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Extracting Motherhood: Breast Pumps, Neoliberal Time, and the Mechanization of Maternal Labour

This article examines how breast pumps mediate maternal experience in the early postpartum period, functioning not merely as tools of nourishment but as sociotechnical artifacts that shape subjectivity, restructure time, and redistribute labour. Drawing from feminist technoscience literature, health and medicine rhetoric, and matricentric feminist theory, the study situates pumping within neoliberal regimes of productivity, surveillance, and efficiency while foregrounding the economic and gendered inequalities that structure access to its benefits. Using interpretative phenomenological analysis (IPA), the study analyzes in-depth interviews with four mothers in the United States who have used breast pumps across multiple birth experiences. Their narratives reveal the pump's dual role: enabling rest, milk donation, and shared caregiving while also imposing metric temporality, amplifying emotional fatigue, and extending maternal responsibility across new terrains. By integrating participant accounts with critical theory, the analysis shows that the pump often operates less as a tool of liberation than as a coping mechanism in the absence of structural supports. The article argues for a feminist ethics of maternal care that resists the privatization and mechanization of caregiving, and advocates for such policies as federally mandated paid leave, universal lactation accommodations, community-controlled milk-sharing systems, and public investment in caregiving infrastructure. In tracing how maternal labour is technologized, made mobile, and rendered measurable, this study contributes to feminist debates on care, embodiment, and the political economy of reproduction, reframing the pump as a site of adaptation and contestation.

Introduction: Breast Pumps, Maternal Promise, and the Logics of Technological Care

In the early hours of postpartum life, the breast pump often appears not just as a machine but as a promise—that milk will come, nourishment can be provided, and mothering can be performed even in the absence of latching or traditional support (Rasmussen and Geraghty 1356). For many mothers, especially first-time mothers, the use of a breast pump begins before they even leave the hospital, a practice increasingly common and often driven by concerns about milk supply or early latching difficulties (Loewenberg Weisband et al. 28). Especially in contexts where traditional systems of maternal support have been replaced by individualized, technologized care, the breast pump becomes one of the first tools through which maternal work is mechanized, tracked, and quantified, particularly when the presumed intuitiveness of breastfeeding is disrupted (Johnson et al. 128; Tomori 172).

This transformation, from relational breastfeeding to its technomedical and quantified rendering via the pump, is not benign. As Jessica Martucci notes, breast pumping is not merely an extension of breastfeeding but a distinctly technological act that can fragment the embodied and relational experience of feeding (791–92). The pump does not simply facilitate milk expression; it embeds maternal labour into systems of measurement and control that align closely with neoliberal logics of efficiency, output, and self-regulation (Geraghty et al. 135; Rasmussen and Geraghty 1356). This thinking echoes work by Valerie Fildes and Bernice Hausman, both of whom argue that breastfeeding, when technologized, is increasingly managed according to biopolitical and medicalized imperatives rather than maternal experience (Fildes 188; Hausman 146). By translating milk into a quantifiable product, tracked in ounces, stored in labelled bags, and scheduled for extraction, maternal care is rendered legible through metrics and mechanisms. The pump, in this sense, functions both as a prosthetic and a disciplinary device—a tool that extends care while reconfiguring it through capitalist and biomedical frameworks.

This article offers a feminist rereading of the breast pump as more than a lactation aid. Building on previous research, I argue that the breast pump serves as a sociotechnical mediator of maternal identity, both as a product and a producer of maternal subjectivity. In this sense, the breast pump becomes a site of maternal mediation: a point of contact where bodies, expectations, technologies, and ideologies intersect, shaping how motherhood is performed, measured, and understood. As a device that transforms the embodied act of breastfeeding into a process of extraction, storage, and optimization, the pump is liberatory and disciplinary: a paradoxical figure in the constellation of maternal care technologies (Faircloth 133; Tomori 175).

I situate the breast pump within broader frameworks of matricentric feminism, sociotechnical systems, and neoliberal governance. In doing so, I explore how maternal care is increasingly refracted through ideologies of self-regulation, productivity, and efficiency, where even the most intimate acts of nourishment are made legible through data, schedules, and mechanized output (Lupton 95; Orgad 29). Yet I also attend to the subtle acts of resistance that emerge: mothers who unplug, milk share, or reorient the machine's meaning towards collective and relational care (Baraitser 56; Subramani et al. 58).

By interrogating the pump's cultural, political, and material functions, this article contributes to feminist scholarship on care work, reproductive technologies, and maternal subjectivity. It invites a reimagining of maternal labour not as an individualized performance of adequacy but as a site of negotiation—where machines, bodies, and ideologies converge in tension and possibility, constraint and care, extraction and autonomy.

Neoliberal Motherhood and the Reconfiguration of Maternal Labour

To understand the significance of the breast pump as a sociotechnical mediator, we must first examine how maternal labour is structured, valued, and governed within neoliberal societies. Maternal labour, which is emotional, physical, and cognitive carework, is often rendered invisible or undervalued in public discourse. It is sustained through idealized notions of motherhood and hidden forms of domestic labour that are rarely acknowledged or compensated (Ciciolla and Luthar 470; Faircloth 104; Subramani et al. 58). Yet this labour remains essential to social reproduction, sustaining individual well-being and the economic systems that rely on it (Dowling 240; O'Reilly, *Matricentric Feminism* 13).

Under neoliberalism, the ideal citizen is imagined as self-reliant, efficient, and endlessly optimizing. These values are mapped onto motherhood, producing what Sharon Hays calls the ideology of "intensive mothering," a model that demands constant emotional, physical, and economic investment in children, which the mother manages with little to no structural support (Hays 4). Numerous scholars, including Rosalind Gill and Shani Orgad, have noted how neoliberalism frames mothers as entrepreneurs of the self: responsible for optimizing their families while managing their own productivity, resilience, and emotional regulation (Gill and Orgad 16; Rottenberg 421). Mothers are positioned as both managers of family life and objects of self-surveillance. They are expected to plan with precision, monitor milestones, and perform caregiving not just as a moral obligation but as a mode of identity, one that is unpaid yet highly professionalized.

This neoliberal imaginary reframes carework through the language of

choice, entrepreneurship, and personal responsibility. As many feminist scholars have observed, neoliberalism presents motherhood as a personal project to be optimized rather than a social role supported by collective structures (Baraitser 69; Fraser, "After" 608; Orgad 45). In this view, the maternal body is no longer simply nurturing; it is regulatory, tasked with managing its biological outputs through logics of productivity, predictability, and risk management (Lupton 123).

This is where matricentric feminism becomes a critical analytic tool. Unlike broader feminist frameworks that sometimes bracket motherhood as a private or natural domain, matricentric feminism centres the material, emotional, and political realities of mothers. It asks us to take seriously the unique demands of mothering in a society that expects women to give endlessly while receiving little in return. As Andrea O'Reilly insists, motherwork must be understood not only as care but as cultural and economic labour shaped by policy, public discourse, and ideology (O'Reilly 15). In the neoliberal context, this labour is increasingly privatized, outsourced, or technologically mediated, even as mothers are held accountable for its outcomes (Pugh 39).

Technologies like the breast pump become essential tools within this system. They allow mothers to extract and deliver care while participating in labour markets, educational programs, or attending to other children or responsibilities. On the surface, the pump offers flexibility and agency. But as Bernice Hausman and others point out, this flexibility often masks deeper structural burdens, such as the pressure to track ounces, sanitize equipment, and align the body's rhythms with institutional schedules (Hausman 153; Johnson et al. 127; Tomori 173). The pump becomes a conduit for aligning motherhood with market values, emphasizing standardization, efficiency, and measurable output at the expense of embodied and relational dimensions of care.

In this sense, maternal labour under neoliberalism is not simply about doing more with less. It is about aligning motherhood with the values of late capitalism: efficiency, surveillance, self-discipline, and optimization. The breast pump facilitates this alignment by translating care into quantifiable, mobile, and storable units—bottles of milk that can be logged, labelled, and integrated into daily schedules (Blum 87; Fildes 190). This transformation risks eroding the affective and embodied meaning of breastfeeding, reducing it to mechanical productivity.

As Elizabeth Podnieks and Amber Kinser remind us, maternal labour is shaped not only by choice but also by social forces that demand adaptability while denying support (Kinser 23; Podnieks xiii). The neoliberal mother is told she can "have it all" but only if she can manage it all, often through relentless self-discipline and the aid of market-ready tools. In this environment, technologies like the breast pump do not simply liberate; they impose new regimes of care that demand constant calibration between intimacy and

output, presence and productivity.

The disciplinary role of the breast pump becomes especially apparent in workplace contexts structured around masculine norms of uninterrupted labour. Even when formal policies provide lactation breaks or designated spaces, studies show that many mothers face covert pressures to limit use, conceal needs, or maintain productivity at the cost of personal wellbeing (Bai and Wunderlich; Tsai). Natasha K. Sriraman found that mothers who were emotionally and medically committed to breastfeeding often weaned early due to institutional inhospitality; they expressed milk in janitorial closets, storage rooms, or while multitasking, which fragmented the intimacy of feeding. This reality aligns with Martucci's argument that pumping can alienate the maternal by severing embodied rhythms from relational care. Yet these environments also give rise to subtle maternal resistances: mothers who reclaim pumping spaces, advocate for policy reform, or cultivate peer support. These acts underscore the breast pump's dual role—a disciplinary mechanism enforcing capitalist rhythms and a contested site where maternal agency and solidarity can emerge.

Beyond the physical architecture of institutional labour, maternal care is increasingly governed by digital infrastructures. Recent technological innovations in breast pumping- including hands-free pumps, mobile tracking apps, and Bluetooth-enabled monitoring systems—further illustrate how maternal care is increasingly governed by digital surveillance and optimization logics. Sawalha and Karnowski found that many new parents used digital tools to track milk output, feeding times, and infant intake, believing these would reduce anxiety. However, mothers frequently reported that such tools heightened their sense of failure or inadequacy when output declined or fell short of app-based benchmarks. Junqing Wang et al. explore how baby wearable technologies, though physically attached to the infant, profoundly reshape maternal caregiving by introducing logics of self-surveillance, optimization, and ambient monitoring. In this framework, the quantified mother figure emerges—a maternal figure whose care is mediated through data points, algorithmic feedback, and performance metrics. Therefore, this technological framing transforms the pump from a support device into an extension of capitalist self-monitoring, where even lactation must be logged, graphed, and improved. In this system, the pump becomes a prosthetic not only for the breast but for neoliberal expectations of constant self-regulation and bodily management.

As this section has shown, the breast pump cannot be separated from the broader ideological and material contexts that define maternal labour today. Recent empirical studies on lactation at work and digital pumping technologies underscore how maternal care is increasingly governed by surveillance, institutional time, and optimization logics. By integrating these accounts with

feminist theory, this article situates pumping within the expanding field of maternal technology studies while extending it through a phenomenological and relational lens. Rather than treating the pump as a discrete object or neutral aid, I frame it as a site through which maternal labour is fragmented, made visible, and subjected to new regimes of management.

Yet within these constraints, mothers negotiate meaning, resist logics of efficiency, and reclaim care on their terms. These dynamics underscore the need for an interpretive framework that can attend to both the structural forces shaping maternal labour and the lived, embodied experiences of those navigating it. This approach makes visible how maternal subjectivity is not only shaped by but also pushes back against the technomedical and capitalist frameworks through which it is often read. In doing so, the analysis contributes to feminist conversations about the politics of care by foregrounding maternal experience as a target and source of resistance in technocultural landscapes. The next section outlines the theoretical and methodological commitments guiding this inquiry into how the breast pump mediates maternal subjectivity.

Situating the Inquiry: Feminist Theory, Technoscience, and Interpretive Method

This study is situated at the intersection of feminist technoscience studies, health and medicine rhetoric and maternal theory. Each field contributes essential interpretive tools. Feminist science and technology studies foreground the non-neutrality of technology (Wajcman 6); rhetorical health studies interrogate how medical discourses shape embodied subjectivities (Jack 219), and maternal theory, particularly matricentric feminism, insists on centring the complex, often marginalized voices of mothers (O'Reilly 6). These frameworks expose how maternal experiences with breast pumps are not merely personal but are shaped by broader sociopolitical forces, including gendered expectations, biomedical norms, and technological mediation (Lupton 102; Oudshoorn 33).

Building on these foundations, this inquiry adopts a critical feminist interpretative methodology to examine the sociotechnical dynamics of the breast pump in shaping maternal labour and identity. The premise that breast pumps can simultaneously discipline and empower necessitates a methodological approach attuned to lived experience, situated meaning-making, and structural critique. Interpretative phenomenological analysis (IPA) offers a useful lens in this context. Grounded in phenomenological and hermeneutic traditions, IPA enables close, iterative engagement with personal narratives while attending to the sociocultural structures through which those narratives are formed and understood (Smith and Nizza 22).

The empirical material grounding the analysis in the subsequent sections

was generated through a series of semistructured, in-depth interviews with four mothers living in the United States (US) who had used breast pumps within the past two years. Each participant was a parent of multiple children and had used breast pumps across multiple birth experiences. Data collection occurred in two phases. The first interviews lasted approximately sixty minutes, followed by second interviews ranging from forty to sixty minutes. Guided by IPA's methodological tenets, each participant's dataset was initially treated as a single case to allow for microlevel analysis focussing on the idiosyncratic meanings embedded in their narratives. Macrolevel analysis followed, where patterns and points of convergence were identified across cases to surface broader thematic commonalities. The analytic process involved line-by-line coding, memoing, and conceptual mapping to trace the interplay between personal experience and discursive structures (Eatough and Smith 182; Smith and Nizza 55).

Poststructuralist feminist theory further strengthens this methodological stance by conceptualizing identity as fluid, performative, and discursively produced (Butler 25; Jeremiah 21). From this perspective, mothering is not a static role but an embodied and contingent process that is continually shaped by sociotechnical and institutional forces. Technologies like the breast pump do not simply support or interrupt this performance; they actively participate in its construction. As the preceding section illustrates, the pump reorganizes maternal time, restructures care routines, and generates new anxieties and expectations that are deeply intertwined with neoliberal maternal ideologies (Gill and Orgad 290; Rottenberg 425).

Taken together, these theoretical and methodological commitments prepare the ground for the analysis that follows. The breast pump plays an active role in mediating maternal performances and identities, structuring time and behaviour in ways that reflect broader biopolitical logics. Understanding this dynamic requires not only a feminist critique of medicalization but also sustained attention to how mothers live with and through the machines that mediate their care practices.

Data Collection and Analysis

Ethical approval for this study was granted by the Institutional Review Board at Michigan Technological University in 2021. I recruited four participants using purposive and opportunistic sampling to ensure experiential richness and demographic variation. Inclusion criteria required that participants had used a breast pump daily for at least four to six weeks postpartum. Research shows that most mothers in the US return to work around six weeks after birth (Falletta et al.), which marks a pivotal point where breast pumping often transitions from being a supplemental practice to a central, sometimes primary,

means of feeding. Furthermore, studies in maternal health and lactation underscore that this early postpartum window is marked by increased physiological pressure to maintain supply, emotional adjustment, and logistical adaptations to return-to-work demands (Geraghty et al.; Loewenberg Weisband et al.). Hence, by focussing on this period, I sought to capture how pumping operates not simply as a bodily technique but as a mechanism of labour negotiation in the context of institutional abandonment.

The final sample included four full-time working mothers residing in the US, each parenting two or more children. One was Puerto Rican, one Black American, one white, and one African doctoral student who had lived in the US for seven years. I met the first participant serendipitously at a shopping mall while she was purchasing breast pump parts; others were recruited through social media and professional referrals. I conducted all interviews virtually using Zoom, a modality that not only allowed geographic flexibility but respected participants' preferences and aligned with literature validating the efficacy of virtual qualitative research (Archibald et al.; Deakin and Wakefield).

Each participant engaged in two semi-structured interviews. This dualinterview approach reflects my commitment to iterative meaning-making and is consistent with best practices in IPA, which emphasize layered exploration of lived experience over time (Pietkiewicz and Smith; Smith et al.). The first interviews (sixty to seventy-five minutes) allowed participants to construct foundational narratives about breast pumping, subjectivity, and care. I then transcribed and reviewed each interview before scheduling a second session (forty to sixty minutes), which allowed me to prepare tailored follow-up questions. This process not only honoured the depth of individual experience but also enabled me to return to themes that emerged organically in participants' own words—a practice recommended by Michael Larkin and colleagues to deepen interpretive engagement. This decision emerged from my feminist commitment to reciprocity and co-construction. By providing these reflections, I invited participants into the analytic process, offering space to clarify, expand, or resist my interpretations. This dialogic approach, grounded in the work of Lucy Yardley and Svend Brinkmann and Steinar Kvale, transformed the interview into more than a data-gathering technique. It became a relational exchange, where the mothers involved in this study were treated not as subjects but as epistemic partners whose insights refined and validated the evolving analysis.

For the analysis itself, I followed a multiphase IPA process. I began with close, immersive readings of each transcript, making analytic notes across three dimensions: descriptive (what was said), linguistic (how it was said, focussing on tone and metaphor), and conceptual (interpretive significance). I then organized emergent codes into broader thematic clusters and refined

them iteratively. I relied heavily on memo-writing, visual concept mapping, and a reflective journal to track my assumptions, hesitations, and interpretive shifts, a process that Jonathan A. Smith and Nicola D. Nizza emphasize as central to IPA's rigour. So, rather than bracketing my positionality, I treated reflexivity as an asset: My dual standpoint as researcher and mother shaped the ways I listened, questioned, and interpreted. In this sense, the analysis was not just procedural but relational and situated; it was an encounter between narrative, theory, and embodied insight.

Beyond Saturation: Idiographic Depth and Transferability in IPA

While the study involved a small sample, this is consistent with IPA's idiographic emphasis on analytic depth over generalizability. The aim was not to achieve thematic saturation in the conventional sense but to develop richly textured, contextually embedded accounts of participants' lived experiences. Each case was treated as a discrete interpretive unit before engaging in crosscase analysis, a foundational tenet of IPA enabling deep phenomenological insight (Larkin and Thompson; Smith and Osborn). Across these cases, strong patterns emerged concerning temporal regulation, maternal self-surveillance, and care redistribution. These recurrent themes were not treated as statistical trends but as interpretive resonances, shaped by individual histories and sociotechnical contexts.

Although the findings are not generalizable in a quantitative sense, they offer transferable insights into how maternal identity and labour are negotiated through breast pump use in structurally constrained settings. As IPA scholars argue, the value of such work lies in its capacity to illuminate how particular phenomena are experienced, not how frequently they occur (Smith et al.). By engaging deeply with a few carefully selected voices, this study contributes to broader feminist discussions of maternal technology, care ethics, and reproductive labour.

At the same time, it is important to situate these insights within the specific cultural and policy landscape of the US. The US presents a uniquely undersupported environment for postpartum care, with no federal paid leave, minimal workplace lactation protections, and deep structural inequities in maternal health. Furthermore, the Affordable Care Act (ACA)'s mandate to distribute breast pumps through private insurance has further increased pump usage, reinforcing expectations that mothers will manage infant feeding independently of structural support. These intersecting conditions may shape the sociotechnical mediation of pumping differently than in contexts with stronger welfare systems or alternative lactation infrastructures, although such comparisons would require further empirical inquiry. As such, the findings offer culturally embedded insights rather than universally generalizable ones.

Mechanizing Maternal Care: Surveillance, Time, and the Technological Reconfiguration of the Body

This section presents one strand of the interpretative findings, focusing specifically on how breast pumps structure maternal care through logics of surveillance, standardization, and temporal control. Drawing on participant narratives, this section critically illuminates how pumping technology enacts both constraint and adaptation, aligning maternal bodies with institutional expectations while enabling new forms of care and endurance.

One of the most persistent themes in participants' accounts was the regulation of time. Mothers described their daily routines as governed by pumping intervals, clock-based reminders, and supply-tracking systems that demanded strict adherence. As one participant put it, "You have to pump every two or three hours, no matter what. If you miss it, you mess with your supply" (participant one). Another shared, "It was kind of like a three-to-four hours thing.... I was doing it early in the morning, afternoon, in between feedings... whenever I had time to come home" (participant two). These accounts reflect how maternal care becomes embedded within an industrial temporality where nourishment is governed by efficiency and risk minimization rather than attunement to the infant or to the maternal body.

These individualized time regimes, while presented as neutral routines, reflect deeper institutional logics that prioritize regulation over relationality. This rationalization of time echoes Lisa Baraitser's concept of "maternal time" (67) as fundamentally interruptible and nonlinear, yet here it is overwritten by institutional demands and technological logics. Pumping schedules displace embodied cues and replace them with mechanized rhythms that prioritize production over presence. As Cecília Tomori argues, such shifts represent a broader biomedical governance of the maternal body, where milk becomes a substance to be managed, extracted, and optimized (174).

For mothers working in low-wage, inflexible jobs, however, this temporal discipline can be nearly impossible to sustain. Women of colour and low-income mothers are disproportionately concentrated in labour sectors characterized by low job control, rigid schedules, and minimal workplace accommodations—conditions that make regular pumping breaks a logistical challenge and significantly curtail breastfeeding duration. Recent research identifies low job autonomy as a key predictor of early breastfeeding cessation and a partial mediator of racial disparities in breastfeeding outcomes, underscoring how occupational structures reinforce maternal inequities (Whitley et al.). The expectation to conform to mechanized pumping schedules thus operates unevenly across race and class lines, intensifying the precarity of lactation for already marginalized mothers.

The spatial reconfiguration of care was another striking theme. Participants

described pumping in cars, offices, and public restrooms, often in hurried, improvised conditions. One participant noted, "I was pumping early in the morning before I go to work ... and then again at work," describing a routine that demanded performing intimate care in spaces not originally designed for it (participant two). Another added, "Wherever I could plug it in and lock a door," referring to break rooms and single-stall bathrooms (participant one). These spatial negotiations reveal how breast pumping, though mobile, is frequently accommodated rather than supported, requiring mothers to make carework fit within the contours of institutions that were never meant to hold it.

The ability to locate private, sanitary pumping spaces is also unevenly distributed. For many hourly workers, disproportionately Black and Latina women, access to lactation rooms is not just inconvenient but often nonexistent. These workers are frequently relegated to unsanitary or unsafe environments, such as supply closets, cars, or public bathrooms, intensifying the emotional and physical toll of managing milk expression without proper infrastructure. As Su-Ying Tsai demonstrates, access to dedicated lactation spaces significantly predicts whether mothers will continue breastfeeding upon returning to work. In her study of labour-intensive workplaces, Tsai found that access to lactation rooms, formal break policies, and employer encouragement were all strong predictors of breastfeeding duration, with odds ratios as high as 61.6 for using breast pumping breaks.

These access disparities are not merely logistical challenges; they also illuminate the deeper sociotechnical norms that structure maternal labour. Such spatial dislocation reflects what Judy Wajcman calls the "gendered temporalities of technoculture" (14), in which technologies designed for flexibility often reinforce capitalist imperatives for constant availability. The maternal body becomes mobile yet fragmented and expected to deliver care while remaining unobtrusive in professional or public settings. This spatial compression intensifies the privatization of maternal labour, effectively making mothers solely responsible for fitting their bodies and needs into rigid institutional architectures. As recent policy expansions, such as the PUMP Act, attempt to close access gaps by mandating break time and lactation space across employment sectors, persistent inequities in enforcement and workplace culture remain obstacles to universal accommodation.

The datafication and surveillance of maternal performance emerged as another mode through which the pump restructured maternal labour. One participant shared, "Each [bag] has a label of the dates and the time that it was pumped and stored ... so that it doesn't go bad" (participant three). What might seem like a harmless act of organization is, in fact, a form of care labour shaped by documentation and accountability. The mother becomes a technician of her own body, translating its outputs into traceable metrics. As Deborah

Lupton observes in her work on digital health, technologies often encourage self-monitoring that naturalizes discipline through routines of optimization and surveillance (114).

Moreover, while such meticulous tracking may feel empowering for some, for others, particularly those navigating racialized medical and welfare systems with long histories of scrutiny, it can reinscribe anxiety and hyperaccountability. Black mothers, in particular, are disproportionately subject to institutional oversight that frames deviations from normative standards of care as risk, amplifying the stakes of perceived maternal failures (Pendleton and Dettlaff). For the mothers in this study, the breast pump functioned not only as a practical tool but also as a system of monitoring that rendered their labour legible through logs, ounces, and timestamps.

Yet participants also described moments of agency, resilience, and adaptive care enabled by the pump. One mother explained, "Sometimes I needed a break, or one of the twins wouldn't take formula ... so I needed to pump just to make sure he was fed" (participant one). In this case, the pump offered not only control but flexibility, allowing her to respond to the demands of multiple children without forgoing nourishment or emotional care. Another mother remarked, "I don't know what I would have done without the pump. But at the same time, it felt like I was always tied to it ... like I couldn't go anywhere without thinking about when I'd have to pump next" (participant two). Her words capture the ambivalence of maternal technology—how it liberates and tethers in equal measure.

This emotional burden was a recurring theme. One participant reflected, "It started taking a toll on my mental health ... what started as a privilege began to feel like pressure" (participant four). While pumping may offer functional autonomy, it also intensifies maternal self-surveillance and heightens the expectations for continuous productivity. For some mothers, this burden is compounded by economic insecurity. Mothers without access to paid leave or with precarious employment often face the dual pressure of maintaining milk supply and income. The Affordable Care Act provides breast pump coverage, but it does not guarantee the workplace conditions necessary to use it effectively. Policy solutions must therefore address both provision and structural support. Linda Blum and Bernice Hausman have long cautioned against viewing breastfeeding technologies as unqualified progress, pointing out how they can inadvertently erase the relational and affective dimensions of care (Blum 92; Hausman 148). These narratives confirm that maternal technologies often reproduce the strains they promise to relieve.

Ultimately, these findings suggest that the breast pump is not merely a caregiving aid but a sociotechnical actor that reorganizes the terms of maternal life. It mechanizes nourishment, disciplines time, and reconfigures maternal presence into measurable, transportable outputs. In doing so, it participates in

the production of maternal subjectivity, shaping how mothers come to know their bodies, responsibilities, and worth through data, efficiency, and institutional compliance. Yet this process is far from uniform. For mothers navigating racialized surveillance, economic precarity, or spatial exclusion, the pump magnifies longstanding inequities under the guise of empowerment. It renders maternal care legible to institutions while often detaching it from the embodied, relational rhythms that define early parenting. As Donna Haraway argues, technoscientific systems mediate life not only by extending capacity but by embedding it in regimes of calculation and control, where even the most intimate acts, such as feeding a child, are interfaced through logics of optimization (150). The breast pump, then, becomes a prosthetic of care and a prosthetic of governance, tethering maternal labour to the demands of institutions while offering only partial relief from their pressures.

From Isolation to Interdependence: Breast Pumping and the Redistribution of Maternal Care

This section extends the interpretative analysis by focussing on how the breast pump enables not only individualized maternal labour but also new configurations of relational and collective care. While often discussed as a device of privatized productivity, the pump, in practice, can function as an instrument of redistribution. It enables mothers to circulate nourishment, delegate caregiving responsibilities, and blur the boundaries of maternal self-containment. In these ways, breast pumping unsettles the dominant narrative of maternal isolation and opens space for practices grounded in reciprocity, sharing, and mutual care.

One participant, identifying as an "overproducer," described donating her surplus milk to another mother whose infant was experiencing feeding challenges: "Okay, so she's my third baby. And even though I worked from home, I just made a lot more than she would eat. So I just pumped the rest and ended up donating it to another mom and babies who ... she, the mom, couldn't produce milk. So that's how I got into breast pumping" (participant two). Her account reframes milk not as personal excess but as a resource of mutual aid—a form of relational care extending beyond the nuclear family. This practice unsettles dominant ideologies of maternal containment and aligns instead with Joan Tronto's ethic of care, which emphasizes attentiveness, responsibility, and responsiveness as social values (135). As the participant later shared, "It takes a village to raise kids ... and everybody's village looks a little different. In this case, out of the extra milk supply" (participant two). Her language invokes a collectivist ethic resisting the neoliberal script of maternal self-sufficiency.

Yet it is important to note that such redistribution is not universally

accessible. The capacity to donate milk, store excess, or delegate feedings presumes a baseline of material stability, including access to refrigeration, predictable schedules, and supportive coparents. For some mothers, particularly those in low-wage or precarious employment, these conditions are out of reach. Economic insecurity often demands uninterrupted labour, leaving little time or space for the routines that make milk-sharing viable. Moreover, traditional gender expectations continue to place the burden of feeding and coordination primarily on mothers, even when redistribution is possible. In this way, milk-sharing practices, while framed as acts of mutual care, remain deeply shaped by structural asymmetries in income, labour flexibility, and domestic responsibility. Redistribution, then, reflects not only mutual aid but unequal access to the infrastructures that make such generosity possible.

Indeed, this form of redistribution is enabled by the pump's ability to sever the temporal and spatial tether between feeding and the maternal body. As Charlotte Faircloth argues, expressed milk becomes "a portable and tradable substance," circulating through social and economic networks (132). Participants described routines of labelling, freezing, and transporting milk; everyday practices through which maternal labour is encoded, extended, and exchanged. For another mother, redistribution included delegating feeding to her partner: "I was able to even rest, because my husband was able to take over, since there was enough milk in the fridge" (participant one). Yet even this act of rest is shaped by privilege; many working-class mothers, especially those navigating parenthood alone or without job flexibility, find such redistribution aspirational rather than attainable.

While wet nursing has historically served as one form of distributed maternal labour, participants' accounts suggest important differences. Wet nurses, often operating under exploitative, racialized, and classed labour arrangements, served as replacements rather than extensions of maternal care. In contrast, milk sharing among the mothers in this study was voluntary, peerbased, and ethically relational. It preserved maternal autonomy while extending maternal responsibility outwards. One participant explained the duality of donation and ongoing personal care: "Even on the nights she'd be up all night, I would still have to get up to pump. She eats on one side, and I'd have to pump the other because she never ate all that I made. So I had to" (participant two). Here, donation did not lessen her labour but reframed it, expanding the geography of maternal care while preserving the intimacy and responsibility of embodied practice.

These practices, however, were not without their emotional and physical costs. "Even when I didn't feel like getting up, I knew someone was depending on that milk" (participant two). Her words speak to how redistribution, while rooted in care, also generates new forms of obligation. Rather than relieving

pressure, the pump may simply redistribute it, translating maternal labour into forms that are more diffuse but no less demanding. For some, this labour is embraced as a meaningful extension of care; for others, it may compound already stretched capacities. Crucially, the emotional weight of these exchanges is shaped not only by personal ethics but by broader social norms valorizing maternal self-sacrifice and normalizing its invisibility, particularly among women navigating caregiving roles without institutional or relational buffers. In this way, the pump's facilitation of redistribution reveals less a liberation from labour than a reorganization of its load, rendering care more shareable, but not necessarily more supported.

Ultimately, the findings in this section complicate the conventional view of the breast pump as merely a tool of mechanized, privatized motherhood. Instead, participant accounts reveal the pump's dual capacity to reproduce and resist the individualization of maternal labour. By enabling the circulation of milk beyond the maternal body, the pump opens channels for shared responsibility, mutual aid, and relational caregiving. Yet these redistributive potentials are deeply conditioned by material circumstances, access to time, space, partners, and economic stability, and they are mediated by enduring gendered expectations around maternal self-sacrifice. In this light, the pump does not simply extend care but reconfigures its burdens and boundaries, often in uneven ways. As Nancy Fraser contends, when caregiving is relegated to the private sphere, its social and political dimensions are obscured ("Contradictions"). The practices described here resist that obscuration by making visible the infrastructures, negotiations, and inequities that shape maternal labour. The pump, then, is not only a disciplinary device but also a contested site of interdependence—one through which care circulates across households yet never fully escapes the asymmetries organizing its flow.

Towards a Feminist Ethics of Maternal Care

This study's interpretative findings complicate common assumptions about the nature of maternal care in technologically mediated, neoliberal contexts. Through the lens of the breast pump, motherhood emerges not as a fixed identity but as a practice that is continually negotiated, structured by institutions, mediated by machines, and shaped through relational, embodied labour. Technologies like the pump do not simply offer convenience; they actively reconfigure how care is conceptualized, distributed, and valued. The same device that allows mothers to rest, share responsibility, and extend care beyond their bodies also entangles them in regimes of productivity, surveillance, and discipline. This ambivalence is not simply a theoretical paradox but a policy challenge: How can institutions support caregiving without reducing it to efficiency metrics or individual responsibility?

Addressing this requires more than technological innovation; it demands workplace policies that honour care as a public good, including federally mandated paid leave, universal lactation accommodations, and flexible scheduling protections recognizing the embodied temporality of care. Understanding the contradictions at play necessitates a feminist ethics attuned to complexity, contradiction, and lived experience and one committed to transforming these structural conditions.

Across the narratives analyzed, breast pumps functioned as prosthetics of possibility and instruments of regulation. They enabled shared caregiving, provided a means of feeding across time and space, and created openings for rest and reciprocity within the family. At the same time, they imposed rigid temporal demands, fostered emotional fatigue, and introduced new expectations of consistency and self-monitoring. This duality underscores the limits of a technological fix for maternal care. As the participants' experiences reveal, technology cannot resolve the structural contradictions of contemporary motherhood; it can only help mothers endure them more efficiently. The deeper issue lies in how institutions offload the burden of reconciliation onto individual women, relying on technologies like the pump to bridge the unbridgeable: the gap between idealized caregiving and unsupportive labour conditions. Without coordinated policy responses—such as standardized enforcement of lactation protections, public investment in caregiving infrastructure, and expanded access to affordable childcare—maternal technologies risk becoming coping mechanisms rather than tools of transformation. In this light, the pump becomes emblematic not just of maternal adaptation but of systemic abdication.

Building on this critique, these findings suggest that what is needed is not more efficient maternal technology but a fundamental rethinking of the values and institutional frameworks that shape maternal labour. Too often, technologies like the pump are evaluated not by how they support mothers but by how seamlessly they allow care to conform to market logics: uninterrupted productivity, minimal disruption, and individualized problem solving. This alignment flattens maternal care into a task to be optimized rather than a relational practice embedded in interdependence, time, and embodied labour.

As Allison Pugh observes, we live in a culture that demands care be everpresent yet invisibly maintained—what she calls "the illusion of effortlessness" (97). Devices like the breast pump sustain this illusion by rendering maternal labour both hypervisible in its metrics and invisible in its emotional and physical tolls. When institutions valorize efficiency over care, they obscure the labour required to meet impossible standards of maternal presence, availability, and endurance. A feminist ethics would reject this concealment and instead foreground the asymmetries in who is expected to maintain the illusion, particularly mothers navigating caregiving without paid leave, health benefits, or caregiving networks. The question, then, is not whether maternal technology works but for whom it works, under what conditions, and at what cost. In this sense, resisting mechanized care as a default solution requires challenging the structural precarity that renders it necessary in the first place.

Building on this politicized understanding of maternal technologies, a feminist future of maternal care must hold space for ambivalence—for the mother who relies on the pump but resents its demands and for the moments of liberation enabled by technology and the exhaustion that follows. It must also foreground values such as interdependence, dignity, and collective responsibility over autonomy, efficiency, and optimization. As Nancy Fraser reminds us, care is not a personal burden to be managed but a social good to be protected and shared ("After" 609). Reimagining maternal care as a public concern rather than a private struggle requires policies that move beyond individualized fixes and instead build collective supports. These policies might include federally subsidized childcare, universal parental leave, communitycontrolled rather than market-driven national milk banking systems, and legal recognition of caregiving labour in workplace evaluations and public assistance programs. Rather than asking how mothers can better adapt to the demands of fragmented systems, these measures would reconfigure the systems themselves—redistributing responsibility, recalibrating expectations, and embedding care within the architecture of social life.

This study has demonstrated that the breast pump, often dismissed as a mundane artifact of everyday parenting, is a revealing node in the political infrastructure of maternal life. As a technology that mediates care, compresses time, and distributes labour, the pump illuminates the broader structures through which gendered caregiving is managed, privatized, and made governable. The ambivalences mothers described—between autonomy and exhaustion, redistribution and burden—are not individual contradictions but structural effects. Framed through a reproductive justice lens, these findings insist that maternal care must be understood not only in terms of personal experience but also as a terrain of economic, racial, and gendered struggle. What is needed is not simply better-designed tools but a transformation in how care is valued, organized, and supported. This approach includes expansive policy commitments: universal paid leave, robust public investment in lactation and childcare infrastructure, protections for informal caregiving labour, and equitable access to maternal health technologies untethered from employment status or income. Ultimately, the breast pump is not just a symbol of maternal endurance. It is a reminder that just care requires just systems. And building those systems is a political imperative, not just a technological one.

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