Loose Threads

Marisa Di Monda

This piece is part of a research project exploring the development and histories of gendered labour and knowledge through framing women's work within the domestic realm, its ties to computing, and tensions between art and craft.

Loose Threads invites you to lie on the bed beneath a canopy made by the artist's Nonna, touch the blue stitching on the quilt to listen to the artist's mother tell stories of women in their family, and watch a projection from Tasmania, Australia of a nearly identical quilt made by Marisa's mother in the process of teaching her how to make the one in the space.

The quilt is patched with printed images of women contributing to the history of computing - collected from the feminist server AnarachaServer - and of women from Marisa's family. The design is based on an Anni Albers' wall hanging and includes an IBM punch card pattern encoded with a quote from the first computer programmer, Ada Lovelace.

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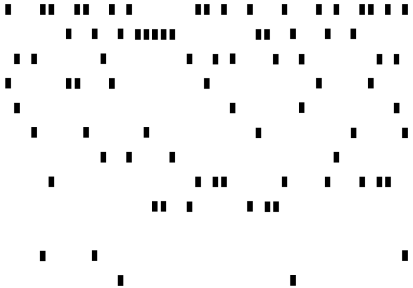
AS THE JACQUARD LOOM WEAVES FLOWERS AND LEAVES.



Family Ties

Excerpt from essay

In the 1950s, Mama's parents and siblings migrated from Italy to Australia - where she was later born - for new prospects. The women in her family have always been prolific textile makers. Giovanna - my nonna, Caterina/Cathy, Domenica/Mimma, Anna - my zias/zie, and Rosetta - Mama. My nonna shaped them to be skilled makers and excel in the domestic arts and labour, from which they could then support their own husbands and families. Nonna passed on to them knowledge that was exclusively for the daughters and not for her sons. She taught them about the "malocchio" - evil eye - how to remove it and how and when to teach other women this ritual. Zia Cathy has updated her methods to perform the ritual over the phone for her daughters and granddaughter. I first learnt about malocchio when I was around twelve; surrounded by the girls and women in our family, I witnessed Zia Mimma performing the ritual on my cousin one dark and rainy evening. I was excited to think that perhaps we were a family of

witches. Mama and her sisters continue to share their knowledge, swap tips and techniques and attend craft and quilting workshops with groups of other women.

My mother and her three sisters did not complete their high-school education - this was not prioritised for them. When asked why, Mama responded, “Nonno didn’t think women needed an education”. The path of domesticity was well-trodden and laid out for them. When they entered the workforce to contribute financially to support their own households, in addition to their domestic labour, they worked in kitchens, laundries, and delis as carers, cleaners and seamstresses. They also worked in the family corner shop they held from 1965 to 1968 on Macquarie Street, Hobart, Tasmania. Every day, a stack of newspapers was delivered, held together with white parcel twine. These newspapers were filled with gendered advertisements, such as women shopping for floor care and cleaners. My Nonna collected the twine. They would all unravel it at the shop and keep it together in large plastic bags. She would then weave or crochet them into decorative and

sturdy blankets that have withstood time and usage, remaining un-frayed.
Nonna's blankets opened a space both poetic and political. They are a potent artistic act of resistance in that they appropriate what constitutes an official image of information by a form of marginalised knowledge. These blankets - the queer usage or re-territorialising of the twine - were the starting point for this research project and asking what produced and sustained the marginalisation of the women in my family.

Figure 1.
Top left to right: Nonna - Giovanna, Nonno - Gerado, Uncle Frank - Franco,
Zia Mima - Domenica, Zia Cathy - Caterina, Uncle Joe - Guiseppe, Zia Anna - Anna and Mama - Rosetta. c.1964.
Hobart, Tasmania.

*This image is stitched into the quilt.

Figure 2.
Nonna and me. c. 1989.
Hobart, Tasmania.

Figure 3.
Mama, Anna, Caterina & Domenica.
Hobart, Tasmania.

This image is stitched into the quilt.

Figure 4.
Felicetta, my sister, and I wearing dresses made by Mama. c.1992.
Hobart, Tasmania.

This image is stitched into the quilt.

Figure 5.
Macquarie Street corner shop calendar. Hobart, Tasmania.

Figure 6.
Pages from the newspapers delivered to the corner shop wrapped in parcel twine. Hobart, Tasmania.

Figure 7.
First quilt Mama made then gifted to me.
c.2014.
Hobart, Tasmania.

Figure 8. 9. 10. 11.
Nonna’s parcel twine blankets today.

Figure. 12
Detail of *UK AIDS Memorial Quilt*.
https://www.aidsquiltuk.org/

Figure. 13. & 14.
Unknown, Australia / England, *Sailor's tumbling block quilt*. c. 1846. silk, paper. Collection of Dr Annette Gero, Sydney. Photographed when displayed at The Ian Potter Centre, NGV, Melbourne Australia in 2016.

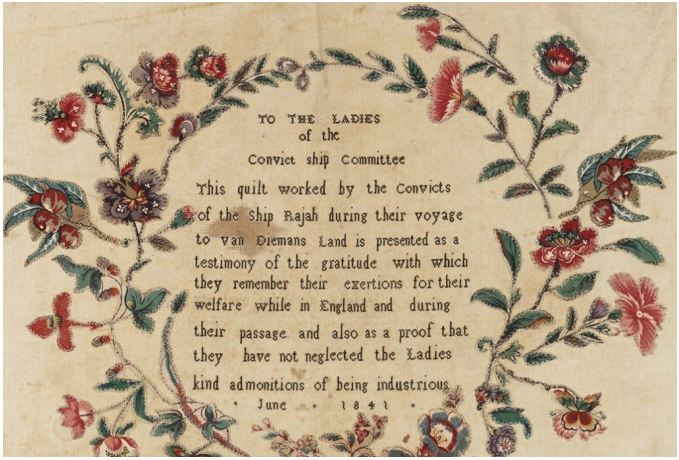


Figure. 15.
Unknown (Convict women of the HMS Rajah) (makers), Kezia Hayter (designer), born England 1818, arrived Australia 1841, died 1885.

The Rajah quilt 1841 (detail), cotton (chintz), silk (embroidery and applique),
325.0 x 337.0 cm, National Gallery of Australia, Canberra, Gift of Les Hollings and the Australian Textiles Fund 1989

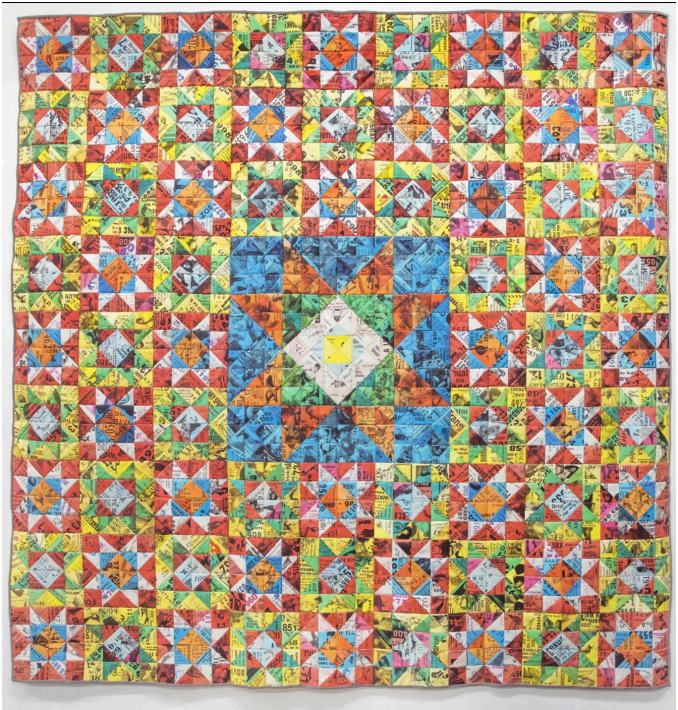


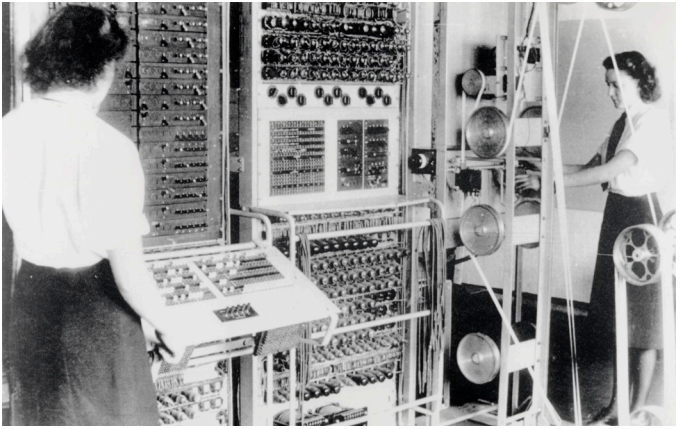
Figure. 16.
Tom Phillips, *Women's Work,* 1997.
Prostitutes' advertising cards on cotton backing cloth, 204 x 204cm
Artsy, https://www.artsy.net/artwork/tom-phillips-womens-work.

Quilt Images

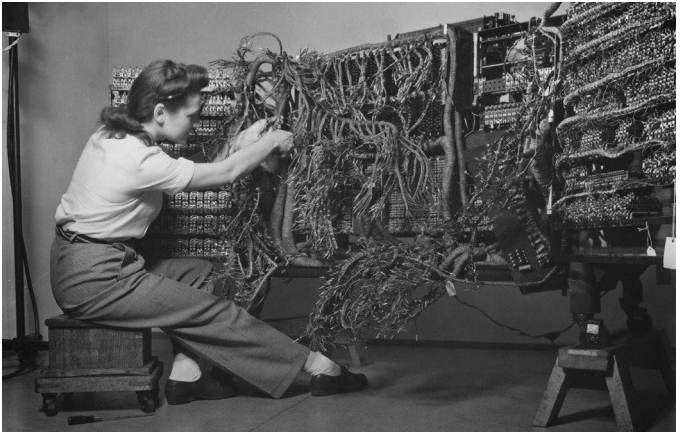
Collected from the feminist server
AnarachaServer

The Harvard Observatory, under the direction of Edward Charles Pickering, had several women working as skilled workers to process astronomical data. Harvard was the first such institution to hire women to do this type of work. Among these women were Williamina Fleming, Annie Jump Cannon, Henrietta Swan Leavitt, and Antonia Maury. Although these women started primarily as calculators, they often rose to contribute to the astronomical field and even publish in their own names. This staff came to be known as the Harvard Computers or, more derisively, as “Pickering’s Harem”.

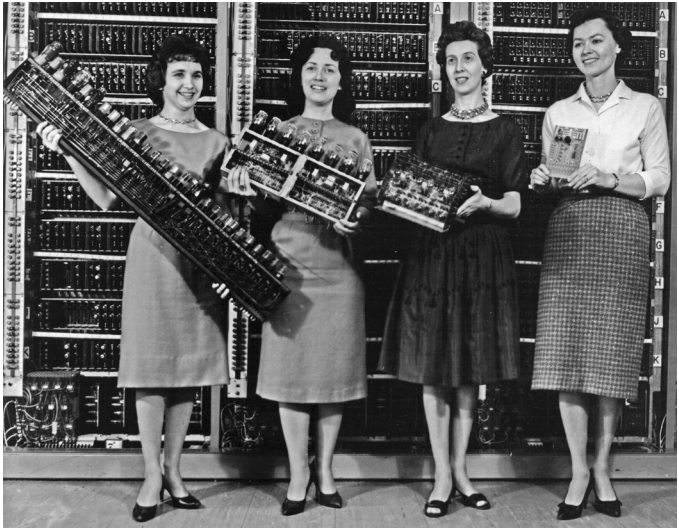
Washington DC Bonus Bureau Computing Division, 1924.



A Colossus Mark 2 computer being operated by Wrens (Women's Royal Naval Service) c.1943.

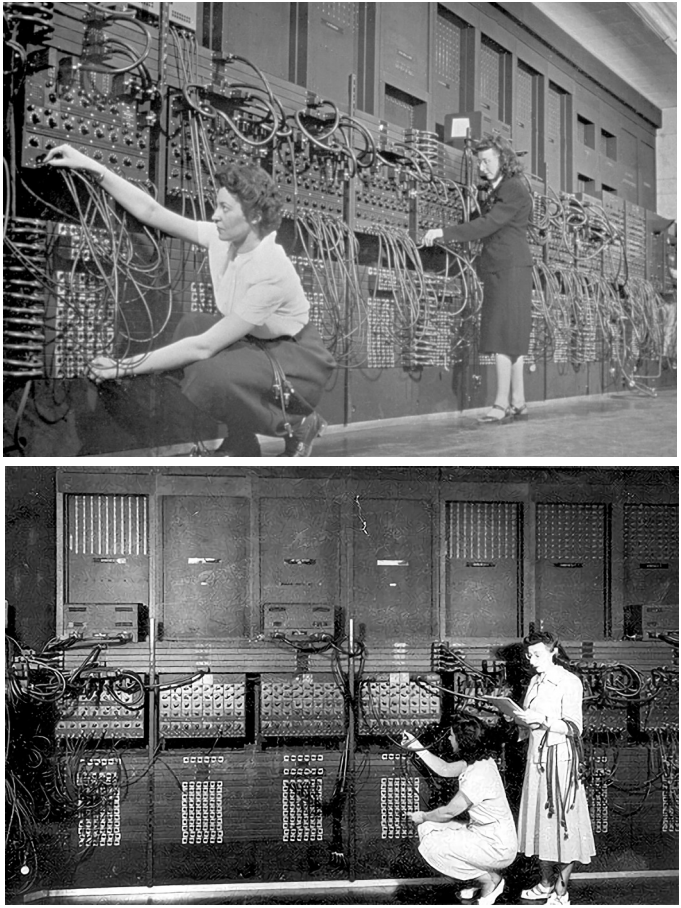


Wiring an IBM.



ENIAC operators - Patsy Simmers, holding ENIAC board; Gail Taylor, holding EDVAC board; Milly Beck, holding ORDVAC board; and Norma Stec, holding BRLESC-I board.

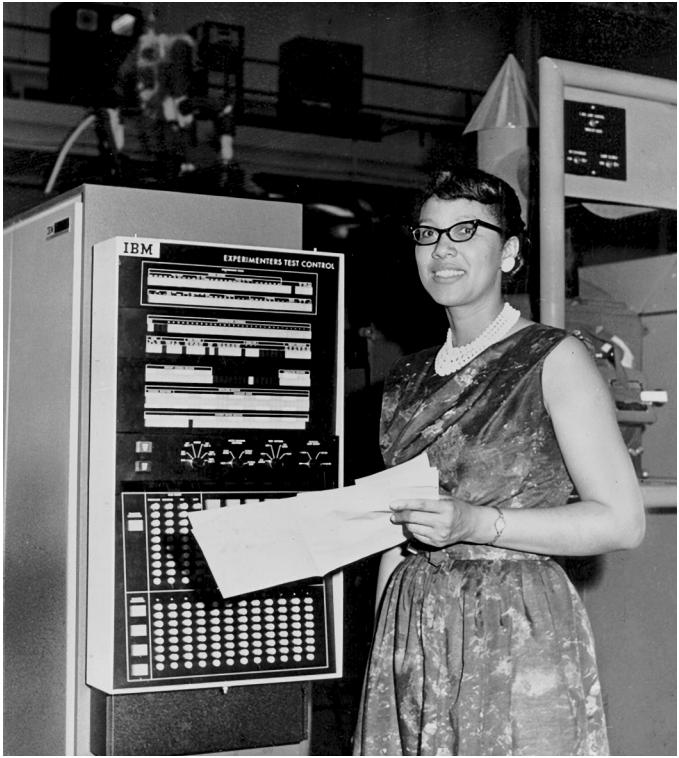
The Electronic Numerical Integrator and Computer (ENIAC) was the world's first fully electronic, digital computer. It was created as a secret American project in 1945 during World War II to calculate artillery trajectories.



Ruth Lichterman & Marlyn Wescoff, programmers of ENIAC.

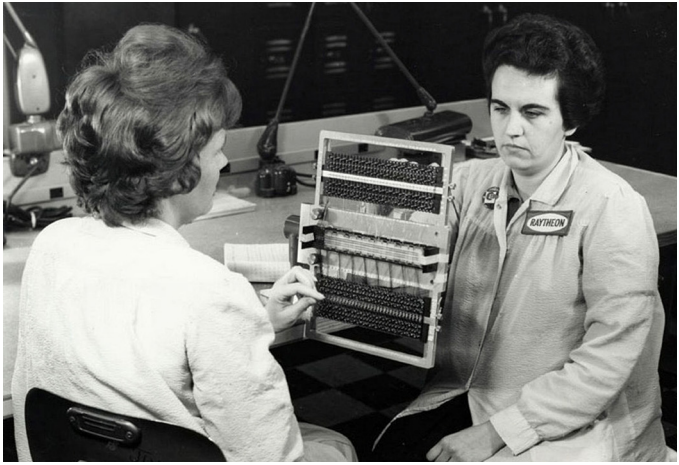
Katherine Johnson c.1960 with calculating machine and celestial training device. Johnson was an American mathematician whose calculations of orbital mechanics as a NASA employee were critical to the success of the first and subsequent U.S. crewed spaceflights.

NASA “human computers”, 1959. From left: Lucille Coltrane, Jean Clark Keating, Katherine Collie Speegle, Doris ‘Dot’ Lee, Ruth I. Whitman, Emily Stephens Mueller.



Melba Roy Mouton, an American mathematician who served as Assistant Chief of Research Programs at NASA's Trajectory and Geodynamics Division in the 1960s, headed a group of NASA mathematicians called "computers".

Margaret Hamilton stands next to a stack of program listings from the Apollo Guidance Computer in 1969. She was director of the Software Engineering Division of the MIT Instrumentation Laboratory, which developed onboard flight software for NASA's Apollo program.



During the first Apollo missions, the software of the Apollo Guidance Computer was physically weaved into high-density storage called “core rope memory”, similar to magnetic core memories. To build the memories, NASA hired skilled women from the local textile industry and the Waltham Watch Company because of the precision needed to work around the cores with a needle. Sitting across each other at long desks, these women passed wires back and forth through a matrix of eyelet holes, each comprising a magnetic core bead. Passing a wire through the core created a “one,” while bypassing the core created a “zero”. The core rope memory was nicknamed “LOL memory”, where LOL stood for the “Little Old Ladies” who assembled it. They were supervised by “rope mothers”, who were often males. However, the rope mother’s boss was a woman named Margaret Hamilton.

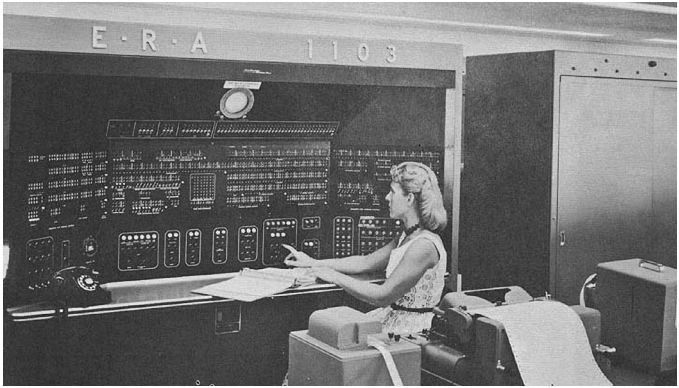
Raytheon recruited women from the nearby Massachusetts mills for their exquisite manual dexterity, perfect for weaving the copper code that ran the guidance computers for the Apollo space missions of the 1960s and 1970s.

Weaver of core memory in a photograph from a Raytheon Apollo 11 Press Kit. The photo caption from the kit describes the woman as a “space age needleworker.”

Engineer stringing the sense inhibit wiring components of the Apollo Guidance Computer erasable memory.

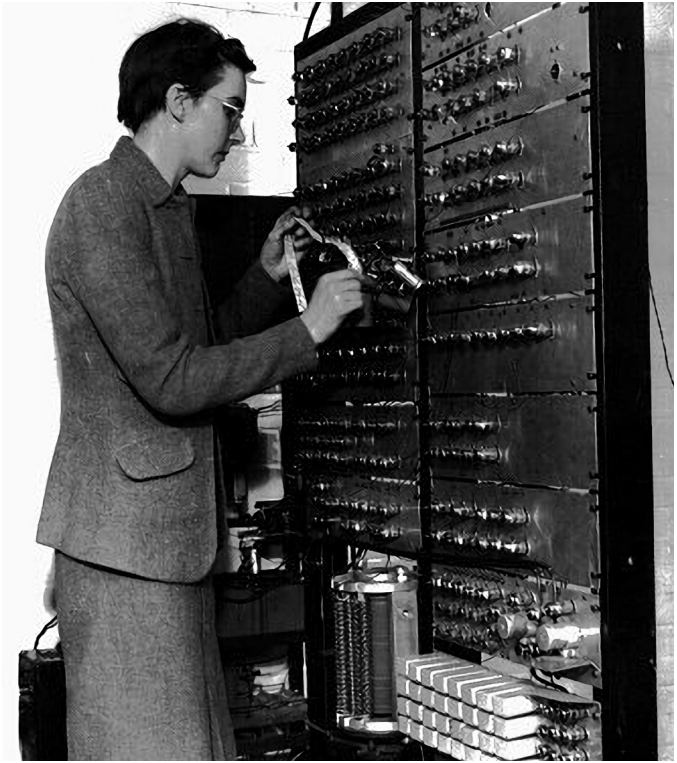
Technician assembling the micrologic and core memory panels that make up the Apollo Guidance Computer into their housing.

Grace Murray Hopper was an American computer scientist, mathematician, and United States Navy rear admiral. One of the first programmers of the Harvard Mark I computer, she pioneered computer programming and invented one of the first linkers. Hopper was the first to devise the theory of machine-independent programming languages, and the FLOW-MATIC programming language she created using this theory was later extended to create COBOL, an early high-level programming language still in use today.



A woman operating the input/output console of a ERA 1103 UNIVAC 2 Calculating Machine, 1955.

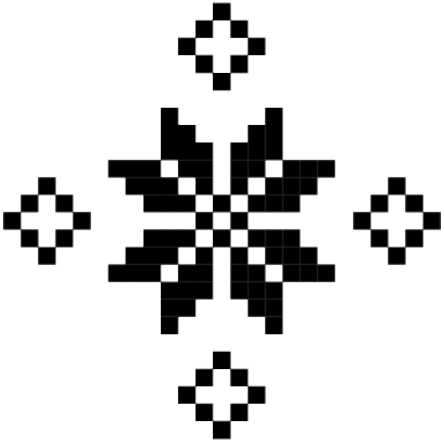
Ann Moffatt sits at her kitchen table in 1966, writing the code for the Concorde black box, while her baby looks on.



Kathleen Booth née Britten wrote the first assembly language and designed the assembler and autocode for the first computer systems at Birkbeck College, University of London. She helped design three different machines, including the ARC (Automatic Relay Calculator), SEC (Simple Electronic Computer), and APE(X)C (All Purpose Electronic (X) Computer).

Threads

Repurposing Parcel Twine



Mama talks about Nonna's frugality and creativity. She repurposed the parcel twine that held the shop newspapers together when they were delivered each morning. This symbol is the crochet pattern of one of the blankets.

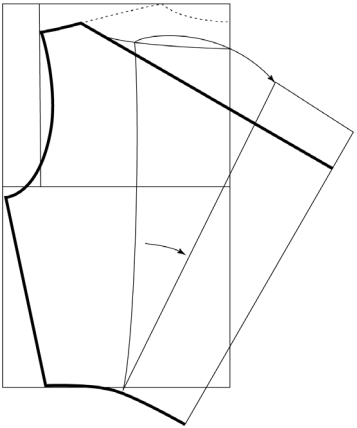
Home Remedies

Nonna had an infinite amount of home remedies. Mama shares one - how to get rid of a splinter.

Malocchio or Evil Eye

Mama explains mallocchio or the evil eye. My nonna taught her daughters how to remove the curse from others.

Sewing Girls & Dress Patterns



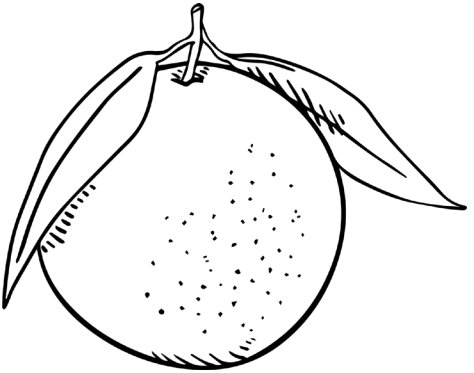
Mama talks about how Nonna constructed dress patterns and how all the women in the family learnt to sew, knit and crochet. This has bonded them as they continue to share skills with each other and to the new generations.

Education

Mama talks about the family's education and why it was disrupted.

The image was taken from one of the newspapers saved from the shop where Nonna used the twine to make blankets. They resemble the school uniforms we all wore and the dresses Mama and Zia Cathy wore when working in care homes.

There's an orange under the bed



After my Nonna passed, she continued to visit my auntie in a dream, telling her to collect the oranges from under the bed. Mama and my aunts checked under Nonna's bed, where they found a single orange. They shared the fruit between them.

Unravelling

Essay

This is a story about women's work - where it is appreciated and where it is not, where it is valued and where it is not, where it is seen and where it is hidden. This story begins with whores and witches and weaves through to the first loom, computers and missions to space. I have sought out this story to understand what produced and sustained the marginalisation of the women in my own family - what consigned them to the realm of domesticity. This story follows the rigid binary building of patriarchal capitalism and how it flows through our bodies.

Family Ties

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See above Figures. 1-11 for supporting imagery.

Whores, Witches & Workers

In the mid-1970s, Silvia Federici began the research project with Leopoldina Fortunati on the roots of social and economic exploitation of women taking hold in the transition from feudalism to capitalism in 16th and 17th century Europe. Federici's Caliban and the Witch: Women, the Body and Primitive Accumulation traces the genesis of housework and modern Western notions of femininity and masculinity from this transition and details the structural elements that divorced production from reproduction and disciplined women.

Federici argues that during the transition from feudalism to capitalism, the witch hunts were a tool in constructing a patriarchal order - the disciplining of women where their bodies and labour became controlled by the state and exploited as an economic resource.[3] The witch was the embodiment of what "capitalism had to destroy: the heretic, the healer, the disobedient wife, the woman who dared to live alone, the obeah woman who poisoned the master's food and inspired the slaves to revolt".[4]

The fabric of capitalist, patriarchal society was stitched together with sexual division, the exclusion of women from waged work, women's subordination to men as a result of a waged versus unwaged dynamic, and the mechanisation of bodies of reproduction.

Federici reveals Marx's blindness[5] - in his account of primitive accumulation - to the economic relationship between reproductive work and unpaid labour in the home to the social system of production. The oppression of women and subordination to men was not simply a result of feudal relations, as Marx claimed and

not due to the exclusion of women from capital development, as some feminists argue. Women were included in capitalist development - their role was mystified as a “natural resource or personal service” and exploited.[6] Reproducing the workforce and contributing to workers’ physical and emotional well-being to ensure participation in production was not recognised, yet it was essential and profited upon.

This social-economic role of women – producing workers’ productivity – was pushed to the background, construing it as imperceptible, unnoticed, assumed, expected, normalised, and natural.

> **For in pre-capitalist Europe women’s subordination to men had been tempered by the fact that they had access to the commons and other communal assets, while in the new capitalist regime women themselves became the commons, as their work was defined as a natural resource, laying outside the sphere of market relations.[7]**

Women were disqualified from the market and public space. Craft workers campaigned against women workers to protect themselves from the competition of cheaper women's rates. Men refused to work with men that worked with women. Women were expelled from their workshops and, if seen to be working in the public space, were represented as "sexually aggressive shrews", "whores", and "witches".[8]

The jobs available to proletarian women were of the lowest status: "domestic workers, farm hands, spinners, knitters, embroiderers, hawkers, wet nursers". This created a sexual division of labour and dependence of the female non-worker on the male worker. For example, in England, the law entitled husbands to their wives' earnings - even if the work was breastfeeding. Furthermore, they suffered legal infantilisation - losing the right to manage their affairs and conduct economic activity independently.[9]

Federici points out that disenfranchised, male-waged workers still gained benefits from the wages and unpaid domestic work of their wives. They also had the means to pay for the services of prostitutes without experiencing the kinds of risks or punishments the sex workers faced. Men faced lower risks and wielded the power to threaten a woman's honour.[10]

The obstacles women faced in earning wages led to the "massification" of prostitution. In the Middle Ages, sex work had been considered a "necessary evil", but during the transition, prostitution saw new restrictions and then criminalisation. Brothels were shut down, and prostitutes were subjected to "banishment, flogging and punishments such as the ducking stool. In contrast, it was not considered a crime in 16th-century France to rape a prostitute.[11]

The transition saw the criminalisation of contraception and women's control over procreation, thereby cutting ties to generational knowledge women passed down of the many ways in which to control their fertility and induce abortions.

By denying women control over their bodies, the state deprived them of the most fundamental condition for physical and psychological integrity and degraded maternity to the status of forced labor.[12]

Furthermore, women were discouraged from seeing their families too often after marriage, and the meaning of “gossip” shifted to have a negative connotation. An unaccompanied woman in the streets risked sexual assault, and the presence of women in public became frowned upon in England.[13]

By the end of the 17th century, women were defined as non-workers and their work fulfilled in the home - produced for the market or not - was deemed worthless. Produced for the family or not, sewing clothes was “domestic work” or “house-keeping”. It was considered that women needed this work so as not to fall on “public relief”.

> **Sexual hierarchies, we found, are always at the service of a project of domination that can sustain itself only by dividing, on a continuously renewed basis, those it intends to rule.[14]**

The banishment of women from the workplace, the loss of rights to financial independence and autonomy over their body, the lack of recognition of housework and the sufferings inflicted upon them for sex work demonstrates the capitalist project to shape and tame women to function as unpaid, exploited workers. It demonstrates a link to the "creation of the housewife and reconstruction of the family as the locus for production of labor power".[15]

A [w]hole in one

Sadie Plant explores the gendered division of labour and exploitation of women as she investigates women's involvement in computer innovation and the lack of acknowledgement for their historical contributions. Plant examines the inextricable links between women, weaving and technology. In the story of technology, women

are repeatedly veiled beneath a Gaussian blanket - blurred into the background. Women's contributions have been disregarded as men have spearheaded the narrative.

In *Zeros + Ones: Digital Women and the New Technoculture* (1998), Plant traces the origin of computers to weaving. In 1833 Ada Lovelace met Charles Babbage, designer of the Difference Engine - the first computer. Babbage realised the possibility of the Analytical Machine inspired by the Jacquard loom invented in 1801. The automated weaving machine could be programmed to weave any pattern directed by the punched holes of the cards. It was a binary system of hole and no hole, up and down, in and out, on and off, zero and one.

> **We may say most aptly that the Analytical Engine weaves Algebraical patterns, just as the Jacquard loom weaves flowers and leaves** [16]
>
> **– Ada Lovelace**

The Analytical Machine could be programmed in the same way - using punch cards - to do mathematics. Ada Lovelace became the first computer programmer by writing a program for this machine. The punch card became a core part of storing information in the modern age and in the emergence and development of IBM.17 Despite Ada's contributions and involvement with the machine, her predefined path of womanhood led elsewhere.

Weaving - along with other forms of textile making - has historically been associated with women. The Fates, Penelope, Athena and Arachne spin the loom in Greek Mythology. Freud even granted women the credit for inventing, weaving and plaiting at the same time as claiming, "women have made few contributions to the inventions and discoveries of the history of civilization.".[18] He attributes women's motivation to weave not as an original stroke of creative genius - which can only be thrust from a penis - but as imitating a natural aspect of the body - pubic hair. According to Freud, women are motivated to weave as part of an attempt to conceal their "deficiency" or

“the horror of nothing to be seen”.[19] After the growth of pubic hair, Freud claimed, “The step that remained to be taken lay in making the threads adhere to one another”.[20] Woman is defined in terms of man - the vagina is a “ ’sheath’ or masturbatory orifice for the penis, a hole waiting to be filled”.[21]

Following Freud’s theories, the historical development of computer innovation can be traced to women’s pubic hair. Technological advancements were spawned from an empty hole. Something came from nothing. It is a beautiful sentiment but perhaps not what he had envisaged. Gilles Deleuze and Felix Guattari call Freud “an overconscious idiot who has no understanding of multiplicities”.[22] They fill the hole with physics, “Physicists say that holes are not the absence of particles but particles traveling faster than the speed of light. Flying anuses, speeding vaginas, there is no castration”.[23]

Real Work: Let's talk about the bag

> **We've heard it, we've all heard about all the sticks and spears and swords, the things to bash and poke and hit with, the long, hard things, but we have not heard about the thing to put things in, the container for the thing contained.**
>
> **– Ursula K. Le Guin, 1989, *The Carrier Bag Theory of Fiction***

The devaluation and framing of weaving and domestic labour as a natural and necessary pre-occupation for women - rather than "real-work" [24] - went with them as they entered the computing workforce. Women were hired to fulfil repetitive tasks that were considered too menial and mundane for men. Seen in the workplace as in the home, women were "his helpmate and assistant, working in support of him, according to his plans".[25] After the Civil War in the US, women were hired as human computers - which included the group of women named the "Harvard Computers"

employed for clerical work and processing astronomical data - due to the shortage of men and were paid less.[26] During World War I, women worked under men in the UK and the US as human computers calculating ballistics.[27] In the 1940s, computing and calculating were seen as tedious “women’s work” and saw the Applied Mathematics Panel coin the term “kilogirl” - a kilogirl of energy was “equivalent to roughly a thousand hours of computing labour”.[28] The cognitive labour of designing machines or holding engineering roles was men’s work - hardware. The calculating and programming - like the repetitive algorithmic and generative processes of knitting, weaving and stitching - was women’s work - software.[29]

The six “ENIAC girls” who programmed and presented the first programmable, electronic, general-purpose digital computer, ENIAC, completed in 1945, were forewarned that they would not be promoted as professionals beyond being human computers. These jobs were for men. They were not mentioned in the historical accounts of the public demonstrations of the computer in which they took part, nor

were they invited to the celebrations.[30]

In the early 1960s, magnetic core memory was a mechanism created for information storage, which allowed for portable computers. They were comprised of wires running through or around magnetic rings to create binary - zeros or ones. In 1965, computer scientist Margaret Hamilton was responsible for the NASA Apollo mission computer software which, utilised the core rope memory.[31] Expert seamstresses called “Little Old Ladies” by the predominantly male engineers, or “rope mothers”, were hired to hard-wire the code by threading the wire of core memory modules. The modules were dubbed “LOL memory”.[32] Software or “soft work” and programming was dominated by women from the 19th to 20th century. However, by the end of the 1960s - when women were still mostly excluded from leadership roles and paid less than their male counterparts - this work became male-dominated. It was elevated to modern software as we know it today.

Everywhere it is Machines

The gendered forms of craftwork and domestic labour followed women into the culture of digital production. The history of women in computing saw them mainly as undervalued machines and the project of capitalism defined them as reproductive, domestic machines - “single purpose” and “predetermined” systems.[33] French philosopher Gilles Deleuze claimed that types of machines can be matched to societies “because they express those social forms capable of generating them and using them”.[34] Observing women’s bodies as machines allows us to reveal the traces of the construction of the female identity. The gender disparity in the computing labour force and the subjugation of women instilled by a patriarchal and capitalist order of male dominance was the social form that generated women as marginalised and exploited machines.

Deleuze and Guattari challenged the totalising rigid identities and binary logic models of Western culture and philosophy by doing away with the transcendent - the pre-defined essences of things

or static forms that constitute and define the identity of things that build the world around us - for an ontology solely of immanence - a constant process of flux, flows and connections, where identity is a derivative of difference.[35] In their ontology of immanence, they reconceptualise the body and subjectivity by rejecting discrete identities. Reducing a reproductive body, for example, to this one faculty is limiting them to being a static rooted tree as opposed to a node in the interrelated network that is the rhizome. Rejecting the essentialist, rigid identities under an ontology of immanence allows for the re-conception of bodies beyond the gender binary, allowing for the opportunity of women and others to "devise their own knowledges and accounts of themselves in the world".[36]

For Deleuze and Guattari, there is no pure individual. The body is not subordinated to consciousness and organic locus.[37] Bodies are defined by what they can do and their assemblages. They reconfigure the body as a machine of assemblages, which allows for the viewing of an individual to be considered as something beyond a discrete package with

emerging subjectivity, disrupting the subject/object binaries:

> **It is at work everywhere, functioning smoothly at times, at other times in fits and starts. It breathes, it heats, it eats. It shits and fucks. What a mistake to have ever said the id.**
> **Everywhere it is machines—real ones, not figurative ones: machines driving other machines, machines being driven by other machines, with all the necessary couplings and connections. An organ-machine is plugged into an energy-source-machine: the one produces a flow that the other interrupts. The breast is a machines that produces milk, and the mouth a machine coupled to it… we are all handymen: each with his little machines…**[38]

The body is a machine made of machines and each machine is a connection of flows to other machines. The body is a site of flux, of forces constantly acting and being acted

upon. Connecting back to Plant, as there is no pre-determined, ideal path, and as the body is composed of a dizzying number of structures (latent machines), women's gendered work, the work of weaving, of listening to the structures and feeling the potential forms in subjects and objects, leads them to have a better grasp of making new connections dependent on an entangled form, rather than imposing connections from the top down. While male-gendered work engenders seeing objects as either ready-to-hand (functional) or present-at-hand (dis-functional), female-gendered work encourages listening and balancing of the multiple functions present within any object (i.e. something is never purely dis-functional).

Under this conceptual framework of machines, social structures and ideologies are machines that allow for a complex interrogation of the ways oppression can take place through the body. Patriarchal and capitalist structures flow into our body machines and perpetuate norms and binaries that have sustained the marginalisation of women in the context of gendered labour. Social structures of control

move through our bodies to shape our desire, gender and sexuality to shape our society into predictable and controllable mechanisms.

Federici's research presents how the fabric of society was woven together while Deleuze and Guattari unpick the fabric to offer new and changing patterns. Both critique the familial, conjugal and Oedipal organisation of sexuality and desire under capitalism. Federici's work is concerned with the social formations of family and gender under capitalism that have repressed and oppressed women, queerness and alternatives to heteronormativity. Deleuze challenges transcendent frameworks that have continued to define norms and perpetuate them as the only potentialities for assemblages and eradicate those that disrupt—for example, the naturalisation of essential gender difference and heteronormativity. Heteronormativity was in the interest of capitalism from an economic position, so that desire was encouraged and enforced and all else quashed. Establishing heteronormativity as the enforced norm stifles and discourages other desires and other production of what will not support capitalism.

Desire Production

For Deleuze, desire is an active and productive driving force behind machines - revolutionary even. Rather than machines representing the society that produces them, they can better be understood as producing societies.

> **There are no desiring-machines that exist outside the social machines that they form on a large scale; and no social machines without the desiring machines that inhabit them on a small scale.**[39]

The concept of “desire production” is an intertwining of the driving force of desire from Freud and the driving force of production from Marx. Deleuze shifts desire from the unconscious realm to the eco-social realm of production.[40]

Traditionally, desire has been thought to come from a lack and that lack creates the desire production in an individual. Deleuze and Guattari challenge this by rethinking the concept of desire and production as default

and fundamental properties of machines. Desire is not responding to lack or located deep inside the psyche of an individual but instead is social and inherent to life. Desire produces and creates reality - a vehicle or conduit for changing things from virtual to actual.

> **If desire produces, its product is real. If desire is productive, it can be productive only in the real world and can produce only reality.**[41]

This challenges the concept of desire being dictated by external transcendent forces like Freud's Oedipus. Desire has been suppressed over the years by the work of Freud and any form of psychoanalysis that relies on transcendent, external concepts. The consequences of a society basing desire on Oedipal ideas and lack are that desire is turned inward towards your immediate family. An individual's desires are a misinterpretation of a deeply rooted psycho-sexual framework obfuscated within the unconscious mind. The majority of desire is focused inward rather than toward the social and political realms, which

might be concentrated as a force for driving change. However, that small portion of desire is subjected to capitalism's forces and structures of control.

Federici's research demonstrates how capitalism necessitated a particular type of worker, which affected the whole structure of human relationships, desires, identities and the private and public spheres:

> **Capitalist production relies on the production of a particular type of worker, and therefore a particular type of family, sexuality, procreation, and thus to redefine the private sphere as a sphere of relations of production and a terrain of anticapitalist struggle...The personal became political and capital and the state were found to have subsumed our lives and reproduction down to the bedroom.**[42]

The heteronormative relationship and family that could continue to produce and reproduce the workforce is centred. This capitalist and patriarchal society rests upon the idea that

“natural” attraction and desire happen between a cis-man and cis-woman. The patriarchal capitalist society is constructed to have an Oedipal, heteronormative family facing desire. Productive desire is then occupied and not used as a driving revolutionary force - it is repressed. Desire is shaped by how we can express it in society, and we are constructed based on desire.

In Orientations Toward a Queer Phenomenology, Sara Ahmed describes the heterosexual couple as a “social gift” that one receives and is pressured to accept. She describes heteronormativity as a “straightening device” to orient the sexuality of society along straight lines, which echoes the Deleuzian desire production coming from a patriarchal capitalist machine.[43]

The heteronormative worlding is produced by the capitalist desiring machine – what Donna Haraway calls the “god-trick”. In her essay, Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective, Haraway challenges how Western culture presents knowledge. She described this as a presentation of disembodied, transcendent,

universal truths and objective facts. This “view from above, from nowhere” she dubs the “god-trick”.[44] The trick is that behind the conquering, neutral gaze resides the “unmarked” position of the male, white, heterosexual human. The consequence of this is the rendering of all other positions invalid and held as subjective.[45] A bias lens through which reality is described. A lens so vast that it can be difficult to recognise and determine its edge - it falls to the background.

The “god trick” creates the space for the straight body and heterosexual couples. Within this space, the queer body becomes a “failed orientation”, “slanted”, “oblique” as it orientates against the straight lines, inhabiting the space as a social deviant.[46] The desire production of heteronormativity through body-machines produces the straightness and obliqueness. Haraway’s situated knowledges and Deleuze and Guittari’s ontology of immanence can support the slanted and non-linear knowledge of queerness by asserting the contingency of knowledge-making – dismantling the norm in heteronormativity.

Subversive Stitches

In Herman Melville's Moby Dick, we can observe a subversive use of craft to depict queer desire, which also disrupts the construction of woman weaver. In Moby Dick, a same-sex marriage occurs - Ishmael, the narrator, and Queequeg, the tattooed Pacific islander, get married in bed, "He pressed his forehead against mine, clasped me round the waist, and said that henceforth we were married.".[47] Later, in Chapter 47: the Mat-Maker the two men sit in reverie and weave a sword-mat together as well as a homoerotic tension:

> **I was the attendant or page of Queequeg, while busy at the mat. As I kept passing and repassing the filling or woof of marline between the long yarns of the warp, using my own hand for the shuttle, and as Queequeg, standing sideways, ever and anon slid his heavy oaken sword between the threads, and idly looking off upon the water, carelessly and unthinkingly drove home every yarn; I say so strange a dreaminess did there then reign all**

over the ship and all over the sea, only broken by the intermitting dull sound of the sword, that it seemed as if this were the Loom of Time, and I myself were a shuttle mechanically weaving and weaving away at the Fates.[48]

The *UK AIDS Memorial Quilt* [49] is a further disruption or example of queering a domestic craft and reclaiming of tools that marginalise - a marginalising craft to memorialise marginalised people. The quilt materialises those lost in the 80's and 90's of the HIV AIDS epidemic. It is constructed of 48 twelve-foot by twelve-foot panels, each comprising up to 8 smaller panels (Figure. 12) and represents approximately 384 people from across the UK.

Furthermore, there is a long-standing history of quilting among soldiers and sailors as they needed to be able to sew in order to mend their sails.[50] Quilting was a way of passing the time while developing their sewing technique and became a form of occupational therapy for convalescing soldiers in World War I.[51]

In 2016, the exhibition Making the Australian Quilt: 1800–1950 at The Ian Potter Centre: NGV Australia was considered the first major exhibition of its kind to bring together works that constitute Australia's quilt heritage. This exhibition of almost 100 quilts, including waggas (modest bed coverings made from found fabrics), a quilt made by 29 women convicts sailing to Australia (Figure. 15), and two by men, a prisoner of war and a sailor (Figure. 13,14). Throughout this exhibition, the works were not once referred to as craft but as art and art form. Are quilts and textiles observed and utilised within a home or domestic realm considered craft - just as women's domestic labour in the home is not considered real work - but art when installed within the white cube?

In *The Subversive Stitch: Embroidery and the Making of the Feminine,* Parker interrogates the binary of gender within the binary of art and craft. She writes:

> **The art/craft hierarchy suggests that art made with thread and art made with paint are intrinsically unequal: that the**

former is artistically less significant. But the real differences between the two are in terms of where they are made and who makes them.[52]

Thread is associated with women, domesticity, free labour, exploitation, coercion and subjugation. Paint is historically associated with the male artist, expressing vision, produced in academies and studios. It is doubtful, due to the historical and contextual associations, that thread will ever be elevated to the paint.

Nineteen-seventies feminist artists embroidered in a "fine-art" context to connect with a "heritage in women's hands" for a more appropriate way of challenging masculine processes and materials and for making feminist statements.[53] Parker asserts the tensions between the subversion and compliance of embroidery as a political form. As a form of protest, it can challenge the subordination and oppression of women while not aiming to achieve masculinity.[54]

Limited to practising art with needle and thread, women have nevertheless

sewn a subversive stitch, managing to make meanings of their own in the very medium intended to foster polite self-effacement.[55]

It is complex in that it still occupies a space of expectation - of what is enforced on women - but this space was available in contrast to the exclusion from the male-dominated space of the artist studio - separate and outside of the domestic realm.

The Women's Liberation Movement coined the expression, "the personal is political", and during the twentieth-century, embroidery took to signal the art form representing the personal life.[56] The thread stitched together the politics of personal life and personal relationships. Decades later, Tracey Emin, in Everyone I have Ever Slept With 1963-1995 and When I Think About Sex, for example, utilised the medium of embroidery to publicly confide the personal - drawing on the tradition laid down by seventies feminists - but to express it as universal rather than political.[57] In May 2022, Hayward Gallery in London presented the exhibition Louise Bourgeois: The

Woven Child - a retrospective from the last two decades of her life, focusing exclusively on her work utilising textiles - including fabrics and clothes from different stages of her life.[58] These works - consistent with her early oeuvre of women's issues - revisit the personal themes of identity and sexuality, trauma and memory, guilt and reparation.

> **Bourgeois's work brings out the deeper meanings of textiles' evocation of women. In her work fabric is associated directly with female sexuality, the unconscious and the body.[59]**

Compared to her earlier works, the contrast in material is a striking choice and engenders many questions asserting the gendered hierarchy of materials. Emerging from a family working in textiles, why did she wait until after she was an established artist to switch away from her previous practice of using harder, more masculine associated materials of bronze, wood and metal to softer, feminine materials? Are these the signs of a struggle against an artistic tradition and being accepted as a legitimate

artist? Did the nineteen-seventies movement create space and even permission for her to be considerably feminist in this space? If she had made these works in the earlier years of her artistic career, would she have reached the status of legend she reaps today?

This research maps the context of my work using textiles - grounding it in a history of women's work, joining the tradition of reclaiming the tools that have marginalised us. Patriarchal capitalism has been the binding thread weaving the story of the subjugation of women at home, at work, in art, in relationships and in their bodies. Our bodies are sites of absorption, feeling the flows of oppression, but are also conduits for change. Deleuze and Guattari's schizoanalysis offers bristling viscerality within an ontology of immanence, where binaries can be challenged, and identities flow fluidly and flux forward in progress.

Endnotes

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