

Marian Sandberg

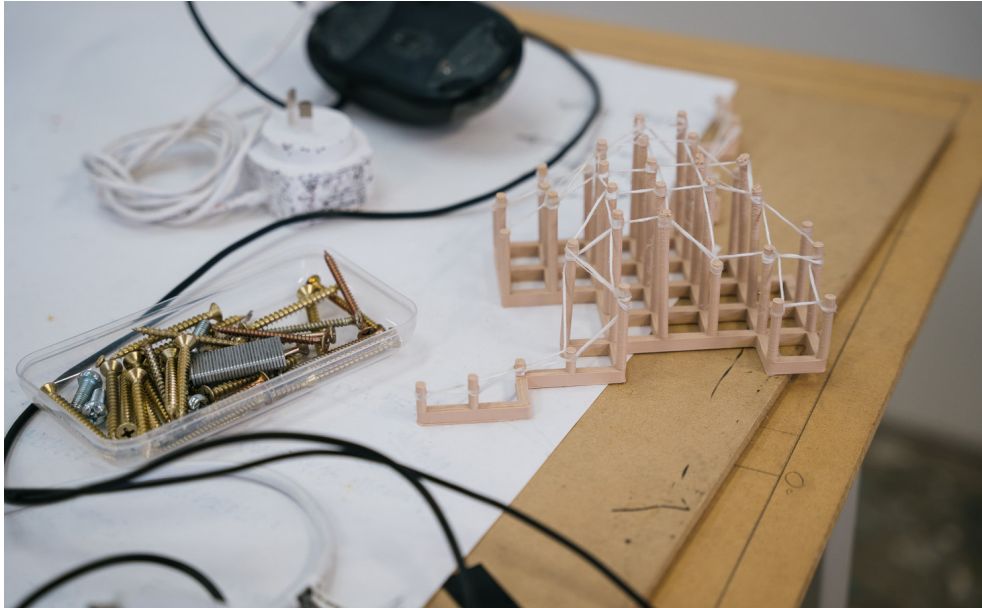


Marian Sandberg works across sculpture and installation. Through her practice, she seeks to understand what it means to be human in this age of technology.

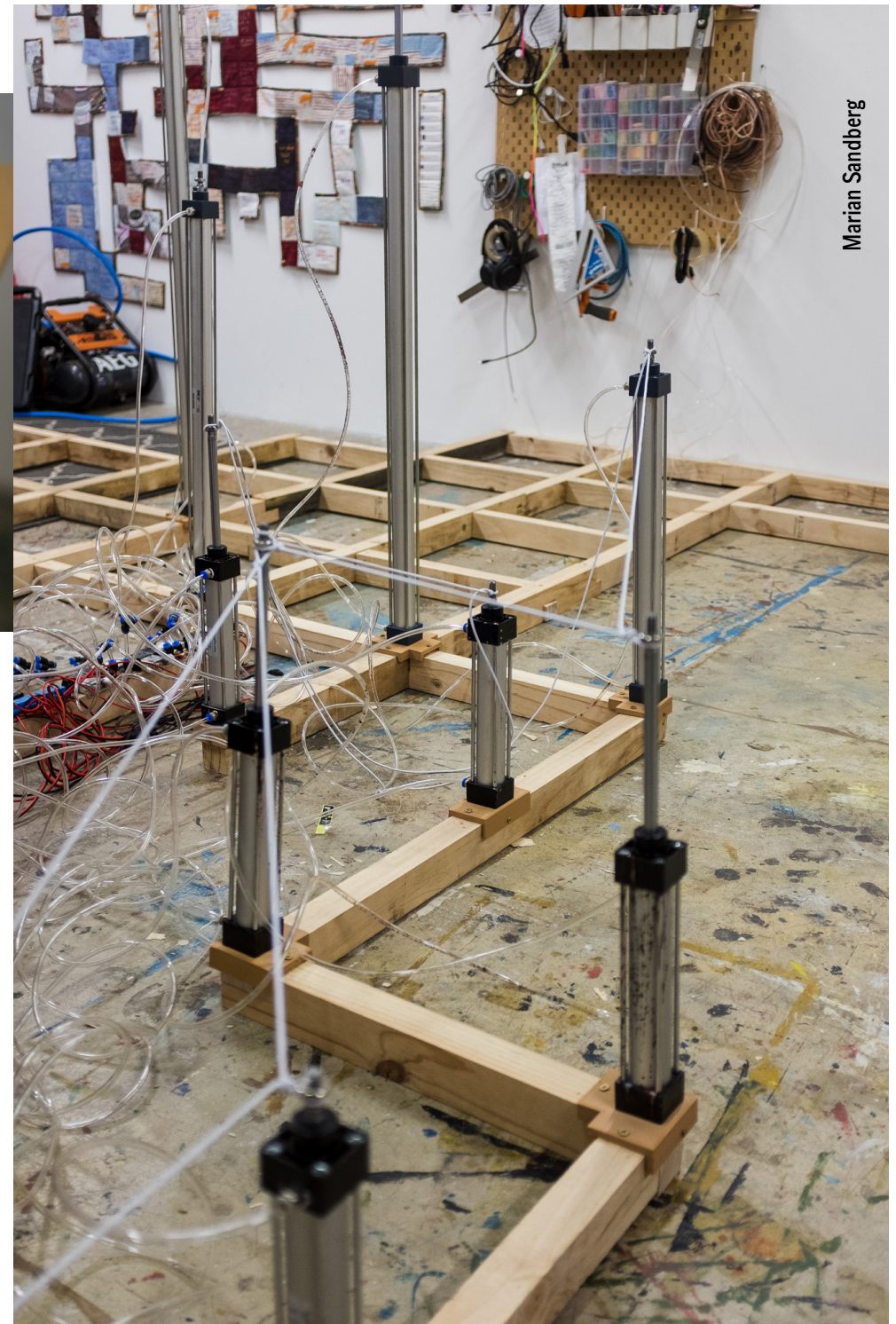
She does so by programming a diverse collection of old and new technologies in the expanded field, offering alternative systems to inhabit, and grounds for re-thinking inherited technological norms. This is a longstanding research area for Sandberg, who holds a Master of Information Systems from the University of South Australia and a Bachelor of Visual Art from the Adelaide Central School of Art.

Sandberg became Stelarc's first mentee in 2023, culminating with her first solo show *The Presence* which won the South Australian Living Artist (SALA) festival's UnitCare Services Digital Media Award. Other recent exhibitions include *Hatched: National Graduate Show 2023* at Perth Institute of Contemporary Art; *Data Reveal Party (2024, The Little Machine)*; and *Materiality (2024, Praxis Artspace)*. She is never quite sure where her keys are, and wonders if Siri gets tired of finding them.

Marian Sandberg, 2024 Studio Program artists, Adelaide Contemporary Experimental. Photography by Thomas McCammon.



ACE Studio Open Day (2024), Marian Sandberg's studio, Adelaide Contemporary Experimental. Photography by Lana Adams.
ACE 2024 Studio Program Donor Event (2024), Marian Sandberg's studio, Adelaide Contemporary Experimental. Photography by Peter Fong.



Marian Sandberg

Uterichoreogenesis by Pia Van Gelder

Marian Sandberg is an open book. She brings a level of full disclosure that is both daring and generous, motivated by a desire to locate and define humanity among systems of technological engagement.

In her most recent work, she seeks to open up the black box of the fertility industry and the norms that surround it, by sharing her experiences of making children while having a uterus that cannot host a foetus. Previous works by Sandberg have explored her path through the fertility industry with in-vitro fertilisation and surrogacy. Like Sandberg's *ACE Studios: 2024* exhibition artwork *Remote* (2024), *Data Reveal Party* (2024) lays bare the artist's choice to "gestate the excess in the gallery," presenting the human embryos that were withdrawn from cryostorage after "two were incubated, one was lost as an embryo, [and] one was lost as a four-day-old human."¹ Those remaining are mounted, edited and hung on the gallery wall.

For *Remote*, Sandberg turns to her own uterus, no longer in her body. When going into surgery for a hysterectomy, Sandberg asked her surgeon if they would document her uterus by scanning it in three dimensions. They tentatively asked her why and she explained, "I'm an artist," which sufficed. From her digitally extracted uterus, Sandberg has made a gallery-sized mechatronic recreation.

The aesthetics of the synthesised uterus have evolved over time. Until the end of the nineteenth century, incubators were not a medical technology but an agricultural one, primarily used for poultry production, and presented as fairground attractions within an exhibitory culture that spectacularised cutting-edge medical treatments as public entertainment. (As Elizabeth Stephens points out, so strong was the association of incubators with birds that a major exhibition of premature babies in the new technology of incubators in Berlin in 1896 was popularly referred to as the Kinderbrutanstalt – "baby hatchery").²

Half a century later, Emanuel M Greenberg's 1955 patent for his Artificial Uterus looked something like a bathroom and septic plumbing system; while more recently artificial wombs have taken different material forms, mimicking the cellular tissue of the uterine wall with a "biobag" made of polyethylene film to encase and expand with the gestation of a lamb foetus.³ Sandberg's scaled-up, animated womb is furnished on a pixellated foundation of recycled chair legs and soft, delicately stitched and threaded upholstery, colour matched in human-tissue tones to her bodily scan. These are the domesticated aesthetics of feminine labour that Sandberg commonly brings into

her work. The tools and products of textiles and weaving work in tandem with custom electronics and computation, throwing back to computational code's conception in the Jacquard loom. The work is familial and estranged in more ways than one, as Sandberg considers the ontology of her own uterus as she recalls her experience with a remote uterus; that of her surrogate. This intimate interweaving with the technology of the time fundamentally shifted Sandberg's experience of what it means to be human through redistributing her own reproductive capability and agency.

Bioartists Ionat Zurr and Oron Catts discuss how ectogenesis (the development of embryos in artificial conditions outside of the uterus) opens questions about care along with our fundamental "ability to know life, let alone be alive."⁴ It was only late last year that a number of international research teams began seriously planning human trials for artificial wombs. For humans, ectogenesis has implications for many including those without a viable uterus, those with comorbidities or disabilities that preclude them from pregnancy, and those that want to outsource the labour of pregnancy due to its part in gender inequity. It has been considered a cyberfeminist and xenofeminist project. The early feminist writer and activist Shulamith Firestone saw the artificial womb as part of a larger goal to free "women from the tyranny of their reproductive biology by every means available."⁵

That the uterus is an organ existing solely for the gestating of a foetus, and otherwise lying dormant, is a story perpetuated by the patriarchal misogynistic medical industrial complex. Comparatively, we have spent very little time studying what uteri do without a fertilised ovum. The menstruating uterus is in a constant state of flux, continuously shedding and regenerating the functional layer of the endometrium, the inner layer of the organ. Sandberg's re-engineered uterus sheds pressurised air in a cyclical fashion, sending her an email each time in a bid for connection. But the fluxing structure isn't in constant motion; remote in both proximity and utility, *Remote* is programmed with motion sensors to drive its cycle, requiring a viewer's presence to activate it. The element of spectacle recalls the (in)famous Coney Island incubator babies, another instance of the (often highly profitable) remote womb craze of the late nineteenth century, in which the tiniest of infants were presented as exhibits for goggling spectators.

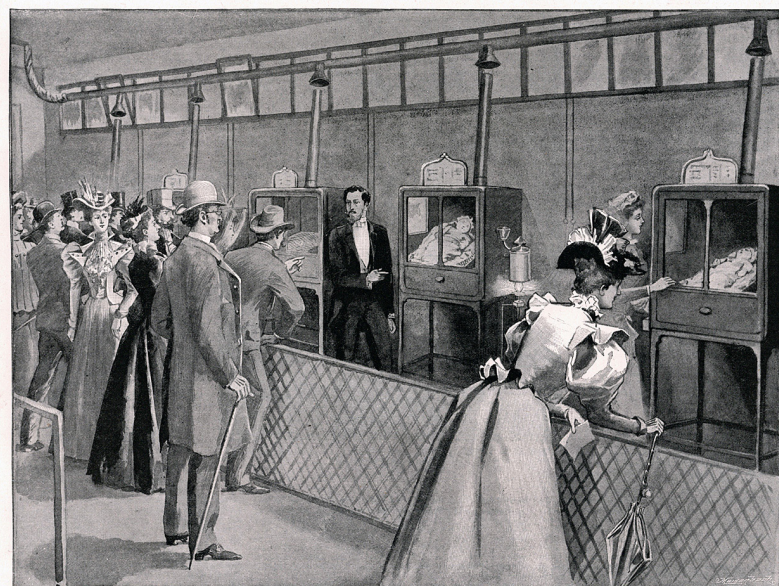
3 Greenberg, Artificial uterus. Partridge et al., "An Extra-Uterine System to Physiologically Support the Extreme Premature Lamb."

4 Ionat and Oron, *Tissues, Cultures, Art*, 55.

5 Firestone, *The Dialectic of Sex: The Case for Feminist Revolution*, 209. As Julia Kaganskiy points out, Firestone's ideas were controversial then and continue to be so today, "not least because she failed to develop an intersectional understanding of women's struggles; for instance, she neglected to acknowledge the way race and class have determined which women ultimately bear the brunt of reproductive care work. Despite these shortcomings, her work has remained influential with cyberfeminists, queer theorists, and xenofeminists, who have similarly looked to technology as a means of emancipating bodies from the tyranny of nature (as it says in Laboria Cuboniks' *Xenofeminist Manifesto*: "if nature is unjust, change nature!") and advocated for uncoupling kinship and care relations from purely biological definitions". news.artnet.com/art-world/ani-liu-2153297

1 "Data Reveal Party"

2 Stephens, *Artificial Mothers*



DRAWN BY S. A. H. ROBINSON
 The latest novelty in the Berlin Exhibition is the stall with Dr. Lion's baby incubators, which prove a great attraction not only to the medical profession, but also to ladies. The babies exhibited are between five and eight months old. They would not be living if it were not for the invention, and are kept alive in warm temperatures varying according to their age. They do not appear to be able to see or hear, but merely to crawl, and they are nourished by drops of milk dropped into their mouths.

“AN ARTIFICIAL FOSTER-MOTHER”: BABY INCUBATORS IN THE BERLIN EXHIBITION

Lion's "Children's Incubation Institute" at the Great Industrial Exposition in Berlin, 1896. Published in the Illustrated London News, 1896. Image courtesy of the Wellcome Library.

Firestone, Shulamith. *The Dialectic of Sex: The Case for Feminist Revolution*. New York: Bantam Books, 1972.

Greenberg, Emanuel M. Artificial uterus. United States US2723660A, filed July 22, 1954, and issued November 15, 1955. patents.google.com/patent/US2723660/en.

Ionat, Zurr, and Catts Oron. *Tissues, Cultures, Art*. Palgrave BioArt. Cham: Springer, 2023.

Marian Sandberg. "Data Reveal Party." Accessed October 17, 2024. sandberg.io/artwork/data-reveal-party.

Partridge, Emily A., Marcus G. Davey, Matthew A. Hornick, Patrick E. McGovern, Ali Y. Mejaddam, Jesse D. Vrecenak, Carmen Mesas-Burgos, et al. "An Extra-Uterine System to Physiologically Support the Extreme Premature Lamb." *Nature Communications* 8 (April 25, 2017): 15112. <https://doi.org/10.1038/ncomms15112>.

Rego Barry, Rebecca, "Coney Island's Incubator Babies", *JSTOR Daily*, 2018. Available from: daily.jstor.org/coney-islands-incubator-babies

Stephens, Elizabeth, "Artificial Mothers" on the Midway: The History of Infant Incubator Exhibitions From the World's Fair to the Funfair", *Technology and Culture*, forthcoming

Remote works to emancipate Sandberg and her uterus, no longer beholden solely to medical, bodily and societal norms, instead asserting its own semi-autonomous system within gallery walls. At rest until activated by a viewer's motion, *Remote* is animated by a tensile system of solenoid valves and a network of 42 pneumatic cylinders that expand and retract with a shared agency of resistance, air pressure and programming. Stretching over 1.5 metres high, this uterus could house a collective, and renders a viewer into a homunculus as it expands to engulf their view. The womb is a container, both encased in the body and to encase another body. *Remote* does so, envelops the spectator in an act of Uterichoreogenesis; breathing, wet with electronic flux and mechanical lubricant, soft at its base and networked with an electronic nervous system that Sandberg continues to develop to one day distribute agency using a controller she plans to wear.

– Pia Van Gelder

About the writer

Pia Van Gelder is an electronic artist, researcher and historian. Their art practice and writing investigates historical and contemporary conceptions of energies and how these shape our relationship with technology, bodies and our environment. Their historical research has concentrated on the influence of esotericism on electronic instruments of the 20th century and their book current project *The Energies Artists Say* is a collection co-edited with Professor Douglas Kahn presenting a methodology for understanding the polyvalence of energies in practices across the arts.

Van Gelder's work has been shown at the Black Mountain College Museum (NC, USA), Kyoto Art Centre, SuperDeluxe Tokyo, ISEA, Langgeng Art Foundation and iCan in Yogyakarta. Their work has been commissioned by organisations such as Sydney's Museum of Contemporary Art, Performance Space and Carriageworks. Their practice often involves designing and building electronic instruments that are presented in performance and interactive installation contexts. Van Gelder performs live at events and festivals including Liquid Architecture, with various sound and audio-visual projects. They have curated and facilitated events and been involved in a number of artist run initiatives including Dorkbot Sydney, which they founded in 2006, Moduluxxx, a festival of modular synthesis and Serial Space, an experimental art space that they codirected from 2010-2013 and Lanfranchis, an experimental art space codirected from 2004-2007. Often traversing the spaces of transdisciplinary and speculative art and design, their work has been discussed in recent critical texts including Prudence Gibson's *The Plant Contract*, *Art's Return to Vegetal Life* (Brill, 2018), Peter Weibel's *Sound Art, Sound as a Medium of Art* (MIT, 2019). Their writing has been published in the *Journal of Sonic Studies* (16, *Materials of Sound*). With Caleb Kelly, they have co-authored a chapter of the forthcoming 3rd edition of Nicolas Collins, *Handmade Electronic Music: The Art of Hardware Hacking* (Routledge) and coedited a forthcoming collection *Feminist, Queer, Anticolonial Propositions for Hacking the Anthropocene: Archive* (Open Humanities Press), with Jennifer Mae Hamilton, Sue Reid, and Astrida Neimanis.

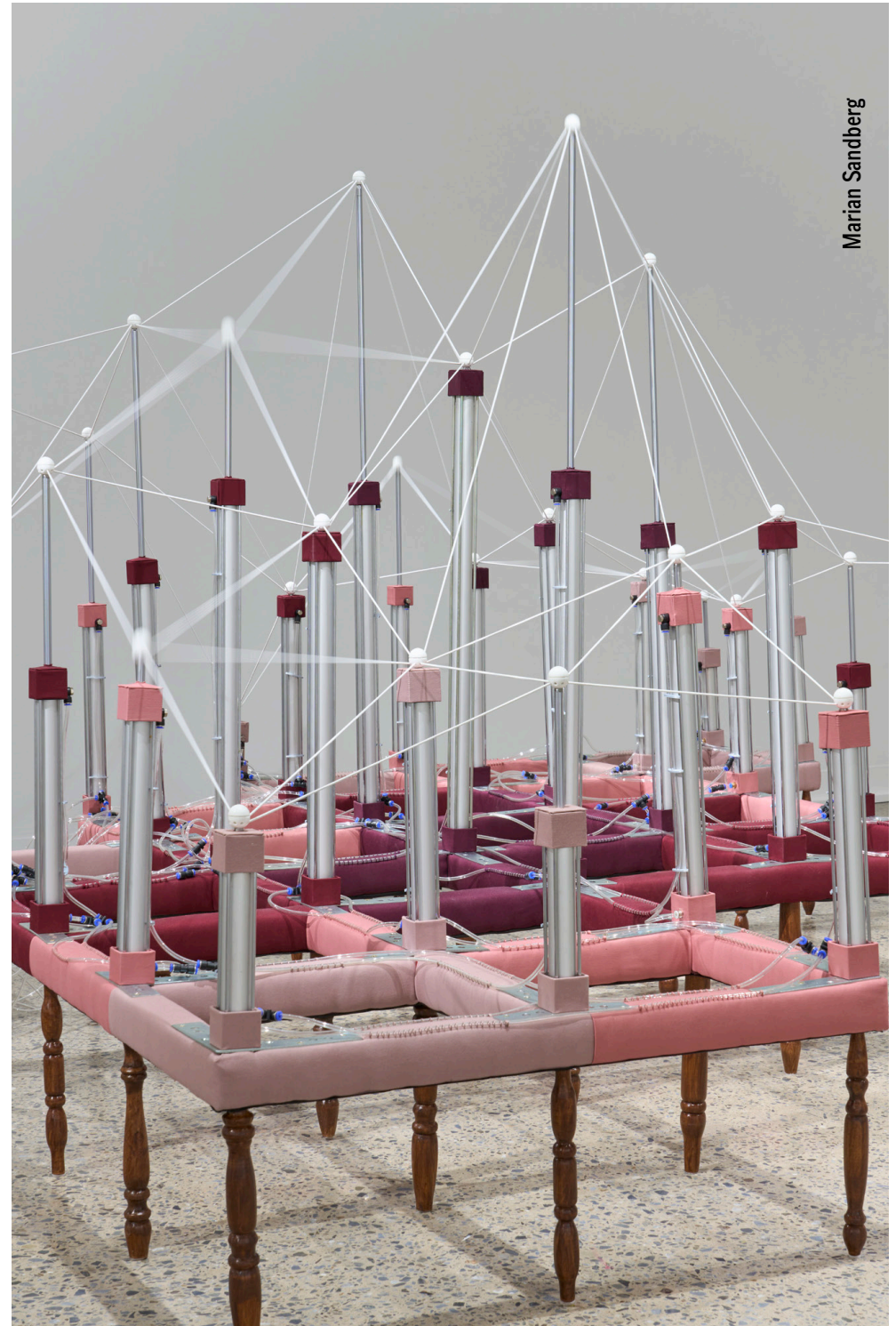
Marian Sandberg
Remote, (2024)

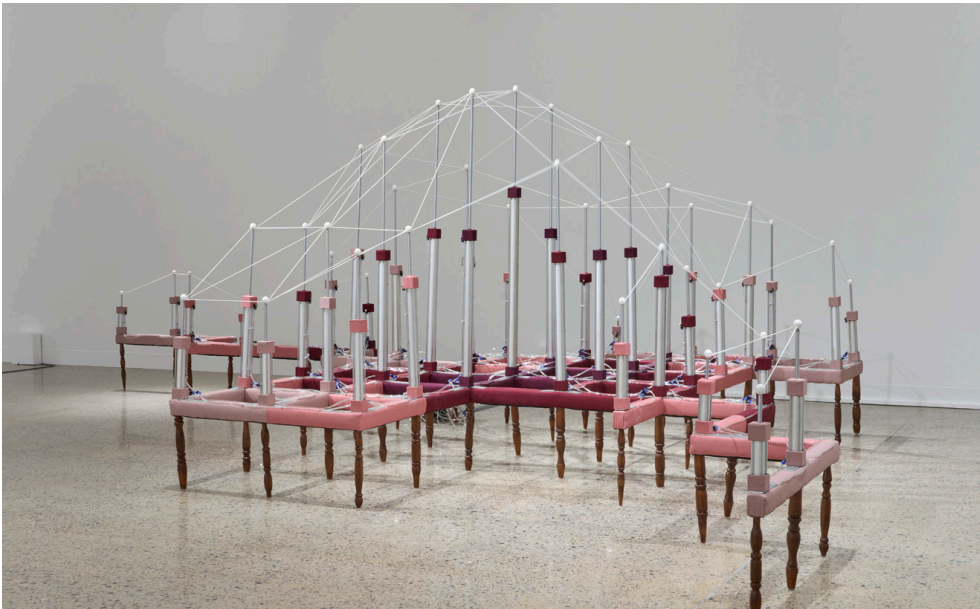
Pneumatic cylinders, microcontroller with WiFi connection and email account, air compressor, PVC tubing, custom 3D printed parts, steel mending brackets, hat elastic, cotton upholstery, embroidery thread, salvaged turned wood chair legs.
6 x 4m, height variable
Courtesy the artist

Marian Sandberg seeks to understand what it means to be human in this age of technology. She utilises a range of technologies, from needle and thread to electronics, breaking apart and inserting herself into systems in order to locate and define humanity among technological norms.

Remote (2024) sees Sandberg examine the relationship between technology and reproductive capability. When having her uterus removed last year, Sandberg instructed theatre staff to 3D scan it on her phone so she could take home a digital extraction. From her digitally extracted uterus, Sandberg has made a gallery-sized mechatronic recreation, motion-activated by the viewer and WiFi enabled, emailing her when it's on its cycle.

Marian Sandberg (2024), *Studios: 2024*, installation view, Adelaide Contemporary Experimental. Photography by Sam Roberts.





Marian Sandberg (2024), *Studios: 2024*, installation view, Adelaide Contemporary Experimental. Photography by Sam Roberts.

I couldn't take it home in a jar. Not that I'd want to anyway – digital extraction seemed more exciting. Handing over both my phone and consciousness, I lay on the operating table, waiting for my uterus to be disconnected. It was a pretty useless organ to me, having outsourced the gestation of my kids to strangers through Facebook. Theatre staff dutifully laid out the organ, posed it as per anatomical norms and used my phone to 3D scan it. On waking, I was left with a digital artefact to reclaim and materialise.

