Mindspace is a conversation series by [Hothouse](), charting the conditions of technology-informed art practices in an attempt to present a working history of media art in Singapore. It further expands its horizons to chart the international conditions of media art.

Flesh Coded and Performed: An Interview with Margaret Tan
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Conducted on 3 June 2023 by Johann Yamin and Samantha Yap for Hothouse
Transcribed and edited by Johann Yamin

In this conversation for the Mindspace series, we hear from artist and academic Margaret Tan, whose performance artworks and interactive media installations from the late 1990s onwards speak to the technopolitics of gendered labour, virtual identities, and networks of cyberarts activity in 2000s Singapore. In 2001, Margaret Tan was one of the earliest artists-in-residence at the National University of Singapore's (NUS) Cyberarts/Cyberculture Research Initiative, producing work for the 2001 exhibition *Cyberarts: Intersections of Art and Technology*. Aspects of her practice from this period are gathered within Mindy Seu's *Cyberfeminism Index* (Los Angeles: Inventory Press, 2022). Margaret Tan's PhD research examined the role of pervasive computing in Singapore, exploring the implications of the Intelligent Nation 2015 technological masterplan. She currently teaches part-time as Senior Lecturer at Tembusu College, NUS. She speaks to us in her personal capacity for this interview.

Johann Yamin and Samantha Yap converse with Margaret Tan about her works from the late 1990s to 2000s, examining her practice and its relationships to feminist thought, cyberfeminism, and technology. This interview transcript has been edited for length and clarity.

Margaret Tan, *Restless*, 1999, Performance. Image courtesy of the artist.

Margaret Tan, *Picture-Perfect*, 2000, Installation with performance. Image courtesy of the artist.

Johann Yamin & Samantha Yap (JY & SY):
In 2015, during a panel held at Amanda Heng's artist studio, you described your journey with art as one that had started late.[1] It was only after spending seven years in the workforce that you began studying art part-time at the LASALLE College of the Arts.

I'm curious to hear more about your earlier works from this period. With performance-installations like *Restless* (1999) and *Picture-Perfect* (2000), you created installative spaces tinctured with a kind of uncanny domesticity. Perhaps this approach presented the fleeting possibility—or even the dreadful impossibility—of stepping out of the domestic sphere as a woman at that particular time. Could you share more about your choice of medium and your interest in examining women's lived experiences?

Margaret Tan (MT):
When I joined LASALLE as a part-time student, it was towards a Diploma in Fine Arts, specialising in painting. But by the time I submitted my works for the diploma, I was already experimenting with performance and installation art. Immediately after, I followed up with a Degree in Fine Arts and *Restless* and *Picture-Perfect* are some works that came out of that. I felt installation and performance art were more suitable for the kinds of political works I was interested in creating.

As with most art students, I went through an initial period of experimentation and self-discovery. However, it was really through my then lecturer Irina Aristarkhova's feminist art history and theory classes that really transformed me and my art practice. I loved the art theory and art history classes. Uncovering feminist writings and artworks that could connect with my personal experiences and explain the patriarchal system was not only enlightening, but also inspirational.

My late father was quite patriarchal. To him, women didn't need to be so educated or ambitious; they just needed to find a good husband to marry. Of course, in my previous job as a Singapore Airlines flight attendant, I also experienced sexism and

the sexualisation of the female body. Early in my marriage, the distribution of housework was often a point of contention with my husband. The encounter with feminism gave me the words and pointed to the relationship between the personal and the political. That there is, beyond personal experience, a system or structure that reinforces patriarchal values and expectations.

While I find your term "uncanny domesticity" very apt in describing the resulting works, I do nonetheless regard them more as a subversive yet hopeful commentary on women's assigned role in the domestic, rather than with a sense of "dreadful impossibility". For example, with *Restless*, while the figure starts out being part of the wallpaper, she eventually emerges from it, while creating new patterns in the process.

At the same time, these works also function to de-stabilise patriarchal modernist art history and the conventional role of women as objects of art, by complicating the figure and the ground, the passive and active. With *Picture-Perfect*, it references Daniel Buren's actions of escaping the museum walls but disrupts this further through the use of humour, sound, and housework.

Margaret Tan in collaboration with Faith Wilding, *Maintenance Performance*, 2001, Multi-media performance. Image courtesy of Margaret Tan.

JY:
You also co-created *Maintenance Performance* (2001) for Women@Work, a symposium by women's rights organisation AWARE.² The performance work was a collaboration with Faith Wilding, a founding member of the US-based cyberfeminist art collective, subRosa. How did your collaboration with Wilding unfold, and how was *Maintenance Performance* staged?

MT:
I knew of Faith Wilding's works as an art student, and I love her 1972 piece, *Waiting*, a performance on the repetitive cycle of waiting women go through in their lives as they serve and maintain the lives of others. I remember choking up each time I watched a recording of it, and thinking how such a simple performance could be so immensely powerful and still relevant decades after it was first performed. So, when Irina introduced us and the possibility of working together, I was in awe, excited and terrified at the same time. After all, Faith was a giant in feminist art history, and I had only just graduated from art school. But Faith was generous and open in the collaborative process. We started our discussion via email, on women's work in the contexts of Singapore and USA vis-à-vis the global political economy, technology, race, and class. We wanted a work that makes women's work visible and that speaks to both our contexts, in terms of similarities and differences.

Maintenance Performance was the opening act for the symposium Women@Work, organised by AWARE, held in an auditorium in Singapore to celebrate International Women's Day on March 2001. It was twenty minutes long with three main segments signalled by the ceremonious exchange of aprons, imprinted with labels, between Faith and I. We had a set of slides each that were projected simultaneously showing artworks dealing with maintenance work and images of women in various "feminised" jobs, while Faith and I gave a breakdown of labour statistics of women in the workforce in USA and Singapore. We touched on the impact of technology on women's lives, both at work and at home. We ended the performance by chanting in unison the multiple "just-in-time" tasks women perform, from conception to death.
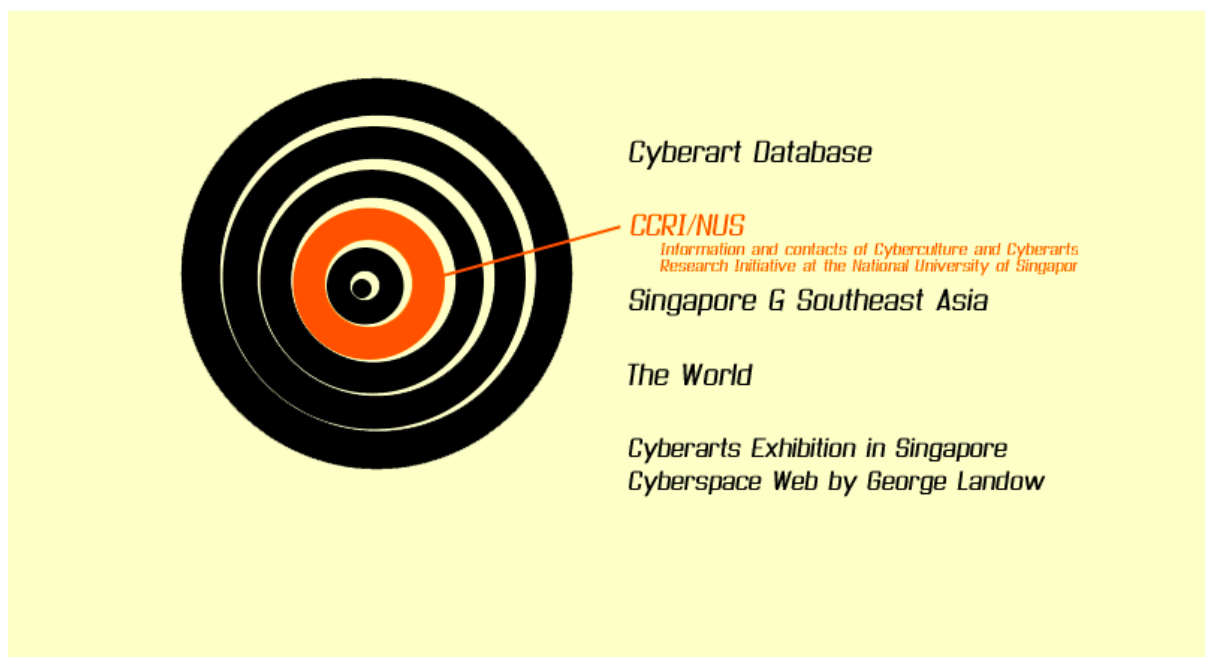
Cyberarts/Cyberculture Research Initative website landing page. Screenshot retrieved from cyberartsweb.org

JY:
The year 2001 saw a flourishing of new media art and research in Singapore. George P. Landow, leading hypertext scholar from Brown University, established the University Scholars Programme at the National University of Singapore (NUS), where he invited Irina Aristarkhova to be director of the newly-launched Cyberarts/Cyberculture Research Initiative (CCRI).

You were hosted as one of the first few artists-in-residence at the CCRI to develop the interactive installation *Virtual Bodies in Reality* (2001).³ *Virtual Bodies in Reality* was shown during the 2001 Nokia Singapore Art festival at the exhibition, *Cyberarts: Intersections of Art and Technology*, curated by Gunalan Nadarajan, then the Dean of LASALLE.⁴ What are your reflections about operating through this frame of "cyberarts" in the 2000s?

MT:
The CCRI, overseen by Irina, and the *Cyberarts* exhibition, curated by Guna, were really ground-breaking projects. Before CCRI, I don't think there were any artist-in-residence programmes in Singapore that supported artists in creating works at the intersection of art, science, and technology. Likewise, the exhibition was the first of its kind in showcasing so many of these works on a national platform, not only in terms of using digital technology as a medium, but also in critically analysing the digital medium.

I felt very lucky to be one of the resident-artists of CCRI to produce work for the *Cyberarts* exhibition. At that time, I had not created any cyberart or new media art. So, it was really a leap of faith in my capabilities on the parts of Guna and Irina, to which I am forever grateful. I was not concerned about how the work was framed. To me, digital technology was another medium for creation and I didn't want to pass off this amazing opportunity. It was also very reassuring that the CCRI residency was there to provide us artists with the technical support.

Looking back now, I realised we were really creating cyberart history in Singapore and putting Singapore on the global map. For example, Charles Lim's work from the exhibition was picked up by the curator of Documenta, while my work was subsequently showcased in Taipei. Irina and Guna were really instrumental here and I feel they never really got the credit they deserve. Perhaps they were too ahead of their time and Singapore was not ready for them. I remember there were not many local reviews of the *Cyberarts* exhibition, as compared to the other conventional showcases in Nokia Singapore Art. There was even one review that was quite dismissive of the exhibition and the term "cyberarts".
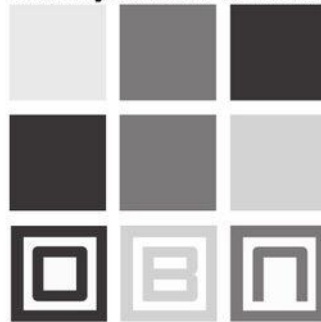
Very Cyberfeminist International OBN (Old Boys Network) Conference 2001.

JY:
In *Virtual Bodies in Reality*, you worked with the digitised data of two cadavers—a male and a female's—from the Visible Human Project. Speaking about the work's development at the Very Cyberfeminist International OBN (Old Boys Network) Conference 2001 in Hamburg, you shared your critical observations about the Visible Human Project and the disparity in online reception towards the Visible Man compared to the Visible Woman.[5] Could you tell us a little more about the impetus for *Virtual Bodies in Reality*?

MT:
First, I encountered this article on the history of the mouse, thanks to Guna, the curator of the *Cyberarts* exhibition. I thought, how interesting that we use the computer mouse in our everyday life and work, but nobody thinks of the mouse as being a piece of military technology. I wanted to highlight that and think about violence—to do something about the computer mouse's military roots, as well as how the notion of violence can change through that technology, because you can track and launch an attack telematically through a click.

It was only through the CCRI residency, during a visit to one of the research centres, that I discovered the Visible Human Project (VHP). Upon further research into the VHP, I thought the two data subjects were very apt and would really enrich my artwork by drawing connections between military and medical technologies, the different forms of violence enacted on flesh, and how the very act of violence itself has changed through digitisation. I eventually obtained permission from the National Library of Medicine, Maryland, USA, to use the data for the artwork.

While I could have easily made up models for my artwork, I thought it was really important to use the VHP bodies as they surface the violence in medical technology, with its history of experimentation on bodies. The dataset was created through a pair of corpses that were frozen, sliced and imaged; flesh disintegrated literally as the bodies were reconstituted virtually. The rhetoric of the two figures as virtual Adam and Eve, while the female body was disparaged for being menopausal, was also interesting in highlighting how we continue to reinforce conventional values in cyberspace.
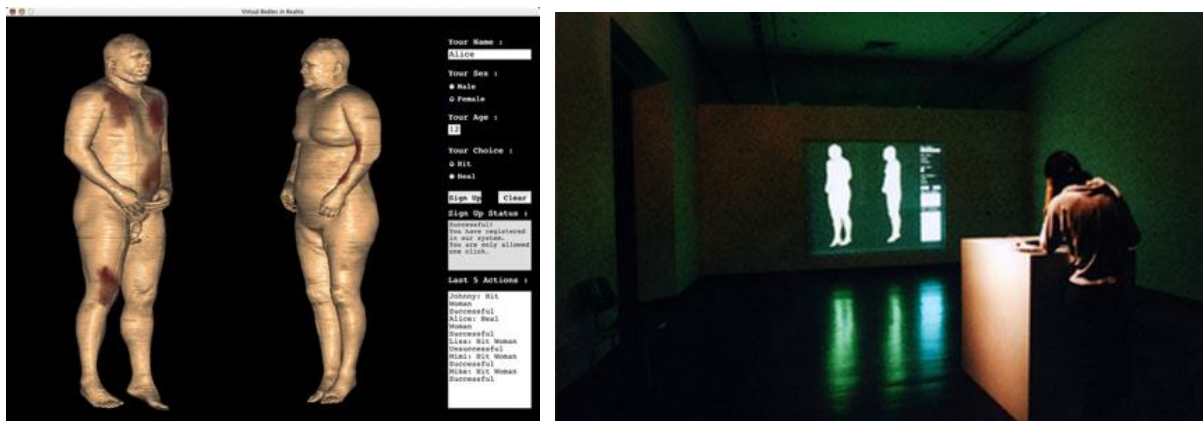
Margaret Tan, *Virtual Bodies in Reality*, 2001, Interactive installation. Image courtesy of the artist.

JY:
Audiences experiencing the installation *Virtual Bodies in Reality* would have to input their name, age, and sex prior to their manipulation of the gendered virtual bodies. This disclosure of one's sex through interactive interfaces calls to mind a question that I borrow from scholar and writer McKenzie Wark: "What happens between sexed flesh and gendered tech?"

Could you walk us through how an audience member would have experienced the installation's spaces and interfaces, and your intent in foregrounding the audience's own identity in their experience of the work?

MT:
Upon entering the room, visitors would see a projection of the two life-sized bodies in slow rotation. To the right of the bodies, there are fields that users can fill in, like any typical form you had to fill up in those days, as well as a projection of the last five actions by previous participants. Once the visitors registered their name, age, and sex, they would be able to use the mouse to select a spot on either one of the virtual bodies to "afflict" a bruise or "heal" a wound.

The act of registering and the projection of past actions functioned to make participants slow down and perhaps reflect before making their choice. I wanted to suggest that your actions were being recorded, and whatever you keyed in, you put your name down to that choice, whether to heal or to bruise the male or the female body. Would entering some of these identity markers have an impact on your decision-making? Knowing your choice would subsequently be reflected in the table below, would that make a difference to your choice?

At the same time, I'm aware that identity and choice seem moot in cyberspace due to the sense of anonymity, just as for participants in the gallery—they could make things up and not give their own name. This is one of the key points of the work. As the virtual and real become increasingly blurred in technologically mediated space, how will that shape our actions and sense of responsibility? The medium affords that sense of anonymity, and that leads to this idea of diminished responsibility.

This is not to say, however, that identity does not matter in cyberspace. In fact, one of the points I raised, together with Irina, Maria Fernández, and Faith Wilding and subRosa during the 2001 Very Cyberfeminist International OBN Conference, is that one's identity and values continue to shape what we bring to cyberspace. Cyberspace mirrors society.

Margaret Tan in collaboration with Stephan Dabazach, *Eat Away*, 2002, Performance with chocolate. Image courtesy of Margaret Tan.

JY:
You also performed a gustatory intervention for the opening of the Nokia Singapore Art 2001 with *Eat Away* (2002). This performance featured pieces of chocolate shaped as human figures connoting either masculinity or femininity, distributed to visitors for consumption. I see this work as a performative companion to *Virtual Bodies in Reality*, and wondered what you thought of that interpretation.

MT:
Leading up to the two works, I was already working as a feminist artist attempting to destabilise modernist notions of art: Of the male genius artist; the emphasis on sight. I was trying to create works that were collaborative—not monumental, but ephemeral. When there was the opportunity to propose works for Nokia Singapore Art, I proposed two. At that point in time, I saw them as separate works.

For *Virtual Bodies in Reality*, I didn't really have a clear idea of what I was going to do. Whereas for *Eat Away*, I knew what I wanted: To do something that engages the other senses apart from sight, like taste, smell, and touch. At the time, I was already working with materials that I thought were liminal, in the sense that these materials did not sit comfortably in dichotomous categories. Hair being one, as it can both be part of and beyond a body, and of course, chocolate is fantastic—it can be both liquid and solid, and has this liminal quality as it melts.

I was quite excited to propose working with chocolate, to talk about gender identity and the construction of the feminine and the masculine vis-à-vis male and female

bodies. I was linked up with Stephan Dabazach, Head Pastry Chef of Hilton Hotel Singapore, and we worked to create these little stereotypical figurines of the male and female body. The idea of the work was to distribute these chocolates in the hotel rooms for guests, as the little chocolates you'd find on the pillows, as well as at the hotel lobby.

Going back to your question about the relationship between the two, that is a really interesting interpretation because I have not thought of the two works together, and I don't think anyone has. Maybe subconsciously, there's an interesting relationship between the two. I suppose *Eat Away* can be read as complementary or inversed to *Virtual Bodies in Reality*. *Virtual Bodies in Reality* is about how flesh disappears, or is disintegrated in cyberspace, where you can be whoever you want to be in this seemingly dematerialised space, the anonymised web. With that piece I wanted to highlight what that digital space does to flesh, notions of identity, and also to one's sense of responsibility.

Eat Away reasserts the body through the act of touch, taste, and smell; we eat to stay alive. In flesh, everything seems coded and performed. Some even believe very strongly that if you're born a certain sex, you remain a certain gender. But I was trying to highlight how we are consuming these constructed identities. The melting of chocolate as they dissolve in participants' bodies questions the stability of conventional gender identities. *Eat Away* is a symbolic and performative work—you eat it to complete the piece.
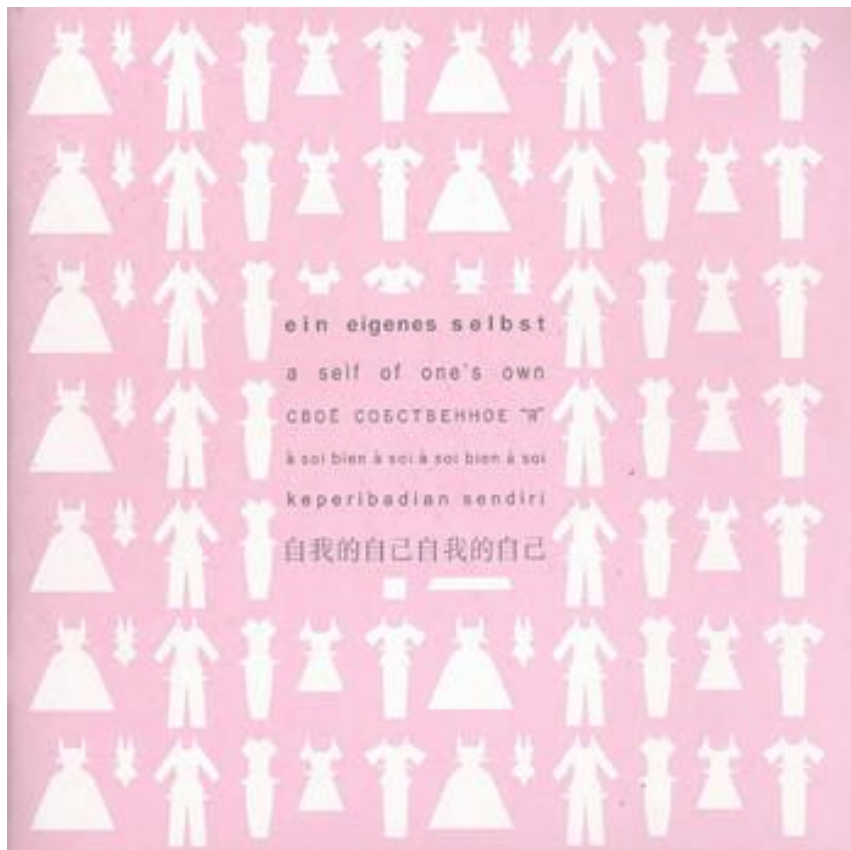
A Self of One's Own, 1999, the publication presented an exhibition essay and artist biographies, statements and images from the exhibition showcasing works by participants of the Feminist Art Workshop conducted by Irina Aristarkhova at LASALLE College of the Arts

SY:
Why was it important for you to make the articulation that you were a feminist artist? What were some of your feminist coordinates?

MT:
It was only in LASALLE that I first encountered feminism. I was working on the topic of sex, questioning why we were so prudish about sex in Singapore but so okay with violence. In the media at the time, they didn't show bodies—any suggestion of sex would be followed by a scene change. But they would show graphic images depicting casualties of war and violence. Young men going through National Service are taught how to kill. I was trying to do works that were a little naughtier, provocatively pushing the boundaries of bodies, sex, sexuality, pain and pleasure. But I wasn't connecting this to systemic infrastructure or value systems yet.

Guna, who was head of the theory department then, set me a challenge and said, "why don't you sign up for Irina's feminist art history and theory class?" Back then, I had these stereotypical notions of feminism—of bra-burning radicals, which I'm not. He said "well, before you say no to anything, you need to know what you're saying no to!" So, I accepted his challenge and signed up for all of Irina's classes. It was transformative—everything sort of clicked and fell into place.

Some of the things we read included *Why Have There Been No Great Women Artists?* (1971) by Linda Nochlin and Chila Kumari Singh Burman's response *There Have Always Been Great Black Women Artists* (1987). The classes made me aware that the things we produced as art students and the mediums we favoured were also gendered. I was working with things like feathers, and I had a classmate who was sewing, and I always felt some of the male lecturers somehow didn't know how to give feedback for these unusual mediums that some of us were using. It was through Irina's class that I also encountered cyberfeminist art history, and these all made me start questioning not just my personal life but things beyond that. We read Donna Haraway's *A Cyborg Manifesto* (1985), which was challenging but enriching, and it opened the door to thinking not just about art, but beyond.

Irina organised a Feminist Art Workshop in 1999, and she also invited practicing artists like Amanda Heng, and people from AWARE like Dana Lam and Shirley Soh, to join us. This was very unusual at that point in time for students, as we were mostly in our studios encountering our lecturers and other students. But here was this platform where we could exchange ideas and receive feedback, and polish our ideas in a very welcoming setting that was informed by research and theory. It was very convivial, as we always workshopped over food and drinks. It was such a nice experience, and that was when I was most productive. *Restless* was an example of a work that came out from those exchanges, engagement and conviviality.

Adeline Kueh and Saraswati Gramich, both lecturers at LASALLE then, were also part of the Feminist Art Workshop. The few of us created works for the resulting symposium and exhibition, *A Self of One's Own* (1999). After my graduation, Irina introduced me to Faith Wilding, and we worked on the *Maintenance Performance* for the AWARE opening. From there, Irina, Faith, and I made a trip to Moscow in June 2002, with Irina as our guide. That was when we planted the seed for collaboration with subRosa.

Workshop hosted at Margaret Tan's house for *MatriXial Technologies* (2003) with subRosa, Adeline Kueh, and Irina Aristarkhova. Image courtesy of Margaret Tan.

subRosa sharing with Women in the Arts Singapore (Witas) for *MatriXial Technologies* (2003). Image courtesy of Margaret Tan.

JY:
Several members of the cyberfeminist art collective subRosa visited Singapore from 1 to 16 January 2003 and collaborated with Adeline Kueh, Irina Aristarkhova, and yourself for the project *MatriXial Technologies*.[6] With Singapore racing to position itself as a biotechnological hub at the time, the collaboration explored the country's developments in assisted reproductive technologies, animal cloning, and embryonic stem cell research.[7]

Five years later for the ISEA2008 conference, you reflected with Irina Aristarkhova on the complexities of such a collaboration. The dialogue, titled *Locating Cyberfeminism in Singapore: A Dialogue*, was critical of defaulting to a Western-centric feminism. I'm curious about your role and involvement in *MatriXial Technologies*.[8]

MT:
My role included giving feedback on the initial proposal, researching embryonic stem cell and cord blood research in Singapore, the bioethics advisory committee's position, as well as public opinions (if any), on the topic. Together with Irina and Adeline, I also helped set up lab and studio visits, including one to a private cord blood bank, as well as arranged for subRosa to share their research with Women in the Arts (Witas) that I was involved with.

I also hosted at my place a workshop for the core group on feminist collaboration across difference. I was less involved in their activities at LASALLE and NUS. Following the collaboration in Singapore, Irina, and I joined subRosa for their presentation, Version>03 Digital Arts Convergence: Technotopia vs. Technopocalypse, in Chicago, USA. Soon after, I started my Masters in interactive media and critical theory at Goldsmith College, London, and did not have time to pursue the topic further in my work.

Margaret Tan, *Smart Apron* illustration for the 2003 Digital Pluralism: UNESCO Digital Arts Award Competition. Image digitized by Jeannine Tang, courtesy of the artist.

Margaret Tan, *Smart Apron*, 2004, Wearable computing project. Image courtesy of the artist.

JY & SY:
While pursuing your master's degree, you were selected to be part of the pilot cohort of residents for the Artists-in-Labs project in Zürich.[9] Collaborating with a Swiss lab, you re-appropriated hardware to create the *Smart Apron* (2004), a speculative wearable technology that could better the working environments of migrant domestic workers. Art historian [Jeannine Tang has contextualized the *Smart Apron*](#) in relation to Singapore's reliance on a precarious population of migrant domestic workers who are often women, revealing the globalized conditions of gendered reproductive labour.[10] Could you firstly share more about the collaborative process for *Smart Apron*?

MT:
I first submitted the idea of the *Smart Apron* to the UNESCO Digital Arts Award at IAMAS, Japan. It didn't win any prizes, but received an honourable mention. While in London, I proposed the idea again to an open call, the Artists-in-Labs Project, organised by Professor Jill Scott and the University of Applied Sciences and Arts, Zurich. The work was selected, and I was subsequently placed in the Swiss Centre for Electronics and Microtechnology, Alpnach, Switzerland, for five months to realise the apron. It was a challenging and enriching experience.

It was initially challenging due to my lack of technical skills and my dependence on the engineer assigned to work with me, who was so busy with his regular work. I felt like a burden to him. I spent a lot of time researching off-the-shelf parts for the apron, tried my hands at soldering microelectronics, worked with another engineer and programmer to get the aprons working. Overall, the experience was very enriching because it taught me to be adaptable, to manage my own expectations in terms of deliverables and of people. Most of all, I found the intellectual and social exchanges between me and the scientists and engineers, and amongst the artists, the most fruitful.

SY:
It's been close to two decades since *Smart Apron*'s inception. Thinking about the work today, the *Smart Apron* seems to make good company with a household's arsenal of smart appliances for performing household chores at maximum efficiency. I can't help but feel that the emancipatory possibility associated with technology has since given way to skepticism. What are your thoughts on the *Smart Apron* project now?

MT:
When I first proposed the *Smart Apron*, my thoughts were very focussed on how to make the technology empowering for the foreign domestic workers. I wanted a functioning apron because I felt it was important to have a wearable dedicated to them, since such technologies are invariably targeted at the rich and mobile class. At the same time, I wanted the work to be a symbolic piece to highlight the challenges faced by these workers in the context of Singapore. I had, prior to this work, worked with AWARE on the Day Off campaign for foreign domestic workers, as well as TWC2 and a group of artists to survey and raise awareness of the local population's attitude toward housework and the people performing such work. Hence, the apron's features—heat sensor, tilt sensor, fall detector and communications capability— speak to the challenges faced by these workers, such as their abuse through the iron, the long hours of work without break, their fall from Singapore's high-rise buildings, and their isolation.

When I embarked on my PhD (2006–2010) at the NUS Communications and New Media (CNM) Department, my initial research proposal was to create a wearable computing piece, based on Asian notions of the body. I was thinking of traditional Chinese medicine, meridian points, and how that might change the way we design wearable pieces, and therefore, its function. I wanted Irina to be my supervisor, but she left for the USA, and I had to find another. At the time, CNM didn't have a lab to prototype, and I had to find a co-supervisor from the Engineering Department. To cut a long story short, I decided to switch to a full research paper, rather than one with a prototype component.

I wrote my PhD on [pervasive computing in the context in Singapore](), which is how I landed on the Intelligent Nation 2015 (iN2015) IT masterplan at the time. I did, in the end, write the *Smart Apron* into one of the chapters. It became a node for me to unpack art production and immaterial labour in the context of a neoliberal, technologised political economy. It was a critical and self-reflexive piece touching on complicity and how technology is empowering or disempowering depending on where you are on the technological ladder. Coming out of it, I felt very paralyzed in terms of my practice. It became very hard to use technology and be an activist arguing for criticality and empowerment when one is complicit in the system.

In 2012, I presented the *Smart Apron* at a [talk]() at Tembusu College, NUS, where I positioned this created object as very much still a work-in-progress. It speaks not only of where I came from but also where I am going. Today, I still regard the *Smart Apron* as a work-in-progress.

Participants include Action Tank, Andrea Sick, Ania Corcilius, Anne Hilde Neset, Annette Schindler, Ariane Brenssell, Barbara Thoens, Bildwechsel, Britta Bonifacius, Christina Goestl, Cindy Gabriela Flores, Claude Draude, Claudia Reiche, Corinna Bath, Cornelia Sollfrank, Elisabeth Strowick, Faith Wilding, Feminist Indymedia Austria, Galerie Helga Broll, Genderchangers Academy, Helene von Oldenburg, Irina Aristarkhova, Isabelle Massu, Janine Sack, Jill Scott, Jutta Weber, Lauren Cornell, Laurence Rassel, Les Pénélopes, Lina Dzuverovic-Russell, Lola Castro, Margaret Tan, Maria Fernandez, Nana Petzet, Nasya Bahfen, Natalie Bookchin, Nathalie Magnan, Noaltgirls (Lina Russell), Rachel Baker, RAWA, Rena Tangens, Rosanne Altstatt, Sara Platon, SubRosa, Susanna Paasonen, Synesthésie, TECHNO-TRICKSTER-TANK™, Uli Peter, Ulrike Bergermann, Verena Kuni, Virtuella, VNS Matrix, and Waltraud Schwab.

Old Boys Network, *Very Cyberfeminist International* (Hamburg: Old Boys Network, 2001), p. 78.

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Virtual Bodies in Reality

Margaret Tan, Cyberarts and Cybercultures Research Initiative, National University of Singapore, http://margaret-tan.com/VBR.html; submitted by Irina Aristarkhova

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Virtual Bodies in Reality involves the use of the male and female virtual bodies from the Visible Human Project, initiated in the US in 1986, where two corpses were systematically sliced, imaged, converted into computer data files, and reconstituted to form two virtual bodies for scientific research.

In this work, visitors are able to interact with the virtual bodies in certain predefined ways. Once the visitors have registered their name, age and sex, they would be able to use the mouse to select a spot on either one of the virtual bodies to "afflict" a bruise or "heal" a wound. In the fast-pace "immaterial" realm of cyberspace, there is often neither time nor space to reflect upon the impact of new technologies on power relations, and the ethical implications of our actions. This work highlights the changing concept of violence in technologically mediated spaces and attempts to suggest notions of responsibility (or lack of) through the registration of one's particulars in the seemingly anonymous World Wide Web.

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What Happened to Difference in Cyberspace? The (Re)turn of the She-Cyborg

Jenny Sundén, *Feminist Media Studies* 1, no. 2 (2001): pp. 215–32; excerpt pp. 228–29

When bodies are viewed as systems of writing, different techniques of inscription and encarving (social, juridical, medical, disciplinary, etc.) constitute bodies as culturally and historically specific. In her striving toward a corporeal feminism, [Elizabeth] Grosz is skeptical to the view of the body as a blank, passive surface, as a neutral page open to societal intextuation, since the specific modes of materiality of the "page" / body makes a difference to the meaning of the message that is being inscribed. [...] Matter

2001

Entry 202 in Mindy Seu's *Cyberfeminism Index* featuring Margaret Tan's *Virtual Bodies in Reality*.

JY & SY:
With New York-based designer and researcher Mindy Seu's recent online project and physical publication, *Cyberfeminism Index* (Los Angeles: Inventory Press, 2022), we're witnessing a concerted attempt to re-articulate "cyberfeminism" for the present moment.[11] Some of your past work and research has been documented within this project. What is your relationship to the term "cyberfeminism" now?

MT:
In 2003, I was invited to speak on a panel "Does technology enable artists to express their art better?" under the Art in Conversation with Technology Symposium organised by the Plastique Kinetic Worms. My presentation highlighted that artists have always used technology—in a loose way of thinking about "technology." The paint brush is a form of technology, and so is paint. The notion of art and technology as separate is suspect, since the Latin root word of technology, *techne*, is about craft, making, and building. I wanted to argue that we shouldn't be afraid to use technology in art. At the time, it was thought that artists using technology were just following trends. I thought that was a problematic framing: One, it's an artificial separation, and two, we should be concerned about technology, because if art is about engaging the context of its time, the context of Singapore at the time was the constant push to use and adopt technology.

I felt we shouldn't be using technology only in terms of consumption—buying computers or phones—it should go beyond that. Technology is not neutral and in Singapore, the relationship between art, technology, and culture tends to be one of consumption, rather than invention and/or critique.

I remember being called a "cyberfeminist" by an audience during the talk and feeling very uncomfortable with that label. At that time, I was proudly calling myself a feminist and felt the term "cyberfeminist" was too narrow for my art practice. Today, I am more relaxed with that labelling. I think this is partly because it is now done in retrospect looking at my past works, and partly because I have been out of art practice for a number of years. I think the label has also taken a different tenor today. In 2003, I felt artists in Singapore working with and through digital technology were seen negatively as following trends, which was why I made the arguments I made during the Art in Conversation with Technology talk.

JY:
After obtaining your master's degree, you did your PhD in Communications and New Media at NUS, and joined NUS Tembusu College full-time. There, among other classes, you've taught a seminar on murals. In 2012, you also joined Dr Lonce Wyse in hosting the [NUS Art/Science Residency](#) at Tembusu College.

In 2023, you shifted to a part-time position at Tembusu College. What has it been like teaching and facilitating the discussion of art across these contexts, and how do you see your art practice in relation to your work as an educator?

MT:
Before joining Tembusu College, I was hired by the NUS Asia Research Institute (ARI)'s Science, Technology, and Society cluster, first as a postdoc and then as a research fellow. Associate Professor Gregory Clancey, the cluster leader, hired me under a grant for researching Asian biotechnology. He was also then the Master of Tembusu College, and I eventually moved over to work for Tembusu College full time.

The mural class was suggested by A/Prof Clancey as he knew I painted murals for a living while I was in art school. We thought murals could be one of the easiest ways to expose students to art because it's a visual medium that is very attractive and complex in raising issues—I consider graffiti a form of mural too. I could imagine students being drawn to it, and not just studying murals in terms of their history and theory, but actually getting them to paint a mural collaboratively, which would be very unusual for an NUS module. So that's how I mounted the course. But I've never thought of murals as part of my art practice—it was a livelihood; a way for me to earn money. My art practice, in terms of installation, performance, and new media art, didn't really come in here at all. Nevertheless, I try to always have a creative project for students. I also teach an urban studies module "Singapore as 'Model' City?" where I get students to carry out intervention projects in an urban public space. The intervention project can of course be informed by installation, performance, and new media art, not just placemaking. I think students can sense my passion for the arts and the important role art plays in our society and life.

The NUS Art/Science Residency, first initiated by A/Prof Lonce Wyse, actually came out of the [2008 International Symposium of Electronic Arts (ISEA)](). Lonce and I were part of a larger committee that brought ISEA to Singapore. As part of the ISEA 2008 programming, we had an artist-in-residence and exhibition component, which Lonce oversaw and I assisted.

After ISEA 2008, Lonce started the NUS Art/Science Residency with some initial funding from the National Arts Council Singapore (NAC). He eventually approached me to be the Co-Director and as Director of Programmes at Tembusu College, I could ensure artists selected for the residency would be housed at the College and have meaningful interactions with our students, both in and outside of the classroom. Subsequently, we managed to get funding from Marina Bay Sands to run the residency for two years. Eventually, we ran out of money and energy and couldn't keep the residency going. Hopefully, going forward, NUS and/or NAC will see the value of the residency and continue to bring art in conversation with STEM. We need STEAM!

Margaret Tan in collaboration with Ian Kirk, *unEarth*, 2004, Interactive installation. Image courtesy of Margaret Tan.

JY & SY:
To end off, what is a project you've been hoping to realise (if you had ample time and resources)? Or, which past project of yours do you wish to revisit?

MT:
In terms of past works, one I'd revisit is the *Smart Apron*. During the residency, the challenge was really to get the apron made and functioning. But that's not the full work. I wanted to do a performance with the set of aprons created. That's not been realised.

The other piece I really like is *unEarth* (2004), with "un" representing the United Nations intentionally spelt in lowercase. I wanted to talk about our ineffectual politics and relationship with the Earth, how it's so mediated that we've forgotten how to listen and have a conversation with nature.

The work starts with this small helium balloon of a globe with two propellers attached to it, which were synced to four microphones. Each microphone would trigger the propeller to spin in a certain direction. If you speak into one microphone, there's limited motion as to where this globe can go. If all four mics were spoken into, it could also become a mess. You basically control the globe through voice and coordination, and you really have to sync your voices in order to make it float and

spin or travel the way you want. The piece is about Earth, what we are doing to nature and how politics are not helping things. Sometimes, nature speaks back in the form of pre-recorded sounds of nature, like birdsongs, calls of animals, etc.

unEarth was created as part of my MA in Goldsmiths College. So, it has been shown at one of the galleries in London, but never in Singapore or anywhere else. If there's another opportunity, I would want to mount the work again and perhaps make it more ambitious.

When I created these works, I never thought the issues they raised would still be relevant two decades on. Having stepped away from art out of necessity made me very sad, but the timing just wasn't right for me to keep my practice going. It's a nice circle for me that people are suddenly interested in my works again. Now that I have lightened my workload at Tembusu College, I hope to return to my art practice.

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Dr Margaret Tan is currently a part-time Senior Lecturer at Tembusu College, National University of Singapore, where she teaches undergraduates Singapore studies and general education courses. She used to be the College's Director of Programmes and was also the Co-director of the NUS Art/Science Residency Programme. As an educator, Margaret believes education should be transformative, both for students and society at large. As an artist, her artworks investigate the intersections of body with space, technology and culture from a feminist perspective, and have been showcased both locally and internationally.

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Notes

[1] "Shifting Representations," panel discussion for CuratingLAB exhibition *Conditions of Production*, 2015.

[2] We also note that the title of the work invokes the practice of New York artist Mierle Laderman Ukeles and her seminal *Manifesto for Maintenance Art* (1969).

[3] "Art, technology and the world around us," *NUS Centre for the Arts*, February 6, 2020. Other artists-in-residence at the Initiative would include Charles Lim, Agnes Hegedüs, and Mark Amerika. The internet art collective tsunamii.net (Charles Lim

and Woon Tien Wei) was also established that year in 2001, and the National Arts Council's New Media Arts Fund was launched in July 2001 with an exhibition of tsunamii.net's *alpha 3.0: GPS Piece – Web Walkabout* at Earl Lu Gallery.

⁴ The *Cyberarts* exhibition was held at the Singapore Art Museum as part of the Nokia Singapore Art festival from 9 December 2001 to 3 February 2002. In his catalogue essay, Nadarajan argued for "cyberarts" as a more comprehensive term for new media art. See Gunalan Nadarajan, "Cyberarts: Intersections of Art and Technology," in *Histories Identities Technologies Spaces: Singapore Art Today* (Singapore: National Arts Council; Singapore Art Museum, 2001), 46–51. The Cyberarts/Cyberculture Research Initiative even served as the "official web-server" and a technological partner to the festival.

⁵ "0000000011111111100000000011 11111000000011111111" in *Very Cyberfeminist International Reader: obn Conference*, Hamburg, December 13–16, 2001, ed. Helene von Oldenburg and Claudia Reiche (Berlin: b-books, 2001), 68.

⁶ The five subRosa members were Faith Wilding, Hyla Willis, Laleh Mehran, Lucia Sommer, and Steffi Domike. *MatriXial Technologies* would later be shown as a presentation and workshop at *Next 5 Minutes 4: Festival of Tactical Media* in Amsterdam, September 2003.

⁷ Among other conversations and research visits over the two-week period, the collaboration had subRosa holding a seminar on *Art meets Bio-Science* as part of the Cyberarts/Cyberculture Research Initiative at the National University of Singapore, as well as a workshop titled *Cloning Cultures* at the LASALLE-SIA College of the Arts. This research would go on to inform two later subRosa projects, *Cell Track: Mapping the Appropriation of Life Materials* (2004) and *Epidermic! DIY Cell Lab* (2005). See subRosa, "Bodies Unlimited: A decade of subRosa's art practice," *n.paradoxa: international feminist art journal* 28 (July 2011): 20.

⁸ subRosa would host *MatriXial Technologies* collaborators in Chicago later the same year, along with an additional meeting in Amsterdam, see "Locating Cyberfeminism in Singapore: A Dialogue," presentation at ISEA2008. See also Adeline Kueh's *The Silver Capsule (for MatriXial Technologies)*.

⁹ "Case Studies of the Pilot Project: By the Artists-in-Labs Research Team," in *Artists-in-Labs: Processes of Inquiry*, ed. Jill Scott (Springer Vienna, 2006), 52–55. Apart from Margaret Tan, Shirley Soh was another Singapore artist selected for the pilot Artists-in-Labs project.

¹⁰ During the residency, Margaret Tan also interviewed migrant domestic workers in Switzerland, speaking to a Bosnian woman and a Croatian woman. This culminated in a performance at the School of Art and Design in Zürich. See Margaret Tan, "Smart Aprons in Singapore and Switzerland" in *Artists-in-Labs: Processes of Inquiry*, ed. Jill Scott (Springer Vienna, 2006), 125. In our email exchanges for this Hothouse article, Margaret Tan describes donning a plain white apron for the performance, with the English translation of her interviews with workers projected upon her body while the original German audio recording played. The performance

contemplated the complexities of speaking for and with the foreign domestic workers, and the impossibility of fully comprehending their position.

[11] Mindy Seu's articulation of cyberfeminism is as follows: "Cyberfeminism cannot be reduced to women and technology. Nor is it about the diffusion of feminism through technology. Combining *cyber* and *feminism* was meant as an oxymoron or provocation, a critique of the cyberbabes and fembots that stocked the sci-fi landscapes of the 1980s. The term is self-reflexive: technology is not only the subject of cyberfeminism, but its means of transmission. It's all about feedback."