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MA Arts & Society Thesis

Cyborg Motherhood: Exploring Invisible Care Work and Breastfeeding Stigma in *Untitled*
(*Feeding Through Space and Time*) by Ani Liu

by

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Abstract

This thesis examines how the technoscientific installation *Untitled (Feeding Through Space and Time)* by Ani Liu utilises Donna Haraway's concept of the cyborg to communicate to audiences the issues of invisible care work and the stigma surrounding breastfeeding during the early months of motherhood. The research is guided by feminist scholarship focused on the phenomenon of the 'technicization of mothering' and the complexities of women's relationship with technology. One of the more techno-positive feminist scholars Donna Haraway and her concept of the cyborg is examined in more detail as well as the debates surrounding breastfeeding in the context of modern feminism in the United States and consequently the phenomenon of lactivism. Through situational analysis and the methodology of the dramaturgical triad, this thesis examines the compositional elements of Liu's work and their ability to foster a strong spectatorial response from viewers as well as encourage reflection on the complexities of breastfeeding and the invisible care work. Additionally, it considers the broader sociopolitical context of the current policies in the United States influencing both the artist and the audience. By analysing the intersections of art, technology, and motherhood, this research aims to provide a nuanced understanding of how contemporary reproductive labour is depicted in art in the United States and how these representations can influence the spectator's perception of the current sociopolitical discourse and their relationship with technology.

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Introduction

Despite being traditionally perceived as something innate and ‘natural’ for women, the practices of mothering have been undergoing various changes throughout history. In today’s day and age, it is undeniable that the rise of technology has significantly altered this aspect of people’s lives. Its presence is prominent from conception with assisted reproductive technology to nursing with devices such as lactation corsets and electronic breast pumps. People start using various apps even before the baby is conceived to monitor their hormonal cycle and continue using them after the pregnancy to track feeding, changing and baby’s sleeping patterns.

However, the assumed liberation coming from these tools is a complex topic as they are both freeing and limiting simultaneously.¹ As the creations emerging from the traditions of patriarchal and capitalistic systems of power, they can never be perceived as neutral even if they might be liberating for a specific individual. It opens a discussion on the broader context of contemporary motherhood experience with issues surrounding biopolitics, stigmatisation of breastfeeding, invisible labour and heteronormative societal expectations to name a few.

In addition, technological assistance with mothering also raises important questions about human-machine relationships as well as the preconceived notions of what is ‘natural’ and how it ought to look in contemporary society. After all, many technological advancements have already been so deeply ingrained in our daily lives that it is difficult to fully grasp what life might look like without them. This is particularly relevant when discussing the stigma surrounding breastfeeding bodies. Breastfeeding has not only been altered by the use of breast pumps but also remains a partially controversial practice praised for being a healthy and natural feeding option but shamed when done publicly.

When attempting to reflect on these complex and nuanced topics surrounding contemporary motherhood, artists are searching for new tools and references in their creative work. One of the artists who continuously examines topics such as biopolitics, reproduction and care work by introducing emerging technologies in her cultural reflections is Ani Liu. In this thesis, the central research question is: How does Ani Liu use the concept of a cyborg in her artwork *Untitled (Feeding Through Space and Time)* to communicate to audiences the issues of invisible care work and stigma surrounding breastfeeding during the early months of motherhood?

¹ Zairu Nisha, ‘Technicization of “Birth” and “Mothering”’: Bioethical Debates from Feminist Perspectives’, *Asian Bioethics Review* 13, no. 2 (June 2021): 135. <https://doi.org/10.1007/s41649-021-00169-z>.

Despite motherhood being reflected in art for centuries,² there has been limited research on new methods of technology implementation to examine the issues of contemporary reproductive labour in contemporary art. Similarly, technological advancements and their various implementation in art have been widely researched in recent years³, but rarely in the context of making a convincing comparison between technological human-machine merging and contemporary maternal experience. This thesis combines these themes and bridges the gap by adding a new layer of nuance to both.

Case study

The case study for this research is the artwork by the American research-based artist Ani Liu *Untitled (Feeding Through Space and Time)*. The artist describes herself as ‘working at the intersection of art and technoscience’.⁴ The artist’s works explore the intricate relationships between science, technology and their impact on human identity, culture, and subjectivity. However, many of her more recent artworks are concerned with biopolitics and care work related to motherhood. The artwork for this research consists of synthetic milk pumped through feeding tubes across the gallery space. The tubes are scattered on the floor and continuously pump the amount of breast milk the artist would have produced in a month when feeding her child. The rhythm of pumping is programmed to imitate the artist’s own breast pump that she was using while breastfeeding. It is the only sound accompanying visitors in the gallery as they explore other works in the gallery. The artwork was exhibited at the Cuchifritos Gallery + Project Space in 2022 as part of the artist’s solo exhibition *Ecologies of Care*. The exhibition focused on the works created during the artist’s postpartum period, in contemplation of the labour of mothering.⁵

In this case, the artist is exploring her personal relationship with breastfeeding and technology, noting that after a certain time of using the breast pump, the artificial cues superseded the biological cues, and her body began responding not to the baby’s suckle but to the mechanical sound of a breast pump. In addition to this unexpected relationship between the mother and the machine, the artwork also makes a compelling case for showcasing the invisible labour of breastfeeding, especially considering the debates about whether it is appropriate to breastfeed

² Joanne Heath, ‘Negotiating the Maternal: Motherhood, Feminism, and Art’, *Art Journal* 72, no. 4 (December 2013): 84–86. <https://doi-org.proxy.library.uu.nl/10.1080/00043249.2013.10792867>

³ H. Rodriguez. 2006. ‘Technology as an Artistic Medium’. In 2006 *IEEE International Conference on Systems, Man and Cybernetics, Taipei, Taiwan, October 2006*, 3635–3639. <https://doi.org/10.1109/ICSMC.2006.384694>.

⁴ For a more detailed description see <https://ani-liu.com/hello>.

⁵ For a more detailed exhibition statement see <https://www.artistsallianceinc.org/ecologies-of-care/>.

in public and the contemporary realities of women juggling both childcare and work-related responsibilities.

Methodology

I will first explain the reasoning behind selecting the situational analysis methodology to respond to my research questions in this thesis. To justify this choice, I will go into further detail about how this methodology applies to the chosen case study of the artwork *Untitled (Feeding Through Space and Time)* by Ani Liu and the specific aspects of it that I want to address in my research. In the second part of this chapter, I will clarify what the methodology entails and how it is usually applied as well as how I will apply it in the upcoming chapter of my thesis. To do that I will refer to the article ‘Dramaturgical Analysis: A Relational Approach’ by Nibbelink and Merx⁶ as well as ‘Situational Analysis: A Brief’ by Verhoeff, Merx and Dolphijn⁷.

The research questions of this thesis are primarily concerned with how the artwork visualises technological concepts, evokes emotional responses from the viewers and addresses certain sociopolitical issues. Therefore, the research can be roughly separated into three categories. The first category is concerned with the artistic elements of the artwork. It questions which elements of *Untitled (Feeding Through Space and Time)* address the merging of natural and technological in the contemporary motherhood experience, how is invisible labour and the concept of cyborg depicted in the artwork. The second category is focused on the audience's response to these elements. It examines what exactly evokes such strong emotional responses from viewers and how the artwork encourages reflection on the complexities of breastfeeding. The third category is further concerned with the sociopolitical context of the artist and viewers. It is necessary to address how the artwork has been influenced by public health policies in the United States and the artist's personal experiences with the healthcare system during childbirth. In addition, the audience's reactions are strongly influenced by the current stigma surrounding breastfeeding in public in the United States.

The structure of situational analysis not only allows me to understand how the artwork's composition affects the spectator but also to see why they were used in the first place due to the context in which the artist is situated. The methodology of situational analysis like categories of my research involves analysing the artwork in three planes and the relationality between said

⁶ Liesbeth Groot Nibbelink and Sigrid Merx, ‘Dramaturgical Analysis: A Relational Approach’, *FORUM+28*, no. 3 (1 October 2021): 4–16. <https://doi.org/10.5117/FORUM2021.3.002.GROO>.

⁷ Nanna Verhoeff, Sigrid Merx, and Rick Dolphijn, ‘Situational Analysis: A Brief’, 8 October 2020, 1-5.

planes.⁸ These are planes are composition, spectatorship and context that exactly corresponds with the research questions set at the beginning of my research. Therefore, by using situational analysis, I will be able to identify the compositional elements of the artwork and how they are affecting the spectator, as well as how the spectator and the artist are positioned in the current sociopolitical context and connect to the issues reflected in the artwork.

It is also important to note that the name of situational analysis clarifies its main purpose which is to recognise the artwork not as a static thing but as a dynamic spectatorial situation.⁹ The meaning of a spectatorial situation can be twofold. Firstly, it recognizes that both the creation and the viewing of the artwork or performance are *situated* in a specific time and place therefore making them influenced by various historical and sociopolitical factors. Secondly, the situatedness of the spectatorial situation additionally indicates its ability to further influence the historical and sociopolitical context through the effects it has on the audience.

This aspect of the situational analysis approach acknowledges the potential of the artwork created by Ani Liu to shift public opinion in a larger sociocultural context as well as its ability to shape and interact with it.

There are three main previously mentioned aspects explored in the situational analysis – the artwork and its physical elements, the spectators engaging with the artwork and the larger societal context within which both the artwork and spectators are situated.¹⁰ Each actor interacts with the other, and these relationships can bring valuable insights.

The relationship between the composition of the artwork and the larger societal context can shed light on the statement or message that the artist is attempting to convey. This can not only add a deeper layer of understanding of the artwork but also showcase the current political and social events that shape the art that is being produced.

The relationship between the spectator and the societal context indicates the situatedness of the spectator. In other words, it explores further how age, gender, race, socioeconomic status etc. affect the way a spectator may interact or perceive the artwork and its messaging. Situational analysis can provide an opportunity for a researcher with opposing views, for example, to focus on the exclusion of certain audiences and opinions in the review of the artwork.

⁸ Groot Nibbelink and Merx, 'Dramaturgical Analysis', 7.

⁹ Verhoeff, Merx, and Dolphijn, 'Situational Analysis: A Brief', 1.

¹⁰ Groot Nibbelink and Merx, 'Dramaturgical Analysis', 9.

Lastly, the relationship between the spectator and the composition of the work can further explore how certain artistic elements convey meaning and evoke reactions from spectators.

In my research on *Untitled (Feeding Through Space and Time)*, I will mainly focus on the relationship between the spectators and the compositional elements of the artwork. While all the previously discussed aspects of situational analysis are significant, I prioritize the communication of specific sociopolitical issues through the compositional elements of the artwork within the context of my research question.

I will first establish how Ani Liu uses the concept of a cyborg in this artwork. That entails closely examining the artwork and identifying its elements which have been either directly inspired by or are referencing the concept of a cyborg by Donna Haraway. Secondly, I will further analyse how these elements relate to the issues of invisible labour and care work as well as breastfeeding and why they are effective in communicating these issues to the audiences in that specific way.

Certainly, to find the answers to both these questions it is necessary to address the situatedness of the artist and the viewers. It is particularly important to acknowledge this larger context within which the spectatorial situation is happening because of the geographical and political factors. More specifically, Ani Liu lives, works and raises her children in the United States where the healthcare system is vastly different from the Netherlands. Consequently, the issues addressed in the artwork are to some extent very culturally specific to the United States. However, it also does not mean that the sociopolitical issues of invisible care work or breastfeeding are not common in other places around the world. It only indicates that a distinction has to be made to add the necessary nuance to the experience of spectatorship.

In addition, while the artwork has been previously displayed in Europe, sources such as various exhibition reviews that have been used in this thesis refer to the exhibition held in the United States. For that reason, there furthermore needs to be an acknowledgement of the difference in perspective between the viewers from the United States and Europe.

Chapter 1: Theoretical Framework

This chapter provides a thorough account of the theoretical framework that guides the inquiry and analysis in this thesis, offering a comprehensive overview of the theoretical landscape within which the research is situated. The research texts that have been employed in the analysis that will follow in Chapter 2, are predominantly focused on the various feminist perspectives regarding technological involvement in reproduction as well as the further labour associated with childcare. The first part of the chapter focuses on the phenomenon of ‘technicization of mothering’ and the rise of cyberfeminism that began in the late 20th century. It is followed by a more detailed examination of the Cyborg, a concept proposed by Donna Haraway who is considered to lean towards a more technopositive viewpoint among feminist scholars. The last part of the chapter highlights the debates surrounding breastfeeding in the context of modern feminism in the United States as well as the phenomenon of lactivism. The aforementioned theoretical framework is primarily focused on Western technological realities and politics, paying particular attention to the United States due to the situatedness of the chosen case study.

1.1 Cyberfeminism and the Technicization of Mothering

In this section, I will first briefly outline the history of cyberfeminism and the changing perspectives on women’s relationship with technology. A broader introduction to cyberfeminist rhetoric is necessary to evaluate the more specific notions of feminist scholars regarding technology and reproduction in the 21st century. I will subsequently explain the term ‘technicization of mothering’ and propose to extend its application beyond conception and birth. From my perspective, this term is a valuable addition to expanding the vocabulary describing the way the experience of motherhood has been altered by technological advancements.

The beginning of cyberfeminism can be roughly traced to the beginning of the Internet. The term was first coined by Sadie Plant in 1994 and described the works of feminist thinkers concerned with the Internet, cyberspace, and other new-media technologies in a more general sense.¹¹ Before this, technology and the Internet were considered a men’s domain which was not fit for women despite women being part of many technological advancements’ creation.¹² The systemic

¹¹ Mia Consalvo, ‘Cyberfeminism’, in *Encyclopedia of New Media: An Essential Reference to Communication and Technology*, ed. Steve Jones (Thousand Oaks, Calif.: Sage Publications, 2003), 108–109.

¹² Consalvo, ‘Cyberfeminism’, 108.

erasure and marginalisation of women in the technological field perpetuated the myth that technology is something only men are interested in and good at.¹³

However, cyberfeminists such as Sadie Plant argued in her 1998 book *Zeros and Ones: Digital Women and the New Technoculture* that women are naturally more fit to use the Internet due to the similarities in their nature.¹⁴ Others, such as Judy Wacjman, approached the topic differently and encouraged women to become more technologically proficient and aware users not only to dismantle the existing myths but also to protect themselves as technology remains a product of patriarchal society.¹⁵ A similar outlook was also shared earlier by Donna Haraway in her book *A Cyborg Manifesto* which, written in 1985, was the influential predecessor of the movement. Although not technically part of the cyberfeminist movement, Haraway began exploring the same themes way ahead of her time which I will get into more detail in the next section of this chapter.

Later and more critical approaches to cyberfeminism included discussions of race and class consciousness. The early works of cyberfeminists were considered too simplistic and ignorant of other possible realities in which women existed. Primarily the call for more active use of technology by women was seen as inherently dismissive of preexisting material conditions and was relevant to mainly privileged, white and Western women.¹⁶ It could be argued that today with technology being such a crucial part of our daily lives, this critique is not as valid as it was in the 1990s or the early 2000s. However, even with a contemporary outlook, it seems that being actively engaged in technology does not guarantee that it will pave the path to gender equality.

For example, Zairu Nisha in her 2021 article 'Technicization of "Birth" and "Mothering": Bioethical Debates from Feminist Perspectives' presents and analyses two opposing feminist viewpoints.¹⁷ The main debate involves the phenomenon of technicization and the use of assisted reproductive technologies with professed 'accepting feminists' viewing this as liberation while 'rejecting feminists' seeing it as another form of control carefully crafted by patriarchy.

To understand the term 'technicization of mothering' it is necessary to revisit its origins. The term 'technicization' refers, first and foremost, to the changes that occurred in our society as a whole. Despite people previously acquiring their cultural beliefs and practices from generation to generation, it changed when modern science began to intervene. With this intervention, the practices previously unquestioned began to be scientifically evaluated and studied to achieve

¹³ Consalvo, 'Cyberfeminism', 108.

¹⁴ Sadie Plant, *Zeros + Ones: Digital Women + the New Technoculture* (London: Fourth Estate, 1998).

¹⁵ Consalvo, 'Cyberfeminism', 108.

¹⁶ Consalvo, 'Cyberfeminism', 109.

¹⁷ Nisha, 'Technicization of "Birth" and "Mothering"', 133-148.

peak efficiency in all areas of life.¹⁸ Subsequently, people began to view themselves and society differently. Scientific and technological progress established new norms and goals for efficiency which people should strive for by opting for the more optimized solutions provided by science and technology.

In the context of maternity and reproduction, this term was first revisited by Sarah Franklin in her book *Biological Relatives: IVF, Stem Cells, and the Future of Kinship* when analysing the arrival of technologically assisted reproduction such as in vitro fertilization (IVF).¹⁹ The process was invented only in 1978 and has been around for hardly half a century but it is already perceived as a regular part of human life.²⁰ It has been accepted as the new normal despite being technologically assisted and therefore has obscured the boundaries between biological and artificial reproduction.²¹ The process of technicization of birth with the introduction of assisted reproductive technologies (ARTs) works in a fairly similar manner to the technicization of society in regards to efficiency. It provides an opportunity to not only defy fertility issues but also ensure the absence of any genetic diseases and even pre-select the baby's sex. All these newly found technological solutions to biological 'problems' present an opportunity to create the 'perfect baby' who, in turn, will become the perfect future citizen and worker.

However, as Nisha assesses this phenomenon in her article, she also raises the question of newly established power dynamics with the idea of technological authority. While previously women were seeking assistance from other women like midwives or healers, with the arrival of technologically assisted births at the clinics, they are now turning to male doctors and their tools.²² This phenomenon has created a significant shift in power as the control of the process has been transferred from the private communities of women to the patriarchal governmental organisations.

While the technicization of birth has been widely researched by various feminist scholars of the past, the technicization of mothering which continues after birth is the topic that is yet to receive as much scholarly attention. Perhaps one of the reasons why this phenomenon has not yet been coined is that contrary to the technicization of birth, the technicization of mothering cannot be

¹⁸ Darrell J. Fasching, 'Technicization', in *Encyclopedia of Science, Technology, and Ethics*, *Encyclopedia.com*. (June 15, 2024). <https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/technicization>

¹⁹ Sarah Franklin, *Biological Relatives: IVF, Stem Cells, and the Future of Kinship* (Duke University Press, 2013), <https://doi.org/10.1215/9780822378259>.

²⁰ Franklin, *Biological Relatives*, 1.

²¹ Nisha, 'Technicization of "Birth" and "Mothering"', 134.

²² Nisha, 'Technicization of "Birth" and "Mothering"', 135.

associated with a single technological advancement which altered it on the same scale as the IVF altered the process of reproduction. Moreover, there are currently many aspects of motherhood that have been altered in the context of technology. Some of these examples include but are not limited to the arrival of social media, the creation of various smartphone applications to help in childcare and development and even the various technological devices that have been utilised by women since the late 20th century. In my analysis, I will focus specifically on the breastfeeding tools that created the opportunity for mothers to combine breastfeeding and work.

1.2 The Concept of Cyborg

The second section of the chapter is dedicated to a more detailed examination of the concept of cyborg proposed by Donna Haraway in her essay 'A Cyborg Manifesto' in 1985.²³ This concept is a crucial part of the analysis as the research question and the case study closely engage with it. Despite being written in the previous century, Haraway's manifesto remains an influential stepping stone for both contemporary feminist scholars and artists which, in part, can ensue due to our world becoming more and more similar to Haraway's cybernetic dream.

In her manifesto, Haraway describes the cyborg as 'a creature in a postgender world' who is simultaneously a machine and an organism and is part of the social reality as well as fiction.²⁴ She encourages the reader to embrace the confusion and acknowledge the responsibility of establishing clear boundaries. The responsibility she describes in her work is not so much individual, as one might assume, but rather collective. We as a society can see how this lack of responsibility manifested in establishing patriarchy, for example, when the clear and seemingly 'natural' gender roles were an integral part of women's oppression. For centuries the main argument against the emancipation of women was the essentialist understanding of human nature and the assumption of women's 'natural' role as mothers and caregivers which could not be done by anyone else.²⁵ Haraway clarifies that the entire Western scientific and political tradition is inherently patriarchal, racist and appropriating since it is based on capitalistic notions of domination of 'others' for the sake of progress.²⁶ Once something is established as 'natural', everything else is inevitably cast away as 'unnatural' or, in other words, not how it is supposed to

²³ Donna Jeanne Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century', in *Manifestly Haraway*, 1st ed., Posthumanities 37 (Minneapolis: University of Minnesota Press, 2016), 3–90. <https://doi-org.proxy.library.uu.nl/10.5749/minnesota/9780816650477.003.0001>

²⁴ Haraway, 'A Cyborg Manifesto', 6-8.

²⁵ Nour Ahmad, 'We Are All Cyborgs: How Machines Can Be a Feminist Tool', *IMS* (blog), 9 May 2019, <https://www.mediasupport.org/navigating-a-changing-world/we-are-all-cyborgs-how-machines-can-be-a-feminist-tool/>.

²⁶ Haraway, 'A Cyborg Manifesto', 7.

be. Therefore, her first argument is that we should fight against any attempts to establish a universal theory explaining reality as there is no chance of encompassing all its various aspects and identities.²⁷

The second argument of Haraway's essay further explains the other side of this responsibility. As Haraway warns the readers about the dangers of creating new universalised explanations of reality, she also encourages the reader not to succumb to the 'antiscience metaphysics' and demonise technology as a whole.²⁸ As previously mentioned in this chapter, Haraway can be classified as one of the 'accepting feminist' scholars who see a potential for liberation and expanding human capacities with technology despite its patriarchal origins that she addresses in her manifesto. At the end of her manifesto, Haraway famously declares that she 'would rather be a cyborg than a goddess'.²⁹ The goddess in this reference is representative of the culturally constructed notion of ideal femininity while the cyborg represents a more fluid and flexible idea of a hybrid identity. In the context of maternity, this statement can be tied to the classic mythologisation of giving birth and becoming a mother. The process of giving birth is often described as a miracle which undermines the tremendous amount of pain and labour involved in it. Similarly, the role of a mother is also mythologised in our culture and often overlooks its more practical and difficult aspects. The mythologised identity of the ideal mother is inevitably restrictive and leaves out other realities that can comfortably coexist within Haraway's cyborg mother.

Moreover, cyborgs are a part of the new social reality where according to Haraway 'nature and culture are reworked'.³⁰ Since cyborgs cannot be strictly assigned to nature, they also lack a strict origin story with a predetermined role, which is the usual case in humanist and patriarchal rhetoric. This way Haraway creates a strong case for technology being a tool, freeing women of their assigned 'female nature'.³¹ Sarah Franklin tied Haraway's ideas with another feminist scholar of her time Shulamith Firestone, who also believed in the technology's potential to transcend the binaries of sex and gender, especially in the context of assisted reproductive technologies.³²

It is important to note that the technological aspect of this cyborg dream has already happened in the 21st century while the societal aspect has not yet fully caught up. As Nour Ahmad

²⁷ Haraway, 'A Cyborg Manifesto', 67.

²⁸ Haraway, 'A Cyborg Manifesto', 67.

²⁹ Haraway, 'A Cyborg Manifesto', 68.

³⁰ Haraway, 'A Cyborg Manifesto', 9.

³¹ Nisha, 'Technicization of "Birth" and "Mothering"', 141.

³² Franklin, *Biological Relatives*, 73.

demonstrated in her article 'We are all cyborgs: How machines can be a feminist tool', there are already many aspects of the current technologies that expand human capacities and augment our abilities.³³ For example, the smartphones that nearly every person in the West now owns and uses daily are a prime example of technology enhancing our cognitive abilities such as memory and other mental functions. Artificial organ transplants and various mobility devices extend our physical abilities as well as our life expectancy. The breast pump is also a technological device augmenting the human abilities of mothers which Ani Liu examines in her artwork. Therefore, the technological future of human-machine cyborgs is already present and has been happening for several decades.

However, on the societal level, the current Western world has not yet reached the postgender reality that Haraway proposed. There have certainly been positive changes towards abandoning gender binaries and stereotypes and overall openness in the past 40 years. However, these efforts are still at risk, especially upon the recent Anti-Abortion and Anti-LGBTQ+ legislative decisions in the United States.

1.3 Lactivism and Breastfeeding Politics in the United States

In the last section of this chapter, I will address the polarising debates surrounding the topic of breastfeeding and, subsequently, lactivism in the United States. According to the National Conference of State Legislatures, the law allows women to breastfeed in any public or private location in all fifty states.³⁴ In addition, there are thirty states with laws related to breastfeeding in the workplace and four states implementing or encouraging the development of a breastfeeding awareness education campaign.³⁵ Breastfeeding is recognised as the ideal form of nutrition for newborn babies by UNICEF³⁶ and the U.S. Department of Health and Human Services³⁷. Judging by this data, breastfeeding in the United States must be the preferred and publicly encouraged form of nutrition for the baby. At the same time, in 2022 only 26% of mothers in the United States and Canada reported exclusively breastfeeding their babies in the first 6 months.³⁸

³³ Ahmad, 'We Are All Cyborgs'.

³⁴ 'Breastfeeding State Laws', National Conference of State Legislatures, last modified 26 August 2021, <https://www.ncsl.org/health/breastfeeding-state-laws>.

³⁵ National Conference of State Legislatures, 'Breastfeeding State Laws'.

³⁶ 'Breastfeeding', UNICEF Data, last modified December 2023, <https://data.unicef.org/topic/nutrition/breastfeeding/>.

³⁷ 'Breastfeeding Reports And Publications', U.S. Department of Health and Human Services, last modified 29 March 2019, <https://www.hhs.gov/surgeongeneral/reports-and-publications/breastfeeding/index.html>.

³⁸ UNICEF, 'Breastfeeding'.

The practical explanation for such a small number of breastfeeding mothers involves the lack of governmental support in the form of paid maternity leave. As Judy Jou et al. noted in the article 'Paid Maternity Leave in the United States: Associations with Maternal and Infant Health', many people do not meet the eligibility criteria since it only applies to employers with more than 50 employees and employees who worked at least 1250 hours in the previous 12 months.³⁹ This leaves many women in a vulnerable position as they are forced to return to work shortly after giving birth and therefore choose a formula or breast pump-assisted feeding option.

Nevertheless, even the more privileged percentage of women who can afford to stay at home and breastfeed are often experiencing difficulties when performing the practice. Martha McCaughey recalled her experience in the article 'Got Milk?: Breastfeeding as an 'Incurably Informed' Feminist STS Scholar' where she described the huge discrepancy between the serene and intimate activity depicted in the videos in her breastfeeding class and the messy reality of it.⁴⁰ Despite being aware of the culturally constructed notions of 'natural and instinctual mothering', McCaughey still experienced the pressure of making 'the right choice' and feelings of inadequacy when she was not immediately good at this new skill.⁴¹ In addition, she noticed that although the discussion of breastfeeding versus formula is framed as a sole decision of the mother, it often leaves out the competing marketing campaigns from the medical community and the formula companies.⁴²

However, the difference between the abstract idea of breastfeeding and its embodied reality is not only present in the mother's mind but also in the public's perception. The general public may agree that breastfeeding is a 'natural', necessary and healthy process but the experiences of breastfeeding mothers in public tell a different story. Amanda Barnes Cook analysed the experience of breastfeeding mothers in public spaces in 2016 and described it as being 'marked by inequality and lack of autonomy'.⁴³ She explained that breastfeeding mothers were most likely the only minority group expected to cover up and hide their 'difference' in the public space so the bystanders would not feel uncomfortable or disgusted.⁴⁴

³⁹ Judy Jou et al., 'Paid Maternity Leave in the United States: Associations with Maternal and Infant Health', *Maternal and Child Health Journal* 22, no. 2 (February 2018): 217. <https://doi.org/10.1007/s10995-017-2393-x>.

⁴⁰ Martha McCaughey, 'Got Milk?: Breastfeeding as an "Incurably Informed" Feminist STS Scholar', *Science as Culture* 19, no. 1 (March 2010): 79–100. <https://doi.org/10.1080/09505430903557940>.

⁴¹ McCaughey, 'Got Milk?', 81-82.

⁴² McCaughey, 'Got Milk?', 84.

⁴³ Amanda Barnes Cook, 'Breastfeeding in Public: Disgust and Discomfort in the Bodiless Public Sphere', *Politics & Gender* 12, no. 04 (December 2016): 678. <https://doi.org/10.1017/S1743923X16000052>.

⁴⁴ Cook, 'Breastfeeding in Public', 678.

Lilith A. Whiley, Sarah Stutterheim and Gina Grandy proposed a theory examining the origins of such difficult emotions related to public breastfeeding in 2022 in the article ‘Breastfeeding, ‘tainted’ love, and femmephobia: containing the ‘dirty’ performances of embodied femininity’.⁴⁵ They proposed that the act of breastfeeding in public is associated with an ‘undesirable’ expression of femininity which does not serve the male gaze of the patriarchy and is therefore considered ‘dirty’.⁴⁶

To further explain the ‘tainted’ emotions of the public, they referred to the research of Kendra Rivera on emotional taint⁴⁷ and conceptualised them into four parts - objectionable, inappropriate, excessive, or vulnerable emotions. These emotions are socially constructed and feed off each other exemplified by the objectionable emotions. They are viewed as negative and not preferred which in the case of a mother are the feelings of shame and in the case of the public are the feelings of discomfort.⁴⁸ Both feelings are triggered by the act of breastfeeding in public and therefore make it undesirable, stigmatizing the person who performs it. Inappropriate emotions are often triggered more in the case of extended breastfeeding when the child has already gained some agency especially if it is a boy.⁴⁹ The fact that breasts are sexualised in society may contribute to inappropriate and sexualised associations. Excessive emotions are triggered when the display of something is considered by the public to be ‘too much’. In the case of breastfeeding in public, these emotions are associated with breastfeeding mothers seemingly pushing their agenda by being in public.⁵⁰ Lastly, the feelings of vulnerability are usually felt by the mothers due to being on the receiving end of so many ‘tainted’ emotions by the people around them despite technically performing ‘good mothering’.⁵¹

As a result, there has been a rise in lactation activism in the United States otherwise known as ‘lactivism’.⁵² According to Cindy A. Stearns, the main form of lactivism is the organized protest aimed specifically at organizations that respond negatively towards breastfeeding mothers in

⁴⁵ Lilith A. Whiley, Sarah Stutterheim, and Gina Grandy, ‘Breastfeeding, “Tainted” Love, and Femmephobia: Containing the “Dirty” Performances of Embodied Femininity’, *Psychology & Sexuality* 13, no. 1 (2 January 2022): 101–114. <https://doi.org/10.1080/19419899.2020.1757501>.

⁴⁶ Whiley, Stutterheim, and Grandy, ‘Breastfeeding, “Tainted” Love, and Femmephobia’, 104.

⁴⁷ Kendra Dyanne Rivera, ‘Emotional Taint: Making Sense of Emotional Dirty Work at the U.S. Border Patrol’, *Management Communication Quarterly* 29, no. 2 (May 2015): 198–228. <https://doi.org/10.1177/0893318914554090>.

⁴⁸ Whiley, Stutterheim, and Grandy, ‘Breastfeeding, “Tainted” Love, and Femmephobia’, 105.

⁴⁹ Whiley, Stutterheim, and Grandy, ‘Breastfeeding, “Tainted” Love, and Femmephobia’, 105.

⁵⁰ Whiley, Stutterheim, and Grandy, ‘Breastfeeding, “Tainted” Love, and Femmephobia’, 105.

⁵¹ Whiley, Stutterheim, and Grandy, ‘Breastfeeding, “Tainted” Love, and Femmephobia’, 105.

⁵² Cindy A. Stearns, ‘The Embodied Practices of Breastfeeding: Implications for Research and Policy’, *Journal of Women, Politics & Policy* 34, no. 4 (October 2013): 362–363. <https://doi.org/10.1080/1554477X.2013.835680>.

public.⁵³ These protests are referred to as ‘nurse-ins’ and consist of many breastfeeding mothers joining together at the same time at a specific place and breastfeeding their children exemplified by the case of the 2004 nurse-in at Maryland Starbucks.⁵⁴ As Faedra Chatard Carpenter pointed out in her article ““(L)Activists and Lattes””: Breastfeeding Advocacy as Domestic Performance’, this form of political activism works in a multifaceted way by transgressing the divide between public and private as well as subverting the idea that the breastfeeding mother is an example of a subservient woman staying at home and not engaging in politics.⁵⁵

In addition to the existing lactivist organizations, some North American artists have also been employing this kind of maternal activism in their work.⁵⁶ The few artists whose practices have been analysed have been described as a part of socially engaged art which constitutes the art practice which is often driven by political issues and requires social interaction.⁵⁷ It might seem that the presented case study of Ani Liu’s *Untitled (Feeding Through Space and Time)* fits the description and can be considered a lactivist artwork. After all, it places the subject of breastmilk and nursing into the gallery space and prompts the viewer to confront their discomfort in the public space. However, as Ani Liu explained in one of her interviews, she attempted to explore the problematic dichotomy of ‘natural’ and ‘unnatural’.⁵⁸ As I mentioned before in the work of Donna Haraway, both of these labels are culturally constructed and can mean different things to different people. Considering that Ani Liu is first and foremost the advocate of each individual mother’s choice, it would be imprecise and overly simplistic to view her work as promoting breastfeeding. I will provide a more thorough examination of this issue in the next chapter.

⁵³ Stearns, ‘The Embodied Practices of Breastfeeding’, 363.

⁵⁴ Faedra Chatard Carpenter, ““(L)Activists and Lattes””: Breastfeeding Advocacy as Domestic Performance’, *Women & Performance: A Journal of Feminist Theory* 16, no. 3 (November 2006): 347-348. <https://doi.org/10.1080/07407700600955354>.

⁵⁵ Carpenter, ““(L)Activists and Lattes””, 348.

⁵⁶ Rachel Epp Buller, ‘Performing the Breastfeeding Body: Lactivism and Art Interventions’, *Studies in the Maternal* 8, no. 2 (15 December 2016): 1–2. <https://doi.org/10.16995/sim.225>.

⁵⁷ Buller, ‘Performing the Breastfeeding Body’, 4.

⁵⁸ Ani Liu, ‘Care as Infrastructure’, in *Architectures of Care*, by Brittany Utting, 1st ed. (London: Routledge, 2023), 86–97. <https://www.taylorfrancis.com/books/9781003296553/chapters/10.4324/9781003296553-6>.

Chapter 2: Situational Analysis

In this chapter, I will use situational analysis to examine how Ani Liu addresses the issues of hidden labour and stigma surrounding breastfeeding in her technoscientific artwork *Untitled (Feeding Through Space and Time)* (Figure 1). Furthermore, I will argue that through the concept of a cyborg, Ani Liu can display how the contemporary experience of breastfeeding is interlinked with technology and the culturally constructed notions of ‘nature’ in a comprehensible manner. The situational analysis approach focuses on the relationality between the three planes of dramaturgy within the artwork or spectatorial situation – composition, context and spectatorship.⁵⁹ While all these planes are connected and should not be viewed as entirely separate, for clarity I will still explain each plane in sufficient detail in their section of the chapter. I will start by introducing the larger theoretical and sociopolitical context within which *Untitled (Feeding Through Space and Time)* operates, then clarify how the compositional elements of the artwork relate to it and, finally, how these compositional elements influence the viewer.



Figure 1 Ani Liu, *Untitled (Feeding Through Space and Time)*, 2022. Cuchifritos Gallery, New York. Photo - Ani Liu.

<https://brooklynrail.org/2022/07/artseen/Ani-Liu-Ecologies-of-Care>

⁵⁹ Groot Nibbelink and Merx, ‘Dramaturgical Analysis’, 7.

2.1 Context

The choice of the context as a starting point instead of the visual composition may not always be the obvious one. However, when discussing the works of Ani Liu, I find it essential to become familiar with the broader context first to grasp the full picture of what is presented to the viewer. In addition, since many of Ani Liu's artworks are technoscientific, the context is also essential for understanding how they were created and how they operate.

During an interview with Brittany Utting, Ani Liu mentioned that she wanted to explore two aspects of early motherhood in this work.⁶⁰ The first aspect was the hidden labour of breastfeeding which is often overlooked. The second aspect of it was concerned with challenging the culturally constructed notions of what is 'natural' and what is 'unnatural'. In addition to these aspects, I would also like to discuss it in the context of technological devices assisting mothers and new, unexpected relationships forming between them as a result of this assistance.

Despite breastfeeding being widely known and practised since the dawn of history, the majority of modern people rarely encounter or know anything about it before having kids of their own. Most likely the average person will not be able to explain the process or roughly estimate the number of hours it takes to breastfeed a newborn. Additionally, the stigma surrounding the act of breastfeeding in public and constant censorship of the lactating body specifically in the United States contributes towards the general population rarely being exposed to it.⁶¹ As mentioned in the previous chapter, the tangible act of breastfeeding, if observed in the public space, evokes 'tainted emotions' and is largely viewed as undesirable.⁶²

All these factors create a somewhat simplified and ultimately flawed idea of what breastfeeding entails for a mother on a daily basis. The artist first noted this while caring for her child during the formula shortage in the United States in 2021.⁶³ The majority of comments under the news articles reporting the issue were diminishing it by stating that breastfeeding is free and therefore mothers have nothing to be concerned about. Perhaps, to a person unfamiliar with breastfeeding this statement seems justified since women's bodies can indeed produce sustenance for newborn children technically on their own. However, as Ani Liu pointed out, the notion of breastfeeding being 'free' disregards the time and physical labour that the breastfeeding person must invest. In the interview for the *MIT Technology Review*, Liu recalled pumping milk in the

⁶⁰ Liu, 'Care as Infrastructure', 91-92.

⁶¹ Buller, 'Performing the Breastfeeding Body', 2.

⁶² Whiley, Stutterheim, and Grandy, 'Breastfeeding, "Tainted" Love, and Femmephobia', 2.

⁶³ Liu, 'Care as Infrastructure', 92.

broom closet next to her classroom at the University of Pennsylvania, so the artist is intimately familiar with the potential difficulties the process entails.⁶⁴ Furthermore, it also disregards the experiences of people struggling with breastfeeding despite their best efforts and the comfort of their own home due to pain, insufficient milk production and other common problems.

Untitled (Feeding Through Space and Time) addresses the labour involved in breastfeeding in a remarkably tangible and intimate way. Ani Liu presents to the viewer approximately 5.85 gallons or 22 litres of synthetic breast milk substitute.⁶⁵ That is the amount of milk the artist would produce with her own body every month while feeding her child. Although initially the breast milk in the installation was supposed to be real, the artist and her team had to create a synthetic substitute for it to be stable throughout the duration of the show.⁶⁶ Nevertheless, the sheer amount of liquid on display speaks volumes of the physical labour and the time that has to be spent on it.

Considering the synthetic milk as part of the installation, how this artwork attempts to challenge the notions of ‘natural’ and ‘unnatural’ might seem relatively straightforward at first glance. As previously mentioned, in the present day there is an alternative for people who do not breastfeed their children in the form of baby formula. Despite being engineered to be a safe, nutritious and healthy substitute for breast milk, feeding one’s child with formula can still be met with public scrutiny as it is considered to be an ‘unnatural’ method.⁶⁷ On the other hand, the choice to fully breastfeed and never use baby formula can similarly be criticised for being inefficient at a time when mothers are expected to return to work as soon as possible. Additionally, some people might choose to combine both options. In any case, associating one feeding method with moral superiority and righteousness is indicative of a broader issue: the persistent criticism that mothers encounter regardless of their choices. After all, 21st-century mothering is persistently forced to operate within the contradictory expectations of seamlessly adapting to the new role of a daily carer while continuing to be an effective employee.

Ani Liu encourages us to reflect on whether these personal choices truly reflect a mother's ethics and morality, or if our perceptions have been influenced by modern marketing schemes and

⁶⁴ Alexandra Lange, ‘Exposing the Messy, Technologized, and Undervalued Nature of Reproductive Labor’, *MIT Technology Review*, 23 August 2022, <https://www.technologyreview.com/2022/08/23/1057617/ani-liu-art-reproductive-labor/>.

⁶⁵ For more details regarding the artwork see the artist’s webpage at <https://ani-liu.com/feeding-through-space-time>

⁶⁶ D. Peterschmidt, ‘Processing Postpartum With AI And Synthetic Breast Milk Art’, *Science Friday* (blog), 3 June 2022, <https://www.sciencefriday.com/segments/ani-liu-postpartum-science-art/>.

⁶⁷ Liu, ‘Care as Infrastructure’, 93.

popular labels such as ‘natural’. After all, the label ‘natural’ means practically nothing in the contemporary world. Natural does not correlate with being inherently healthier or better in any other way. Many of the things that we consider natural have already been modified by scientists to be more suitable to modern people and our current lifestyles.

The other question Ani Liu proposed with this installation is when is the so-called ‘natural’ way celebrated and when is it perceived as disturbing?⁶⁸ Breastfeeding might be celebrated in theory but breast milk as well as the practice of breastfeeding in public are still heavily stigmatised in the United States to this day. In one of her interviews, Ani Liu mentioned that it became legal to publicly breastfeed in all 50 states only in 2018.⁶⁹ However, even positive changes in the legal system cannot guarantee the absence of public shaming and disgust with the breastfeeding body. Moreover, as Carpenter notes in her article “‘(L)Activists and Lattes’”: Breastfeeding Advocacy as Domestic Performance’, the maternalist notion of the breastfeeding body being perceived as ‘the good maternal body’ is not only challenged by where the breastfeeding is taking place but also by factors such as race, education and economic status of the person who is breastfeeding.⁷⁰ Although it has never been explicitly mentioned by the artist, Ani Liu as a woman of colour herself is certainly aware of this aspect regarding the stigma surrounding breastfeeding bodies.

Therefore, the mere act of creating and putting forward an artwork dedicated to breastfeeding can be considered controversial. As Rachel Buller notes in her article ‘Performing the Breastfeeding Body: Lactivism and Art Interventions’, by making breastfeeding visible in public spaces artists are confronting the discomfort and culturally normative behaviours of our society.⁷¹ *Untitled (Feeding Through Space and Time)* is a prime example of such an art intervention attempting to shift our perception of this heavily stigmatised part of motherhood.

The final theoretical and contextual aspect of this installation that I would like to address is the introduction of a new technological actor in the process of breastfeeding. What differentiates this piece from other lactivist artworks is the focus on the experience of pumping milk with a breast pump. I would argue that the acknowledgement of new technological actors assisting with the postpartum care of the child is particularly significant in the contemporary representation of motherhood. There is no doubt regarding the significant role these technological developments

⁶⁸ Liu, ‘Care as Infrastructure’, 93.

⁶⁹ Alex Archambault, ‘Breastfeeding in Public Is Now Legal in All 50 States — and People Say It’s About Time’, *Business Insider*, 27 July 2018, <https://www.businessinsider.com/public-breastfeeding-legal-in-50-states-2018-7>.

⁷⁰ Carpenter, “‘(L)Activists and Lattes’”, 349.

⁷¹ Buller, ‘Performing the Breastfeeding Body’, 14.

have played in the technicization of motherhood and the alteration of the nursing experience in various ways.

The artist's first encounter with the breast pump was due to necessity as she did not qualify for parental leave and was forced to return to work soon after giving birth.⁷² Being familiar with the works of Donna Haraway, Ani Liu quickly became fascinated by the responses of her own body to this new technology that had infiltrated her day-to-day life. The rhythm of the pumping in the gallery directly mimics the rhythm of her own breast pump that the artist used when breastfeeding. These sounds reflect the intimate relationship between her and the machine, as the sound of the pump superseded the biological cues like a baby's suckle or smell after a few months. The artist recalled instantly thinking of herself as a cyborg, referencing Donna Haraway's essay 'A Cyborg Manifesto' from 1985. The cyborg that Ani Liu associated herself with was not a mere combination of a human and a machine with distinct differences as well as a starting and finishing point. In her own words, she began feeling hormonal changes and experiencing affectionate sensations associated with the rush of oxytocin from her breast pump.⁷³ Due to these complex emotional and physical responses, she started thinking of herself as a new human-animal-machine cyborg that has been melded into one being.

Nevertheless, the assistance of various technological advancements such as a breast pump does not guarantee a mother's liberation from labour. As Zairu Nisha pointed out in her article 'Technicization of "Birth" and "Mothering": Bioethical Debates from Feminist Perspectives', while often advertised as tools of women's liberation, technological advancements both in the form of assisted reproductive technology and nursing devices are inherently patriarchal and have been created in the patriarchal society.⁷⁴ While it might be liberating for some women, for others these technologies represent yet another form of control.

For example, in the United States where postpartum care is little to none, the existence of a breast pump gives the employer the ability to assume that the breastfeeding employee can return to work sooner than they should simply because the technology can come to their aid.⁷⁵ In other cases such as the artist's experience, when she gave birth she was forced to return to work sooner since she did not qualify for maternity leave and had to use the breast pump out of necessity.⁷⁶ However, there are also cases where the breast pump is indeed liberating depending on the

⁷² Liu, 'Care as Infrastructure', 89.

⁷³ Liu, 'Care as Infrastructure', 89.

⁷⁴ Nisha, 'Technicization of "Birth" and "Mothering"', 136.

⁷⁵ Liu, 'Care as Infrastructure', 89.

⁷⁶ Hallie McNeill, 'Embodied Knowledge: Ani Liu Interviewed', *BOMB Magazine*, 15 July 2022, <https://bombmagazine.org/articles/embodied-knowledge-ani-liu-interviewed/>.

individual situation. Therefore, the artist acknowledges the difficult task of establishing where the invention of a breast pump can be positioned between oppressive and liberating technological devices.⁷⁷

This topic is especially controversial in the context of the United States if the history of the breast pump is acknowledged. After all, breast pumps emerged as a response to two simultaneous cultural trends happening in the United States at the end of the 20th century, namely, the recognition of breast milk's nutritional superiority to formula and the greater numbers of women returning to the workplace sooner after childbirth.⁷⁸ Before the widespread 1997 campaign of the American Academy of Paediatrics (AAP) which urged new mothers to exclusively breastfeed their infants for the first six months, formula was more popular than breastfeeding in the United States and many women opted for it.⁷⁹ However, the country's policy on maternity leave did not change with the new recommendations and as a response to these trends, breast pumps came 'to the rescue' and allowed women to combine breastfeeding and wage work. As Kelly Hansch McMahon explains in her article 'The Breast Pump: Reinforcing Oppressive "Good" Mother Ideologies Since 1996', the initial medical devices used primarily in hospitals became regular consumer goods when the government began to subsidise breast pumps to working women and employers promised an appropriate space to pump.⁸⁰ Therefore, the rise of breast pump use in the United States is a prime example of how a seemingly liberating technological device can be offered to women instead of an actual change in governmental policy.

In addition, McMahon also pointed out that similarly to washing machines and other domestic technologies, the emergence of breast pumps did not save women time but on the contrary increased the expectations of what women ought to do now that this technology is available.⁸¹ As she compares the current standards of normative motherhood in the United States to the postwar era normative motherhood, she highlights that the emphasis has shifted from the mother's physical proximity to her child to her ability to put the child's needs before her own.⁸² As the breast pump has given mothers the ability to transcend the boundaries of space and time while engaging in wage work, the practice of intensive mothering and devotion to the child's

⁷⁷ Liu, 'Care as Infrastructure', 91.

⁷⁸ Kate Boyer and Maia Boswell-Penc, 'Breast Pumps: A Feminist Technology, or (yet) "More Work for Mother"?' in *Feminist Technology*, ed. Linda L. Layne, Sharra Louise Vostral, and Kate Boyer, Women, Gender, and Technology (Urbana: University of Illinois Press, 2010), 120–121.

⁷⁹ Kelly Hansch McMahon, 'The Breast Pump: Reinforcing Oppressive "Good" Mother Ideologies Since 1996', *The American Papers* 41, no. 2022–2023 (2023): 41.

⁸⁰ Hansch McMahon, 'The Breast Pump', 42.

⁸¹ Hansch McMahon, 'The Breast Pump', 47.

⁸² Hansch McMahon, 'The Breast Pump', 53.

enrichment became a way to compensate for the time spent away from him.⁸³ Moreover, according to Kate Boyer and Maia Boswell-Penc, the standards of what constitutes a good mother have also risen due to the way breast pumps have been advertised.⁸⁴ For example, by showing images of a mother using the ‘hands-free’ breast pump while pushing a child on a swing or using a computer for work, the advertisers are potentially communicating that the pumping is effortless amidst the daily activities as well as the new standard of multi-tasking where simply nursing is not enough anymore.⁸⁵

2.2 Composition

In this section of the chapter, I will offer an extensive description of the artwork and break it down into individual compositional elements. The compositional plane of the analysis focuses on the structure of the artwork and how it was organised. The specific compositional elements that I will analyse are the title of the artwork, the constant movement of the milk through the tubes and their placement, and the accompanying sound of the pump throughout the gallery space. Moreover, I would also like to address the lack of a compositional element in the artwork such as the figure of a mother which, as I will explain further, can also be viewed as a deliberate choice of the artist to convey a statement to the viewer.

The installation consists of an entanglement of feeding tubes scattered across the gallery floor and pumping synthetic milk using an air pump and a liquid pump (Figure 2). The tubes take up around one-fourth of the gallery space floor, creating an obstacle for the viewer without overpowering the exhibition. In one of her interviews, Ani Liu confessed her initial plan to scatter the tubes across the entirety of the gallery floor to create an even more overwhelming sensation for the viewers, but in the end, the idea was abandoned.⁸⁶

Perhaps it would be even more convincing if the tubes would indeed take up the entire floor of the gallery, but the artwork is still taking up enough space so that the viewer could not simply walk past it and ignore it. The scattered tubes are in the corner of the room near the window on one side and an empty white wall on the other. The surrounding emptiness of the white walls and the contrasting dark floor create a strong visual emphasis on the artwork and guide the spectator’s gaze straight to the tubes near his feet.

⁸³ Hansch McMahon, ‘The Breast Pump’, 53.

⁸⁴ Boyer and Boswell-Penc, ‘Breast Pumps: A Feminist Technology, or (yet) “More Work for Mother”?’’, 125.

⁸⁵ Boyer and Boswell-Penc, ‘Breast Pumps: A Feminist Technology, or (yet) “More Work for Mother”?’’, 125.

⁸⁶ Lange, ‘Exposing the Messy, Technologized, and Undervalued Nature of Reproductive Labor’.

Despite the seemingly chaotic nature of the feeding tubes, they have a clear starting and ending point in the form of a milky white box near the window. When looking closely, one can see that the box itself is transparent and only seems white due to being full of synthetic milk that is being pumped in and out of it. As the milk circulates through the tubes, so does the repetitive and motoric sound of the pump that can be heard across the gallery space.



Figure 2 Installation View. Ani Liu, *Ecologies of Care*, 2022. Cuchifritos Gallery, New York. Photo - Brad Farwell. <https://brooklynrail.org/2022/07/artseen/Ani-Liu-Ecologies-of-Care>

The first element of the artwork that I would like to explore in more detail is the title. *Untitled (Feeding Through Space and Time)* is a title that creates certain associations with the work we are seeing. The first part of the title seems to be an emblematic choice for the artist that is also used in her other works such as *Untitled (Pumping)* or *Untitled (Labour of Love)*, which were also shown in the exhibition *Ecologies of Care* at Cuchifritos Gallery. It seems to be more of a personal preference of the artist and in a certain way her signature. So far, there have been no statements or comments made by the artist that would indicate a hidden meaning behind it. However, the words in the parenthesis have been chosen with intention and care each time.

In the case of *Untitled (Feeding Through Space and Time)*, the title hints at the concept of infinity, but in the context of labour and new technologies, that perfectly corresponds with the artwork itself. Feeding 'through space and time' or, in other words, wherever and whenever a person

wants, became possible because of the breast pump. It references the seemingly infinite possibilities of postpartum bodies, now being able to remove themselves from the baby and go out in the world even while breastfeeding.⁸⁷ If there were ever marketing campaigns created to encourage the use of breast pumps, it might have been the perfect slogan. There is no denying the possibilities and liberation this technology has given. However, resembling the early 21st-century feminist idea that ‘women can do anything’, these possibilities create an underlying expectation that women *should* be able to do everything, as previously mentioned.

Another interpretation of infinity in the title can be the new reality of the mother, who is now expected to feed and care for her child incessantly. Now that the baby is born, the process of feeding is always the top priority compared to anything else in any circumstances. This overwhelming realisation that now your entire existence is devoted to caring for a new person for the rest of your life with no going back can also be sensed through all the visual and sensory elements of the artwork.

The repetitive sound of the breast pump follows the spectators across the gallery wherever they go. It is impossible to avoid or pause unless leaving the exhibition completely. In a similar manner, the pumping of the milk across the feeding tubes does not stop even for a second. Even when it reaches the box, soon after that, the process starts again from the beginning. It is simultaneously a powerful and simple metaphor for both the experience of breastfeeding and raising children overall. It gives the spectator a glimpse into the reality of the never-ending labour that parents live in. It is powerful in its ability to overwhelm the spectator on several sensory fronts at the same time – visually through the movement of milk across the tubes and audibly through the sound of a breast pump. The additional emptiness of the walls only adds to this sensation emphasising that there is nothing else except this. Its simplicity, however, is a key to creating empathy in viewers. It is easy to understand and pick up on even without being a parent or an expert in contemporary art interpretation.

⁸⁷ Xintian Wang, ‘How Ani Liu Is Brilliantly Disguising Her Art As Science’, *HuffPost*, 12 September 2022, https://www.huffpost.com/entry/ani-liu-art-science_n_631254cbe4b0aefceecba636.



Figure 3 Ani Liu, *Untitled (Feeding through Space and Time)*, 2022. Cuchifritos Gallery, New York. Video - Brad Farwell. <https://vimeo.com/721278759>

The visual representation of infinite labour is exemplified by the act of pumping milk into the cube only for it to go out and around again. In this context, a reference to the cyborg can be made in a way that the new mother has now forever become a part machine. Despite previously being an individual with a personality, dreams and ambitions, now a woman inevitably becomes also a machine, expected to provide food and care for a child daily. She is expected to provide labour irrespective of her circumstances in the same way a machine is expected to work without breaking no matter what.

Nevertheless, when zooming out of the artwork alone and positioning it within the space of the exhibition *Ecologies of Care*, the artist's statement about labour seems less daunting and more focused on interwoven communities making this labour possible. For example, it was a conscious choice of the artist to credit every person who made this exhibition possible including people you rarely (if ever) see mentioned such as research assistants, engineering consultants and even her child's daycare teachers.⁸⁸ This small gesture of recognition amplifies Ani Liu's initial intention to showcase the hidden labour even in her own life. In most cases when the artist is exhibiting their work, the praise falls solely on their shoulders and those who are taking care of potentially less aestheticized parts of their life to make it possible are forgotten. It reinforces the myth of certain exceptionally skilled women having it all in both career and family matters. Here

⁸⁸ Liu, 'Care as Infrastructure', 87.

in the act of defiance and breaking myths, Liu acknowledges that it indeed ‘takes a village’ and that we should focus more on the hidden supporting structure behind each ‘successful’ mother.

On another note, if we consider the new mother as a cyborg, only the machine part is exposed to the viewers in this artwork. As a spectator, you can see milk as well as the mechanical pumping technology, but there is no mother or child in sight. This way we as spectators are presented with the possibility to either imagine the mother as we see fit or imagine ourselves in her place. What does she look like? Does the mother even identify as she or as a ‘mother’? Perhaps only implicitly but this artwork manages to avoid any specific representation of what a mother ought to look like, which is particularly relevant to the ideas Donna Haraway expressed in her manifesto. It also corresponds well with the artist’s comments regarding the themes of natural and unnatural that she wanted to explore in this artwork. While it can be applied to more tangible aspects of breastfeeding, it can also be applied to discussions regarding the experiences of LGBTQIA+ members as well as other underrepresented minorities in parenting roles. After all, there are still strict gender roles associated with parenting, especially breastfeeding. The empty space creates a possibility for any projections and therefore fosters inclusivity in the representation of a 21st-century mother. At the same time, it also creates a sense of a universal experience that all parents share. Even if you are not breastfeeding and cannot relate to that, the infinity metaphor can still correspond to the childcare experience as a whole.

When focusing on the more tangible elements of the artwork, the artist Ani Liu wanted to bring ‘the materiality of her life’ into the gallery space.⁸⁹ It is rare to see breast milk or diapers in the art and exhibition spaces, despite them being a large part of new parents’ lives. Moreover, as previously mentioned, people rarely see these things even in their day-to-day lives until they have children of their own. By showcasing the tangible and measurable results of her labour, Ani Liu once again encourages the spectators to reconsider their preexisting notions of what it means to breastfeed and come face to face with a real example right in front of them.

2.3 Spectatorship

In the final section of the analysis, I will analyse the way previously introduced compositional elements of the artwork address the spectator and what kind of emotions they might evoke as a result. It must be acknowledged that the artwork being exhibited in an art gallery creates a specific spectatorial arrangement and invites a certain type of visitor. Despite the artist

⁸⁹ Julia Kaganskiy, ‘Artist Ani Liu Has Some Radical Suggestions for What Pregnancy Could Look Like. It Begins With Artificial Wombs’, *Artnet News*, 29 July 2022, <https://news.artnet.com/art-world/ani-liu-2153297>.

potentially intending to prompt a certain reaction from the general public, the art gallery is an inherently elitist space to a certain extent even today. Therefore, the spectatorship analysis in this chapter section inevitably lacks an intersectional perspective which might be a valuable point to explore in further research. However, this grants an opportunity to explore the artwork in depth from a specific situatedness of the author. While some crucial points have been taken from critics' reviews of the exhibition, the substantial part of the analysis is my critical reflection from the perspective of someone educated in the theoretical aspects but completely unfamiliar with the experience of motherhood.

As I read reviews of Ani Liu's *Ecologies of Care* exhibition at the Cuchifritos Gallery in New York, I noticed a common narrative. The experience of seeing her artwork *Untitled (Feeding Through Space and Time)* in person was described by the critics as visceral.⁹⁰ As Diana Seo Hyung Lee wrote for the *Artnews* in 2022 about her viewing experience, she recalled first being struck by the believability of the liquid resembling breastmilk and then experiencing the 'sense of futility' of the process.⁹¹ But what about it exactly induced such a strong spectatorial response?

The first and perhaps the most powerful element contributing to this reaction is the fluid circulating through the tubes. Created to be hyper-realistic and convincing, synthetic milk is a reliable way to evoke feelings of discomfort. After all, most spectators, as previously mentioned, are not only rarely exposed to breastmilk in public spaces but also operate in a society where it is highly stigmatised and viewed as 'dirty'.⁹²

Moreover, the fact that they are exposed to it in an art gallery also contributes to the shock. Considering the common association between the art world and intellectual elitism, the artworks are often expected to explore the seemingly 'superior' and deeper topics unrelated to the domestic sphere or at least contribute to the beauty of the world. Despite this being a rather old-fashioned angle, the criticisms that contemporary artworks regularly receive from the public suggest that it is still prevalent to this day. Subsequently, exhibiting bodily fluids of any kind in the gallery space may feel not only inappropriate but almost contemptuous to the spectator depending on how conservative their views are.

And even if the spectator shares more progressive views on art and in general, the initial feeling of discomfort is still going to be prevalent even if it is not accompanied by frustration. As Whiley

⁹⁰ Diana Seo Hyung Lee, 'Got Milk?: Ani Liu at Cuchifritos Gallery + Project Space', *ARTnews.Com* (blog), 18 July 2022, <https://www.artnews.com/art-in-america/aia-reviews/ani-liu-cuchifritos-gallery-1234634558/>.

⁹¹ Lee, 'Got Milk?'

⁹² Whiley, Stutterheim, and Grandy, 'Breastfeeding, "Tainted" Love, and Femmephobia', 5.

et al. explained, observing someone breastfeeding in a public space can evoke feelings of shame regardless of your views.⁹³ The sexualised associations are so strongly ingrained in Western society that the spectator immediately feels as though observing something that they should not have observed and need to look away. Therefore, the visceral first response to the artwork is largely the consequence of the widespread societal stigmatisation of breastfeeding and domestic labour as well as the deeply ingrained associations of the public with it. By creating and exhibiting an artwork whose main visual component is synthetic milk endlessly circulating through tubes, Ani Liu forces the viewer to face the hidden and confront the mixed feelings, whatever they may be.

However, before ever seeing the artwork, the spectator is already being pulled into the experience by the rhythmic sound of the pump. As you enter and walk around admiring or reading about other artworks, the sound of the pump is ever-present and inescapable. Perhaps after some time, it becomes so ingrained into the background of the viewing experience that it becomes invisible and yet it never really goes away. The sound does not attempt to immediately overwhelm the viewer and therefore is not loud and distracting. It crawls up to you carefully and slowly, coming seemingly from nowhere in particular and yet from everywhere at the same time. The repetitive sound is an active contributor to the environment reminiscent of a lab or a factory. With every pump, the spectator can hear that some kind of mysterious process is going forward one step at a time and yet there is no finished product, no goalpost, no ending and therefore no meaning.

By making the spectator painfully aware of this never-ending process Ani Liu also exposes the viewers to the hidden labour mothers perform every day. As Diana Seo Hyung Lee suggested in her review 'Got Milk?: Ani Liu at Cuchifritos Gallery + Project Space', the initial sterility of the mechanic exhibition environment might strike spectators as cold but it also makes the hidden care work measurable and understandable.⁹⁴ With the help of references to technologies and data, Liu fights against the mythologising of mothers performing care work as well as other harmful myths about women's biology. In the interview with Brittany Utting, Liu explained that her intention to showcase motherhood with data in this exhibition space came partly from her background and training as an architecture graduate. However, another reason for immersing the spectator in the environment reminiscent of a lab was to respond to the myth that in her own words 'people with uteruses are 'hysterical' or emotional or incapable of logical thinking because they are clouded by hormones'.⁹⁵ This choice of presenting mothering to the viewers through the

⁹³ Whiley, Stutterheim, and Grandy, 'Breastfeeding, "Tainted" Love, and Femmephobia', 6-7.

⁹⁴ Lee, 'Got Milk?'

⁹⁵ Liu, 'Care as Infrastructure', 93.

lens of technology instead of mythology is reminiscent of Haraway's declaration of rather being a cyborg than a goddess.⁹⁶ In this case, the spectator is introduced to the cyborg mother who with the help of the breast pump is engaged in an understandable and measurable activity. It is not a hypothetical ideal mother performing the mysterious breastfeeding process behind closed doors. The tangibility and measurability of this process therefore legitimise it in the eyes of the spectators as 'real labour'. Ultimately, in the current capitalist reality, what you cannot see or measure, you cannot or, perhaps more truthfully, do not want to pay for.

Another reason why this atmosphere potentially legitimises the domestic labour of nursing in the eyes of the spectator is that it completely removes the accustomed association with breastfeeding as the ultimate biological destiny of a woman. By removing the sexist idealisation that dictates that the act of breastfeeding and mothering is the dream of every woman and depicting it as a demanding mechanical task, Liu positions the spectator into the role of a factory overseer where the work never stops, and no worker is allowed to have breaks. This parallel to Fordism creates perhaps a simplified but more empirical understanding of what it means to work 'a second shift' at home.

Finally, after the initial discomfort and sense of futility, Liu invites the spectator to look closer and observe this machine from a different perspective. Initially, the artist's personal relationship with the pump can slip away from spectators who prefer their own interpretation to the professionally written label next to the artwork or the clarification available in the exhibition statement. However, once you become aware of the context within which this artwork is situated, the composition of the tubes invites you to cautiously examine the entangled relationship between the human and the machine. While it also might be understood through a more general lens of the human-machine relationship, I find that the main concern of Liu in this installation is to address the complexity of women's relationship with reproductive and domestic technologies. It is done not through any generalisations or assumptions about society or women at large but by presenting the artist's personal experience with her breast pump.

Liu leaves subtle cues to the ones willing to look past the first impressions. For example, once the spectator becomes aware of the sound being programmed to the rhythm of the artist's own breast pump, it creates an additional level of intimacy in this experience. The spectator is no longer listening to a faceless factory-like work but rather can imagine the artist routinely hearing this rhythmic sound as she pumps the sustenance for her child at home or the workplace. This little detail fosters the imagination and almost lets the spectator behind the curtain of the artist's

⁹⁶ Haraway, 'A Cyborg Manifesto', 68.

personal experience of being a working mother. In addition, the newly found intimacy in this piece also encourages the viewer to look at the presented labour with more empathy. After all, it is difficult to empathise with something that you cannot imagine or relate to like ‘mothers’ as a generalised group. It is too diverse and fleeting of a concept as opposed to a single person whose labour you are physically looking at and hearing what she has been listening to for months.



Figure 4 Ani Liu photographed with her artwork *Untitled (Feeding through Space and Time)* for the MIT Technology Review, 2022. Cuchifritos Gallery, New York. Photo – Celeste Sloman.

<https://www.technologyreview.com/2022/08/23/1057617/ani-liu-art-reproductive-labor/>

Yet there is also another intimate relationship present within this artwork, the one between the artist and her breast pump. As a spectator unfamiliar with breast pumps in a practical sense, it is difficult for me to see it any different than another tool or a household item like a washing machine. It has never crossed my mind that one might develop any kind of feelings towards it, be it hormonal or not. But as you become familiar with the experience of the artist, she encourages you to reexamine the way you view technology. Despite the many levels of entanglements that you see or, as the artist called it in the description of the artwork, ‘knotty potentials’⁹⁷, it is still impossible to look at it in black and white. The composition of the artwork mimics these complicated feelings through the chaotic placement of the tubes. As you look at the chaos of it all, you realise that Ani Liu has created a poignant puzzle for the spectator to explore depicting not only the complex experiences of mothering but also the complex relationship of technology assisting women in this journey. It is especially interesting to explore being aware of the complex history of the emergence of breast pumps as consumer goods in the United States and the feminist debates regarding the technicization of birth and the emergence of IVF.

Despite the history and patriarchal origins of these inventions, as the artist pointed out in the interview with Utting, the breast pump can be liberating for some women or, as in her case, create new intimate relationships between the embodied technology of the breast pump and herself.⁹⁸ By showing the viewer a peak into what it feels and looks like to be a cyborg, Liu encourages the viewer to embrace the ‘knotty potentials’ of technology and acknowledge its place in the ecologies of care. Similar to the way the artist acknowledged every person within her ecology of care such as the daycare teachers, she also included the technological companion such as the breast pump who the artist developed an unexpectedly intimate relationship with. In this sense, Ani Liu embraces the idea of Donna Haraway’s cyborg not only practically in her own mothering experience but also as a broader metaphor, urging us to consider technology as part of our support and care systems to build a more diverse ecology of care within the contemporary realities of the 21st century.

⁹⁷ For a more detailed description see <https://ani-liu.com/feeding-through-space-time>.

⁹⁸ Liu, ‘Care as Infrastructure’, 88-89.

Conclusion

To conclude, the thesis attempted to critically analyse how Ani Liu used the concept of a cyborg in her artwork *Untitled (Feeding Through Space and Time)* to communicate to audiences the issues of invisible care work and stigma surrounding breastfeeding during the early months of motherhood. The utilisation of the cyborg metaphor in the artwork demystified the reproductive labour involved in breastfeeding, illustrated the new reality of the mother being in the constant position of a carer regardless of time and place, and revealed the deeply entangled and complex relationship between a mother and a breast pump as simultaneously liberating and limiting technology.

More specifically, by showcasing the process of pumping through data and technology, Liu was able to present tangible evidence of her labour. Instead of the idealised femininity in the form of a breastfeeding mother behind closed doors, she presented a machine with a specific and measurable task which the spectator could observe in the gallery. In addition, by displaying a hyper-realistic breast milk substitute inside the installation, Liu forced the spectator to confront the discomfort and mixed feelings prompted by the widespread stigmatisation of the breastfeeding body in public.

The new reality of the mother being in a constant state of caring for her child despite the circumstances was mainly conveyed by the theme of infinity within the artwork. Both the rhythmic sound of the pump as well as the never-ending process of pumping by the machine captured the viewer in the sense of futility from which they were unable to escape without leaving the gallery altogether.

However, the intimately entangled relationship between the breast pump and the artist as well as the carefully considered acknowledgements within the space of the exhibition gave rise to hope to those for whom the governmental support is out of reach. The cyborg metaphor extends the individual experience of the artist and advances into her support ecosystem. While recognising the complex feelings and patriarchal roots of this technology, Liu also gave space for new intimate relationships with it. Moreover, by exploring it in the context of embodied technology such as the breast pump, Liu demonstrated to the viewer that we already are cyborgs whether we like it or not and the responsibility of making sense of this newly found symbiotic relationship falls upon us.

By using the methodology of situational analysis and the dramaturgical triad the installation was analysed in the planes of composition, context and spectatorship as well as the interconnectedness of said planes. The chosen methodology allowed for a deeper investigation

into the sociopolitical context within which the artwork as well as the spectator operates. Without the knowledge of the historical context and the current policies regarding reproductive labour in the United States as well as the artist's personal experience in this context, it would be impossible to grasp the array of subtle references and the artist's statements. It would also diminish the possibility of analysing the spectator's address in sufficient detail since the situatedness of the spectator is crucial to understanding the visceral response the artwork is capable of invoking.

Nevertheless, the situational approach to analysing the artwork also heavily depends on the situatedness of the author and is therefore inevitably lacking an intersectional perspective. Considering the vastly different experiences with technology of white, middle-class mothers and mothers from marginalised communities, an intersectional perspective would be valuable when analysing the representation of the struggles of breastfeeding mothers in the United States. Therefore, one of the directions in which the technicization of breastfeeding and mothering might be researched further is the experiences of the marginalised communities.

Firstly, the artworks of Ani Liu can be further analysed by a closer examination of the artist's experience as a mother and a woman of colour in the United States. Although the analysis touched upon this topic it did not delve into detail of how being a woman of colour might have influenced Liu's relationship to technology and mothering.

Secondly, the concept of a cyborg mother opens up the possibility of discussing the struggles of gender-fluid and non-binary individuals as well as members of the LGBTQIA+ community in the context of motherhood. As previously mentioned in the analysis, by leaving out the compositional element of the mother and displaying only the machine part of the cyborg, Ani Liu creates a space of inclusivity for various identities that do not fit into the traditional gender binaries and therefore might find the label 'mother' rather limiting. This approach is especially relevant when working closely with the posthumanist ideas of Donna Haraway and therefore might engage with her more recent works when analysing Ani Liu's oeuvre.

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