, even profound, experience of seeing and acknowledging the unexpected kin that biotechnologies produce—while remaining trained on the asymmetries of power on which such entanglement is premised. Likewise holding space for ethical complexity, McCarthy critiques the place of surveillant control in the lives of pregnant people, especially surrogates, today—while pointing to the opportunities for connection and kin-making to which reproductive technologies (and even surveillance technologies) can give rise. Liu, meanwhile, reminds us that techno-solutionism doesn’t mean much without the structural and policy changes necessary to steer our society in a more equitable direction for birthing people, caretakers, and other executors of feminized labor. As we navigate a world of increasingly technologized bodies, alertness to both sides of this coin—to the structural possibilities and limitations of, and the messy lived realities of, our cyborg lifeways—seems like a good place to start. ■

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