

The In/visible Wombs of the Market: The dialectics of waged and unwaged reproductive labour in the global surrogacy industry

Sigrid Vertommen, Department of Conflict and Development Studies, Ghent University¹

Camille Barbagallo, Centre for Employment Relations, Innovation and Change, University of Leeds

Abstract

Since the early 2000s transnational surrogacy has emerged as a new capitalist frontier founded on the intensification of the commodification of women's reproductive labours, bodies and biologies. This has resulted in academic and policy debates on whether to outlaw surrogacy altogether or to ban commercial surrogacy in favour of altruistic forms of surrogacy. Rather than tackling surrogacy in moralising terms of 'altruistic' gift-giving versus 'greedy' money-making, in this article we draw on feminist political economy literature on social reproduction to propose an integrative reproductive labour perspective that looks at the dialectics of waged and unwaged work involved in the process of (re)producing people. Drawing on empirical research data on commercial surrogacy in Georgia, we analyse how this dialectical relation between exploitation of waged work (surrogate) and appropriation of unwaged work (mother) operates on the workforce. We explore Maria Mies' concept of 'housewifization' to argue that processes of exploitation are deepened in the Georgian surrogacy industry, partially because surrogates refrain/are refrained from identifying as workers and as such are not afforded labour rights nor considered to produce value.

They say it's mothering, we say it's unwaged work

'The instruments of wage labour are the hands and the head but never the womb or the breasts of a woman. Thus, not only are men and women differently defined in their interaction with nature, but the human body itself is divided into truly human parts (head and hand) and natural or purely animal parts (genitalia, womb)' - *Maria Mies, Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour*.

On 5 December 2018 Lee, a Cambodian surrogate and mother to a four-year old daughter was finally released from prison in Phnom Penh where she had been held for six months (Bloomerg, 2018). In June, together with 31 other surrogates and a Chinese surrogacy broker, she was arrested under anti-trafficking legislation. Under the new laws regulating surrogacy in Cambodia, the punishment for acting as an intermediary in commercial

¹ Both authors have contributed equally to the development and realisation of this paper. Sigrid Vertommen is the corresponding author, sigrid.vertommen@ugent.be

surrogacy transactions stands at a minimum six months². Surrogates, however, can face much longer prison sentences. Lee and the other surrogates only managed to avoid a fifteen-year prison sentence after agreeing to raise the surrogacy babies, which they are not genetically related to, 'as their own'. Cambodia's Secretary of State for the Interior Ministry rejected the idea that the surrogates were not the mothers of the babies and stated in an interview "*The woman takes care of them and feeds them for more than nine months before the embryo becomes human, so how can you give the children to someone else?*" (BBC, 2018).

Lee was released "on humanitarian grounds" by Cambodia's National Committee of Anti-Human Trafficking after stamping her thumbprint onto a document that outlined she would be arrested if she ever sent the child to the commissioning father in China. In an interview after her release, Lee said that "*she loves the baby and she will take care of him as best as she can*" (Telegraph, 2018). However, as a result of the arrest, she only received USD 3,000 of the total sum of USD 10,000 that she was contracted to be paid. This makes it likely that Lee will have to return to the garment factory where she worked before becoming a surrogate to be able to survive financially, especially now that she has another child to support and care for.

This short yet nonetheless illustrative vignette demonstrates some of the harsh economic and social realities involved in the actually existing surrogacy industry, it also makes visible the discursive binaries through which surrogacy is imagined, policed and operates. The crime that Lee committed was that she transgressed the carefully constructed boundary between motherhood and work. She was only released from prison after promising to mother the child for free, returning to her socially acceptable form of waged work in a garment factory. At the same time, the story of transnational surrogacy is not confined to Cambodia and the global surrogacy market has been characterised by frequent movement, flux and has in recent years partially shifted to other countries at the surrogacy 'frontier' where altruistic surrogacy is allowed, as is the case in Greece and Canada or where commercial surrogacy is legal (or at least not illegal), such as in certain states in the U.S, the Ukraine and Georgia. The research data discussed in this paper draws on interviews conducted with surrogates, surrogacy agents and fertility doctors in Georgia and Israel.

This paper investigates the dialectical relation of the labour of commercial surrogacy and that of unwaged mothering, as well as forms of labour that fall between these two poles. It is an attempt to make sense of the recurring moral outrage, calls for rescue-interventions and criminalisation that occur when women transgress the boundaries of

² Surrogacy was criminalised in Cambodia in 2016. However, the combination of high demand from China, where more than 70,000 commissioning parents are looking for cheap fertility services abroad, and the 'cheapness' of surrogacy services in Cambodia - (in)directly produced by the country's (ongoing) histories of war, poverty and structural under/development - will most likely keep the Cambodian surrogacy industry operating (Keeton and Sineat, 2018; World Bank, 2018).

motherhood and use their (reproductive) bodies to make a living. Or, put differently, we are interested in developing a feminist political economy analysis of the stubborn problem of why women in capitalist societies are expected to perform the reproductive work of gestation and birthing *either* as unwaged mothers *or* as badly paid surrogates. We posit that the Cartesian dualisms that hold apart motherhood and surrogacy, family and market, reproduction and production, gift and commodity, nature and society constitute the material-discursive infrastructure of capitalist modes of accumulation that rely on obscuring the nearly unquantifiable amount of labour, energy and value produced by 'women, nature and colonised peoples' in order to appropriate it, as Maria Mies (1992, 2014) famously argued. Rather than marking surrogacy and 'natural' pregnancy/motherhood as binaries that operate within distinct political economies and institutional choreographies, we draw on Mies (1992), Moore (2015) and Lewis (2019) to propose an *integrative* approach that analyses the (dis)continuities between waged reproductive work in the market and unwaged reproductive work in the family as a *dialectical* relation between exploitation and appropriation. From this perspective, the labour of surrogacy is highly exploitative, badly paid and suffers from poor labour conditions, precisely because the work of pregnancy and motherhood is not recognised and valued as work at all. As Jason Moore (2015:54) aptly summarised: 'Value does not work, unless most work is not valued'.

Through an analysis of the dialectical relationship between waged and unwaged reproductive work in the emerging capitalist frontier of the global surrogacy industry, this paper provides two theoretical contributions to feminist political economy scholarship. First, we bring the labour of biological reproduction into contemporary discussions of social reproduction in capitalist societies (Folbre, 1994; Himmelweit, 1995; Bakker, 2007; Steans and Tepe, 2010; Weeks, 2011; Federici, 2012, Fraser, 2016; Arruzza, 2016; Bhattacharya, 2017; Mezzadri, 2017). Drawing on more recent feminist scholarship by Amrita Pande (2014), Sharmila Rudrappa (2015), Kalindi Vora (2015, 2019) and Sophie Lewis (2017, 2019) that analyses surrogacy from a reproductive labour perspective, we bring the processes, practices and labours of ovulation, gestation, pregnancy, parturition and mothering into dialogue with debates around value-creation under capitalism (Franklin and Lock, 2003; Sunder Rajan, 2006; Cooper, 2008; Cooper and Waldby, 2014).

These gestational labour processes are co-produced by biology-in-society, resulting from complex and messy 'intra-actions' between human (gestators, egg cell providers, midwives, doctors) and extra-human (oocytes, sperm, wombs, placentas, hormones, test tubes, reproductive medicine, technologies) natures (Barad, 2007). At the same time, they are appropriated within circuits of capital (biology-in-capital) under the pretense of merely 'being' an essentialized part of nature, bodies, biologies and womanhood (Mies, 2014; Haraway, 1991; Battistoni, 2017). In this way, capitalism thrives not by destroying natures, but by putting nature and biology to work, and doing so 'as cheaply as possible'

(Patel and Moore, 2017). Bringing together what Marie Mies (2014) frames as 'housewifization' with Jason Moore's concept of the capitalist production of 'cheap nature', in which use-values such as food, energy, raw material and labour power are produced with a below-average value composition (Moore 2015:53), we discuss in the concluding section the capitalist contradictions that emerge at the fertility frontier, between the rise of expensive in/fertility treatments on the market and the exhaustion and refusal of 'cheap fertility' in the household.

Second, we intervene in the 'malestream' political economy debates of value-creation under capitalism that (over)emphasise commodity production at the expense of social reproduction. While international political economy has traditionally treated matters of care and reproduction in and outside of the household as a 'black box' that is neatly separated from the sphere of capitalist production, this paper contributes to recent debates in feminist political economy that stress the centrality of domestic labour and social reproduction to the (re)structuring of labour processes under contemporary neoliberal capitalism (Waylen, 1997; Hoskyns and Rai, 2007; Griffin, 2007; Steans and Tepe, 2010; Mezzadri, 2017; Fraser, 2017). Answering Elias and Rai's (2015; 2019) call for a "feminist political economy of the everyday" that fundamentally rethinks core international political economy concepts such as production, the market, and labour, we argue that profiteering in the global fertility industry, and in the capitalist world-economy at large, relies as much on the appropriation of unpaid reproductive work of mothers and their reproductive biologies as it does on the exploitation of paid reproductive labour (for instance of surrogates, eggcell donors or even breast milk providers, as is discussed in the paper by Newman and Nahman in this special issue). Our analysis of the dialectical relationship between waged and unwaged reproductive work in the emerging surrogacy frontier, is indebted to and seeks to develop the collective body of scholarship of Marxist and Black feminists and world-ecologists that interrogates the importance and the value of the reproductive realm for capitalist modes of accumulation, including Mariarosa Dalla Costa and Selma James (1972), Angela Davis (1981), Maria Mies (1982, 2014), Silvia Federici (2004) and Jason Moore (2015).

The research data discussed in this paper makes use of mixed methods, including interview data, ethnographic observations and discourse analysis of policy documents on commercial and altruistic surrogacy. In tracing the dialectical relationship between waged surrogacy and unwaged pregnancy and motherhood, the paper brings together the authors' research concerning respectively the political economy of global fertility chains and surrogacy between Israel and Georgia (Vertommen) and the reconfiguration of the work of care work and motherhood under neoliberalism in Britain (Barbagallo). It draws on 38 semi-structured interviews conducted by Vertommen in 2018 in Georgia with surrogates, surrogacy agents and fertility doctors as well 52 interviews in Israel from 2010 to 2018. Grounded in feminist research methodologies that value the experiences and theorisations of women and others who have been made invisible in academic research,

we engaged with our research participants (both mothers and surrogates) from our own experiences as (other)mothers, feminist researchers and organisers.

The paper is structured into four sections. First, we introduce surrogacy as a frontier industry that operates as a boundary between commodified and uncommodified forms of life, and we provide an overview of the global surrogacy industry and its basic socio-technical dynamics in terms of legislation, profitability and racialised and gendered divisions of labour. This is followed by a critical analysis of contemporary policy debates on surrogacy in various countries, that have to date moved to criminalise commercial forms of surrogacy, in which the surrogate is paid. In many of these cases, ‘altruistic’ surrogacy remains an option, and is often presented as the only ethical way of organising surrogacy as it does not involve paying the surrogate. Instead of tackling surrogacy in moralising terms of ‘altruistic’ gift-giving versus ‘greedy’ money-making, in the third section we analyse it from an integrative reproductive labour perspective that looks at all the waged and unwaged work involved in the process of (re)producing people. In the fourth section, drawing on Vertommen’s empirical work on commercial surrogacy between Israel and Georgia, we analyse how this dialectical relation between exploitation (worker) and appropriation (mother) operates on the workfloor. By introducing Mies’ (2014) concept of ‘housewifization’, we posit that processes of exploitation are deepened in the Georgian surrogacy industry, partially because surrogates refrain/are refrained from identifying as workers and as such are not afforded labour rights nor considered to produce value. Drawing on Moore (2015) and Patel and Moore’s (2017) work on ‘cheap nature’, we suggest that the reconfiguration of fertility as a capitalist frontier raises further questions about the function of this dialectical relation between exploitation and appropriation within capitalism, and we underline the importance of practices of solidarity between different groups of paid and unpaid ‘reproductive workers’ who, without such an integrative approach, remain divided.

Fertility frontiers: The political economy of the global surrogacy industry

Since the early-2000s gestational surrogacy has transformed from a rather small-scale intimate practice into a popular and lucrative ‘frontier industry’ crystallised around the global flow of reproductive tissues, bodies, technologies, services, workers and consumers (Spar, 2005, 2006; Twine, 2011; Inhorn, 2015; Jacobson, 2016). According to recent studies, the global fertility market is estimated to reach USD 40 billion in revenue by 2026, with commercial surrogacy being one of its most lucrative services (Databridge Market Research, 2019). In several states in the United States, Canada and Israel, where surrogacy is allowed, it has developed into a flourishing ‘baby business’ involving various actors and stakeholders such as surrogacy companies, fertility clinics, genetic counselors, law firms specialised in family and migration law, shipping and logistics companies, hospitality services (hotels, restaurants, tourist industry) and, of course, a

diverse group of reproductive workers including egg cell providers and surrogate carriers but also nurses, nannies and drivers. In the United States (comprises the biggest repro-market, with California as its epicentre) the market for in/fertility services and technologies is expected to grow from approximately USD 6 billion in 2019 to USD 8 billion in 2023 (Frost and Sullivan, 2019).

Because of the vast differences between countries regarding the cultural attitudes and regulatory legal frameworks on surrogacy, labour has been outsourced to low-cost countries in the Global South where women are increasingly commodifying their reproductive biologies and capacities, working as cheap and available oocyte vendors, surrogate carriers and breast milk providers (see Newman and Nahman in this special issue) in the fertility industry to fulfil the genetic family desires of intended parents. The differences in the national costs of surrogacy are stark. For example, in the United States and Canada gestational surrogacy can easily cost between USD 90,000 and 150,000 and in Israel around USD 70,000 (Teman, 2010, Moreno, 2016, Jacobson, 2016). In Georgia, however, it only costs between USD 30,000 and 50,000, while in India and Nepal, which were the cheapest surrogacy destinations in 2015, the price ranged between USD 25,000 and 50,000. While the Indian surrogates only received modest payments, ranging from as low as USD 2,000 to 8,000 (still equivalent to approximately three annual salaries), the surrogacy agencies received up to one third of the total surrogacy cost for brokering deals between commissioning couples and available reproductive assistors.

Transnational surrogacy, particularly for homosexual couples, often requires a double reproductive intervention of firstly an egg cell vendor who provides the genetic material and secondly a surrogate who provides gestational services. This techno-scientific fragmentation of the reproductive process into several bodies and roles (genetic, gestational and social) resulted in the emergence of what Vertommen et. al (forthcoming) have termed 'global fertility chains', interconnected processes that are structured by a highly racialized and gendered division of reproductive labour (Krolokke et al., 2012; Deomampo, 2016). While commissioning parents tend to recruit egg cell vendors who match their ideals of 'good genetic motherhood' in terms of ethnicity, intelligence and physical traits, the surrogates are employed as 'mere' gestational carriers whose genetic makeup is constructed as relatively irrelevant (Winddance Twine, 2011; Pande, 2014; Schurr, 2016). Research in Israel between 2010 and 2018, for instance, highlighted a trending global fertility chain consisting of economically well-off Israeli commissioning parents (both infertile heterosexual couples and dysfertile homosexual couples), who were looking for 'Caucasian' egg cells of lighter skinned, young egg cell providers in the United States, South Africa, Czech Republic or Ukraine, while contracting low-cost surrogates in Thailand, India, Ukraine, Mexico, Nepal, Cambodia and Georgia. One respondent, a well-known Israeli gay surrogacy broker from Tel Aviv summarised the situation in 2012 as: 'basically, I unite sperm from gay Israelis with eggs from donors in

the USA or other Western nations, courier the fertilized eggs to a clinic near Mumbai and implant them in the wombs of Indian surrogate mothers'.³

'The commercial surrogate, the altruistic surrogate and the mother': Moral framings of surrogacy and their shortcomings

Commercial surrogacy is often viewed by policymakers, feminist scholars and/or activists alike as a hyper-exploitative business based on the extreme objectification, commodification, medicalization, disciplining and alienation of women's bodies. In her critical overview of feminist conflicts and debates on surrogacy, Sophie Lewis (2017) argues that surrogacy is presented as a stigmatizing form of body labour that "*- akin to sex work - is antithetical to so-called traditional family values and symbolizes reproductive dystopias of both misogynist and matriarchal hues*". For some feminist commentators such as Julie Bindel (2011) surrogacy is "*a twisted version of slavery*" while Kajsa Ekis Ekman (2013) calls it the "*exploitative sale of human beings*". Stop Surrogacy Now, an international campaign opposing surrogacy, refers to it as "*indistinguishable from the buying and selling of children, and therefore a fundamental abuse of women's and children's human rights*"⁴. This staunch anti-surrogacy stance is reminiscent of previous feminist perspectives against reproductive technologies, such as that expressed by FINRRAGE (Feminist International Network of Resistance to Reproductive and Genetic Engineering) in the mid-eighties. FINRRAGE founding member Gena Corea (1985) viewed surrogacy as the 'ultimate materialization of a patriarchal nightmare' while Janice Raymond (1989) equated it with 'reproductive trafficking', 'baby farming' or 'breeding'.

Indeed, there are plenty of physical and psychological risks connected to gestational surrogacy and egg cell provision. Egg cell providers have to undergo intense hormonal stimulations, which in rare cases can result in ovarian hyperstimulation syndrome, leading to abdominal pain, dizziness and in some rare cases even death. Surrogates are subjected to hormonal stimulations and medical procedures, including blood testing and transvaginal ultrasounds, for at least a year. They often have to agree to a C-section, implying a major abdominal operation, as this is often viewed as more convenient for the doctors and commissioning parents to plan. Moreover, over the course of ovulation and pregnancy the respective bodies of egg cell providers and surrogates are closely monitored and disciplined. Depending on the national surrogacy context, this might mean no alcohol, no smoking, no drugs, no sexual intercourse, no heavy lifting, and no bodily autonomy over important reproductive decisions including abortion, embryo reduction or the number of embryos that are to be transferred to a surrogate's womb. Lastly, there is

³ In 2013 this Israeli surrogacy broker was selected in the project "Überpreneur - 36 People You Must Meet" as one of the most influential global entrepreneurs. See: Andrews, Peter and Fiona Wood. 2013. Überpreneurs: How to Create Innovative Global Businesses and Transform Human Societies. Palgrave Macmillan.

⁴ <http://www.stopsurrogacynow.com/#sthash.q8NtL9zC.dpbs>

also the potential psychological and emotional stress of having to hand over the baby to the commissioning parents after delivery (Rudrappa, 2015; Jacobson, 2016).

As a result of intense debates at both national and global levels of governance concerned with the supposedly unethical character of surrogacy, major commercial surrogacy destinations like India, Thailand, Nepal, Cambodia and Mexico have banned commercial surrogacy over the course of the last years, forcing surrogacy businesses either to close down or go underground. Although new commercial surrogacy markets are still opening up at the fertility 'frontier', e.g. in Georgia, Ukraine and Greece, there has been a notable trend in current policy discussions and academic debates to criminalise practices of commercial surrogacy (Lewis, 2017; Mitra, 2018). In December 2015, for instance, the European Parliament condemned the practice of surrogacy as a form of reproductive exploitation that 'undermines the human dignity of the woman since her body and its reproductive functions are used as a commodity'.⁵ The Council of Europe also rejected international surrogacy guidelines in 2016.⁶

While on the one hand commercial surrogacy transactions are increasingly being criminalised in many countries, the door is being left open to allow altruistic forms of surrogacy. This is often framed as the only ethical form of surrogacy as it involves no money exchange in the form of wages between the surrogate and commissioning parents. In cases of altruistic surrogacy, the gestational worker is often a relative or a close friend of the commissioning couple who carries the baby as the 'ultimate gift of life' or as a noble and selfless act of care and love. Rather than receiving a fee, an altruistic surrogate only receives a reimbursement of her pregnancy related expenses such as medical, legal and childcare costs, maternity clothing or counselling. India, for instance, recently changed its surrogacy regulations in 2017 and criminalised international commercial surrogacy, while allowing altruistic surrogacy for married heterosexual Indian couples. The United Kingdom only allows altruistic surrogacy⁷.

Another notable effect of the criminalisation of commercial surrogacy is the simultaneous emergence and promotion of ethical forms of commercial surrogacy. Men Having Babies, for instance, an American organisation advocating for gay surrogacy has developed an Ethical Surrogacy Framework to help commissioning couples in making ethically correct and least harmful decisions during their international surrogacy procedures⁸. An

⁵ Annual Report on Human Rights and Democracy in the World, Paragraph 115 of its resolution of 17 December 2015. http://www.europarl.europa.eu/doceo/document/P-8-2016-005909_EN.html <http://europeanpost.co/the-european-parliament-condemned-all-forms-of-surrogacy/>

⁶ Starza-Allen, Antony. Council of Europe rejects surrogacy guidelines. Bionews 17 October 2016. https://www.bionews.org.uk/page_95737 (last entry 02/05/2019).

⁷ The line between altruistic and commercial surrogacy is not always clear-cut. In Greece, for instance, only altruistic surrogacy is permitted by law. However, this does not prevent the commissioning parents from giving the surrogate an exceptional financial or material gift after she has delivered the surrogacy baby. This is the reason why in the UK surrogacy laws are currently being revised in an attempt to establish clear categories of acceptable reimbursements for surrogates to clarify what are legitimate 'altruistic' expenses (BioNews, 10 June 2019).

⁸ <https://www.menhavingbabies.org/advocacy/ethical-surrogacy/>

organisation in Israel called 'Responsible Surrogacy' promotes a type of 'fair trade surrogacy' by curating a list of issues that commissioning parent(s) should take into account when considering a surrogacy procedure abroad. These initiatives focus on raising awareness among the consumers of reproductive technologies and not so much on improving the conditions of work through organizing workers/ producers, in this case reproductive gestational workers. In this sense, these 'fair trade' and altruistic initiatives, although surely well intended, actually have a negative impact and contribute to the continued obfuscation and invisibility of the material conditions and labour involved in surrogacy and other reproductive activities.

It is also necessary to note that numerous feminist scholars and activists have critiqued the criminalisation of commercial surrogacy for causing more harm than good. After commercial surrogacy was banned in India in 2016, Marwah and Rudrappa (2016) noted how the ban took away the means of income and survival of working-class women, 'while only alleviating our conscience with the thought we have acted'. Similarly, Schurr and Perler (2015) called the new Mexican surrogacy ban a "*fig leaf*", hiding 'a demonstrable lack of engagement with the structural problems women, and particularly single mothers, face in Mexico's neoliberal economy: lack of employment options, insufficient access to health care, non-enforceability of alimony payment of fathers, and a general lack of social benefits'. This is an important point, in that it is the material realities of neoliberal economics and women's uneven access to income and welfare that structure women's 'choices' to become surrogates and importantly, is indicative of an understanding of surrogacy as labour, or at least as an income generating activity that substitutes for the availability of other income generating activities that are regarded as 'work'.

Furthermore, national surrogacy bans and moves to criminalise the industry have merely pushed the surrogacy market to new frontier countries where the same 'problems' are then repeated. For example, when surrogacy was banned in Thailand, the market moved to India. After the India ban, the market moved to Nepal, and when surrogacy was banned in Nepal, a new market opened in Cambodia and Laos. In addition, because of rapidly shifting legislation on surrogacy in different states, global surrogacy chains are volatile networks with geographic nodes of (re)production that can change very quickly. Until 2015, mostly (South East) Asian countries were the most popular 'mother' destinations. However, after Thailand, India, Nepal criminalised international commercial surrogacy (and after Cambodia, Laos, and Mexico followed suit), former Soviet countries, including Ukraine and Georgia, are emerging as the most stable and popular low-cost surrogacy countries, albeit only for heterosexual intended parents.

While we do not have the space here to more fully discuss the harmful effects of criminalising surrogacy, our claim is that current regulatory solutions that purportedly tackle the 'problem' of surrogacy, either via the criminalisation of commercial surrogacy, or through the promotion of altruistic and/or ethical forms of surrogacy, rely on highly

moralistic perspectives regarding both what counts as work and as (good) motherhood (Rudrappa and Collins, 2015). Rather than depending on moralising frameworks of ‘good mothers versus bad surrogates’ or bad commercial surrogates versus good altruistic surrogates’, we propose instead to understand and analyse both surrogacy and pregnancy from an integrative feminist political economy perspective, as waged and unwaged forms of reproductive labour in interlocked capitalist institutions such as families, nation states and markets.

Our critique of anti-surrogacy discourses should not however be taken to imply that we understand surrogacy or gestational labour more generally as inherently good or non-exploitative. Yet, we would strongly argue against the discursive-material conflation of all surrogacy with victimhood and trafficking, in part because of what becomes obscured with such rhetorical maneuvers in terms of the surrogate’s agency, forms of organising and resistance. In a connected argument, sex worker rights activists have for decades cautioned against collapsing all commercial sex into definitions of slavery and trafficking (Augustin, 2007; Mac and Smith, 2018). They argue instead that a labour analysis of sex provides the possibility for sex workers to access both human and labour rights while also enabling instances of forced labour to be addressed without resorting to racist or paternalizing ideas that all migrant sex workers, many of who are women of colour, are victims in need of rescue⁹.

Gestation as reproductive labour

In this section, we focus on how these set of workers - waged surrogates and unwaged mothers - produce human beings and, at the same time, produce the commodity ‘labour-power’. In doing so we return to the question of value production in capitalism and the interdependence between the exploitation of waged labour and the appropriation of unwaged reproductive work. These questions inform the political possibilities and leverage that women (as unwaged mothers and as waged workers) have in their negotiations, struggles and confrontations with capital and the state. Federici (2019:56) reminds us ‘that those who produce the producers of value [are] themselves productive of that value... [and] that value production is not a linear process, but one that occurs through constant displacements, as value is most often realised not where it is produced’.

As Alessandra Mezzadri (2019) argues, Marxist feminist analysis of value and wagelessness in the 1970s were some of the first to highlight that capitalism first and foremost is dependent on social and biological processes of generation and regeneration of the worker and of the commodity labour power that mostly take place in the realm of the household and the community, i.e. outside of what is considered classic domains of

⁹ In so far as we use the Marxist feminist insights of Silvia Federici and Maria Mies to develop the argument in this paper that surrogacy should be understood as a form of reproductive labour under capitalism and should not be criminalised as an inherently immoral practice, it should be noted that Federici (2020) and Mies have both written critically *against* commercial surrogacy.

production and value-generation. In addition, she highlights the extensive scholarship of Maria Mies whose work focuses on 'debunking the mythology of value as merely generated within productive realms' (Mezzadri, 2019). Our analysis of the dialectical relations between 'natural' pregnancy and surrogacy is that reproductive activities can be and are value-generating and we posit that a process of 'housewifization' (Mies, 1982) systematically obscures the sources of value, both by hiding women's productive contributions to the market and by devaluing those contributions as non-value-producing.

Our understanding of value is also indebted to Jason Moore's (2015) unified approach of 'labour-nature time', in which socially necessary labour time (the classic source of value-creation in a Marxist sense) requires socially necessary amounts of unpaid work, performed human and extra-human natures in 'the web of life'. Applied to the surrogacy industry, we view 'unified labour-biology time' as the coin of value creation, in which the socially necessary labour time that is needed for the surrogate to gestate and birth the surrogacy baby requires both the skills that she acquired during 'natural' birthing and motherhood and the assets from her reproductive biology (such as a uterus, placenta, endometrium, etc that is 'fit' for baby-making and an overall 'healthy' gestational body etc).

Kalinda Vora (2015) and Sophie Lewis (2017, 2019) have put forward the term gestational labour as a way to analyse mothering through the lens of surrogacy, rather than vice versa, in an attempt to unravel the productive nature of gestating and birthing in both its waged and unwaged form. As Lewis (2015:10) aptly phrased it: 'Gestation and surrogacy are separated only by a name and a choreography'. The shift to understanding surrogacy as 'gestational labour', needs to be situated more broadly within the contemporary turn towards theories of social reproduction that has occurred across disciplines and the social sciences (Himmelweit, 1995; Bakker, 2007; Steans and Tepe, 2010; Weeks, 2011; Federici, 2012, Fraser, 2016; Arruzza, 2016; Mezzadri, 2017; Bhattacharya, 2017). Much of the recent debate is informed by Marxist and/or Black feminist contributions from the 1970s, which according to Federici (2019:55) were responsible for 'unmasking the socio-economic function of the creation of a fictional private sphere, and thereby re-politicising family life, sexuality, procreation'.

Reproductive labour is a complex of activities, tasks and services that possess a dual characteristic in that it reproduces human beings and under capitalism, this labour also produces the commodity labour-power. Reproduction involves both waged and unwaged forms of labour and is a cluster of work that some people do and that others definitely do not do such as cooking, caring and cleaning as well as the 'un-named, unnamable labor required to anticipate, prevent or resolve crises, keep up good relations with kin and neighbors' (Barbagallo and Federici, 2012:1).

When we consider Federici's argument in *Caliban and the Witch* (2004) that women's decisions with regard to whether to have children or not continue to have significant

consequences on the reproduction of the workforce, we can begin to understand why women's bodies remain so intensely scrutinized, acted upon and disciplined and why, by contrast, the power that women potentially possess by virtue of this capacity is systematically denied, devalued, and attacked. Pregnancy and motherhood are regulated and structured by powerful and at times violent boundaries of belonging to 'nature', which is rendered an essential aspect of womanhood - despite the fact that in the UK, for instance, close to 25 percent of women will reach the age of 45 and not have had children (ONS 2017). These reproductive practices and processes are also highly racialised, and embedded in ongoing histories of empire, slavery, eugenics, (settler)colonialism and nationalism. This becomes evident in the stratified politics of who is allowed and encouraged to reproduce and be born, and who is not (Nakano Glenn, 1992; Colen, 1995; Roberts, 1998). It is impossible to ignore the 'afterlife' of European histories of colonial conquest and settlement in Amrita Pande's (2014) ethnographic encounter with an Indian commercial surrogate who aborted her 'own' pregnancy to make space for a surrogacy baby.

Rather than understanding surrogacy and 'natural' pregnancy/ motherhood as binaries, we suggest an integrative labour-biology approach, that investigates the capitalist tensions and conflicts between surrogacy work for the market and mother work in the family as a dialectical relation between the exploitation of waged work and the appropriation of 'free' nature. As we will discuss in the empirical section, surrogacy and motherhood co-constitute each other's condition of possibility. As such, a labour analysis of gestation brings our attention to the actually existing conditions under which this work occurs. In making these conditions visible and rendering them within a labour process, it is possible to critically investigate how the labour conditions of surrogacy are co-constitutive of the gendered and racialised dynamics of unwaged pregnancy /motherhood¹⁰. It is a process that Federici (2004) outlines as the capitalist transformation of the human body into a *work-machine*, in that with the rise of capitalism women suffered a double mechanization process. As well as being subjected to the discipline imposed on them by work in manufacturing outfits and later the factories, their bodies were turned into breeding, procreative machines, instruments for the re/production of the workforce.

In locating surrogacy as waged reproductive work, we foreground an analytical framework that enables us to map the contours of exploitation, the policing of bodies and alienation involved, just as we would a call-centre, a shoe factory, a brothel or childcare centre. It makes visible the conditions of work and instances of resistance without recourse to a set of knowledge that makes or seeks to make sex, pregnancy and birth somehow different,

¹⁰ It is possible to extend this argument further with Marxist feminist understandings of sex as work, and the historical development of the nuclear family, marriage and the disciplining of women's sexuality. In *Origins and Development of Sexual Work in the US and Britain* (1975) Federici writes, "an essential premise for the transformation of the female factory-worker-prostitute – in both cases paid worker – into an unpaid mother-wife ready-to-sacrifice her own interest and desire for the wellbeing of her family – was the 'purification' of the maternal role from any erotic element."

out of bounds of the category of 'work' or atypical. The reason to insist on this is because by focusing on both waged and unwaged labour we are able to locate both altruistic surrogacy and 'natural' biological reproduction as equally involving labour processes that include exploitation, the policing of bodies and alienation – albeit in an uneven and unwaged form.

The uneven and exploitative processes that are in motion in the global surrogacy market need to be understood within the broader neoliberal transformations that the reproductive realm has undergone since the late 1970s, in which every articulation of the reproduction of labour power was morphed into 'an immediate point of accumulation' (Federici, 2012). While the Fordist household model depended to a large extent on a division of labour between the male breadwinner and the unwaged housewife, neoliberal modes of reproduction have pushed the housewife into the labour market. While certain groups of women increasingly demanded and won economic, social and political autonomy, the work of reproductive labour has had to be redistributed (Delphy, 1970; Nakano Glenn, 1995; Federici, 2012; Cooper and Waldby, 2014; Fraser, 2016). Women who once carried out caring and domestic work in an unwaged capacity in the home no longer have the time, ability or desire to do so. Without the previous generations of unwaged women workers to perform the work necessary to produce and reproduce labour-power and daily life, women's increased participation in waged work has relied on and pulled another group of women — predominantly migrants and working-class women — into the sphere of waged reproductive work (Folbre, 1994; Ehrenreich and Hochschild, 2003; Hochschild and Machung, 2003; Mitchell, Marston, and Katz 2004). It is important to also stress the relationship between work, value and gender. In that, whilst the waged reproductive work is feminised and is increasingly accorded a monetary value, the work of reproduction remains devalued in comparison to what is considered 'productive' work (Caraway, 2005; Elston, 1999).

In so far as reproductive labour remains central to the construction of gender, it is important to emphasise that different women do varying amounts of, and different types of, reproductive labour (Rollins, 1985). The lens of surrogacy enables us to see this dynamic as it functions not only between different women but also different components of bodies and tissues. In this way, as much as reproductive labour has at times constituted a basis for a common struggle between women, its unequal distribution operates in such a way so as to not only separate and differentiate women from men but also women from each other. That reproductive labour produces conflict and division between women can, to a large degree, be traced to the intersection of reproductive labour with the histories of domestic service and those of slavery, colonialism, and migration as well as to different racialised definitions of work and family (Collins, 2000; Davis, 1981).

Invisible wombs of the market: The housewifization of surrogates

In this section we apply Mies's understanding of 'housewifization' to the contemporary surrogacy industry, to show how perceptions of motherhood and the housewife work to control reproductive labourers, paid or otherwise. Reproductive labour is a useful lens through which to analyse the global surrogacy industry, as it sheds light on how the false binaries of work vs motherhood are constructed and mobilised against surrogates on the "workfloor".

In her ethnography of commercial surrogacy in Gujarat, India, Pande (2014) noted how Indian surrogates were disciplined by the fertility clinics and agencies through what she termed a '*mother-worker paradigm*'. As a good mother, the surrogate was expected to take good care of herself and of the baby inside her without growing too attached, while as a good worker she has to be professional, submissive, healthy, and not too greedy when it comes to discussing financial compensation and labour conditions. When the surrogate dared to transgress these carefully constructed boundaries, she was often reprimanded by the surrogacy brokers, doctors and other surrogates. Pande concluded that 'the rhetoric of good motherhood is employed to restrain the surrogates as workers and the rhetoric of good workerhood to restrain them as mothers' (2014:167). Mitchell and Waldby (2006) argue that the sexual division of labour in what they call a biotech-based 'tissue economy' is characterised by a Cartesian mind-body split, in which only the cognitive labour of the scientist or doctor is valorised as work while the reproductive labour of (female) oocyte vendors and surrogates is made invisible and presented as merely natural (Franklin and Lock, 2003; Cooper and Waldby, 2014; Battistoni, 2017).

Indeed, under capitalism, ovulation, pregnancy and childbirth are not valued as labour; not in their unwaged form as motherhood and 'natural' pregnancy, nor in their commodified form as commercial surrogacy or egg cell provision. Even in the fertility industry, where reproductive labour is one of the obvious sources of profit, fertility brokers still use the language of donation, gift-giving or altruism to promote their services (Ragoné, 1994). In material terms, this means that commercial surrogates or tissue providers are not given a salary or a wage, but rather a fee or financial compensation. Even when they are paid, they are not permitted to be categorised as fully waged reproductive workers with labour contracts and rights protected by national labour codes (Rudrappa, 2015). As one famous surrogacy promotor insisted during an international surrogacy fair in Brussels in 2017:

'Surrogacy involves medical risks, physical discomfort and it's an emotional rollercoaster, so it makes sense to compensate the surrogate for this. But it's not a commercial remuneration. You are not paying her for her skills or her time: surrogacy is not about being skillful, it's not a job, and the surrogate doesn't work for you' (Phil, surrogacy promotor)

Recruiting and casting surrogates in moral frames of either altruism or volunteerism fundamentally assumes that reproductive work should be done for free, and out of love. This has made it more difficult for surrogates to identify as workers and to negotiate for better salaries and labour conditions, particularly given that surrogacy agreements are always negotiated on an individual rather than a collective basis (Pande, 2014; Rudrappa, 2015; Vora, 2015; Lewis, 2019). There are no unions of gestational workers, neither in the Global North nor in the Global South, to collectively bargain for better working conditions. In many countries, surrogates do organise via (closed) social media groups where they can ask each other questions concerning medical procedures, payments, the surrogacy contract and interactions with the commissioning parent(s). In India surrogates were often housed in surrogacy hotels or dormitories for the duration of the pregnancy. This tightened the disciplinary control over their lives and bodies but also facilitated forms of collective organising and resistance at the workplace (Pande, 2015; Rudrappa, 2015; Vora, 2019).

In her research on Indian women's involvement in lace making, Maria Mies (1982:110) introduced the concept of '*housewifization*' to explain that despite their full incorporation into a capitalist export-oriented production system as wage labourers, 'the lace makers' integration was premised on their self-understanding as housewives'. In her later work on global capitalist patriarchy, Mies (2014:116) clarified that 'women are the optimal labour force because they are universally defined as housewives, not as workers' .

'This means that their work, whether in use value or commodity production, is obscured, does not appear as free wage labour, but is defined as income-generating activities, and can hence be bought at a much cheaper price than male labour. Moreover, by defining women as housewives, it is possible not only to cheapen their labour, but also to gain political and ideological control over them. Housewives are atomized and isolated, their work organisation makes the awareness of common interests, of the whole process of production very difficult. Their horizons remain limited by the family. Trade unions have never taken interest in women as housewives'.

Interviews with surrogates and agency workers operating in the commercial surrogacy market in Georgia highlight that commercial surrogates are subjected to similar processes of housewifization. One of the reasons why Georgian women are increasingly deciding to work as surrogates is because it not only pays well compared to their meager salaries for socially 'acceptable' forms of wage labour in Georgia's fractured economy, but it also allows them to combine it with motherhood, in many cases single motherhood. Elena, a single mother from Tbilisi who was working as a surrogate and eight months pregnant, explained that she would have to work three years as a laboratory assistant to earn the same amount - 15,000 USD - as she does now while 'doing nothing, except for being pregnant'.

"*Being*" a surrogate also allowed Elena to stay at home with her two-year-old son, as she could not afford to pay for childcare when she worked outside of the house. However,

when asked whether she considered surrogacy to be her job, Elena promptly answered “no”. Despite all the physical and emotional labour involved in gestating the foetus and the time she spent on medical appointments and Skype conversations with the intended parents, she refused to describe surrogacy as her work. ‘I am just being a mother and a housewife, and I am doing this because I desperately need the money’, she said.

Nargiza, another surrogate who was in the sixth month of surrogacy pregnancy at the time of the interview, got visibly annoyed when asked whether she considered surrogacy as her work. She replied: ‘have you ever been pregnant?’ When Vertommen replied ‘not really’, Nargiza riposted:

‘That’s why you are asking this question. We can return to this discussion after you have had a baby (laughing). You need to go through pregnancy to understand it. Pregnancy is just a state that you are in. It’s not a good or a bad job. it’s not a job. I chose to be a surrogate because I need to be a good mother. The wellbeing of my daughter means everything for me’.

“*Being*” a mother was also a crucial requirement for Elena and Nargiza to become surrogates in the first place. Elena’s surrogacy agent explained that only women who have already birthed their own children were allowed to become surrogates as this diminishes the chances of the scenario in which the surrogate wants to keep the surrogacy baby after she gives birth. It also provides proof of the optimal functioning of their reproductive biologies and gestational bodies. Although the Georgian surrogacy market is highly dependent on the closely intertwined and mutually formative work of motherhood, pregnancy and surrogacy, for Elena and Nargiza both the unwaged reproductive work of mothering and the paid reproductive work of gestating are viewed as an existential state of being, rather than a performative state of labouring.

The societal stigma, shame and taboo surrounding surrogacy have forced Georgian surrogates to remain as invisible as possible. All the interviews conducted with Elena for instance took place in the new flat she moved into during the seventh month of her pregnancy, to avoid gossip from her neighbours. Even when she was interviewed during the day, the curtains of the apartment remained closed and she wore baggy sweaters in order to hide her bump. Mariam, a single mother from Tbilisi who was pregnant with her third surrogacy baby at the time of the interview, explained that she left her neighborhood in the sixth month of her pregnancy.

Until the sixth month I was just pretending that I gained weight to explain why I was chubbier than usual. I mostly would hide, stay at home and wouldn’t not leave my place so much. Whenever I had appointments at the clinic, my father would drive me with the car that I bought for him with the money from my first surrogacy (Mariam, surrogate).

Nargiza quit her job as a barista once she became a surrogate, because she did not want her colleagues to know about it. She continued to wear a wedding ring when leaving the

house, although she had been divorced for many years, 'to avoid nasty comments by strangers' and quickly added:

But if you think wearing a ring is strange, my friend is a surrogate from a village far away from Tbilisi, and she is here now in Tbilisi, pregnant with twins whereas her parents think that she is in Turkey working, and it's a lot of stress, because every time she goes to the appointment she is wearing huge glasses, she is hiding her face just in case someone sees her, she has re-dyed her hair different colors like five times to not be able to be recognized (Nargiza, surrogate).

This "invisibility" is enforced and, we would argue, one of the structural reasons why surrogates, similar to prostitutes, mothers and other reproductive workers, do not easily identify as workers. This refusal of workers' consciousness and identity in turn deepens processes and practices of exploitation in the fertility industry.

Elena, along with several others surrogates we spoke to, explained that there are many things about the surrogacy procedure over which she has no decision, including the number of embryos that are transferred to her womb, how to give birth, whether to perform an embryo reduction or abortion. The surrogacy contract stipulates that these reproductive decisions are reserved for the intended parents in consultation with the surrogacy agencies and the doctors. Georgian fertility doctors explained that depending on the quality of the embryos, between two and four embryos are usually transferred to the womb of the surrogate, as a way of supposedly enhancing the chances of a successful pregnancy. This means that Georgian surrogates often carry twins or even triplets, which in turn poses more potential risks during the pregnancy (Van Hoof and Pennings, 2015). Elena will also remain invisible on the birth certificate of the surrogacy baby, which will only mention the commissioning parents. Furthermore, surrogates in Georgia do not have access to decent and adequate medical and life insurance. Medical complications due to the surrogacy pregnancy are rarely seen as work accidents. For instance, Ilona, one of the surrogates interviewed, had her uterus removed when giving birth to triplets at the age of 40 during her third and most complicated surrogacy procedure. She mentioned during our interview:

'I was in pain for a long time after the delivery, but neither the agency nor the intended parents offered me any kind of emotional support or financial compensation' (Ilona, surrogate).

When a Georgian surrogate suffers a miscarriage, she often receives only part payment, depending on whether the doctors deciding whether it was her 'fault' or not. As one surrogacy broker clarified:

'If the doctors decide that the surrogate has lost the baby because she didn't take her medication properly, or because she was carrying heavy loads, or traveling long distances, then we only pay the surrogate half of the agreed amount' (Ia, surrogacy broker).

While profitability in the global fertility market is partly based on rendering the labour of ovulation, gestation and parturition as invisible as possible, the moral responsibility increasingly rests with the individual surrogate 'mother' or egg cell provider, whose bodies, biologies and behaviours are heavily policed and surveilled and thus, conversely, also hypervisible during the procedure.

Notwithstanding the violations of their basic reproductive rights, many of the interviewed surrogates refused to be seen as victims. Elena, for instance, explained that she felt a victim when, after her divorce, she had to go to dozens of government institutions for social assistance, who sent her from pillar to post again and again.

'Surrogacy was a dignifying experience compared to the misery preceding it' (Elena, surrogate).

It is worth noting again the similarities with decades of sex worker rights activists, who argue that sex workers are equally capable of denouncing the harm and violence they suffer but without collapsing all of their experiences into victimhood, lack of consent and abuse. This suggests that attempts to 'rescue' surrogates and tackle the problems in the global fertility industry should not rely so much on attempts to decommodifying all the gestational and reproductive labour involved and relocating it back to the supposedly untainted sphere of the family and the community, but rather on understanding the complex dialectics between the commodification of reproductive processes, practices and labour on the market and the free gifts of motherhood and biology in the household.

From binaries to dialectics of reproduction under capitalism

'The great secret and the great accomplishment of capitalist civilization has been not to pay its bills' - Jason Moore (2015:87)

In developing an integrative reproductive labour perspective this paper has highlighted the question of why it is that in the global surrogacy industry in which various actors and stakeholders 'make a living' and generate considerable profits, only surrogates and egg cell providers are expected to provide the 'gift of life' for free (Rudrappa and Collins, 2015). One answer that we have posited in response is that capitalist expectations of 'altruism' are not stable or 'natural', but take shape through interlocking hierarchies of gender-race-class. Like other capitalist frontier industries, the global surrogacy business operates through a highly gendered and racialized division of labour in which men/women, nature/society, production/reproduction, family/market, work/life and gift/commodity are defined, organised and mobilised as neatly separate categories, which we have identified as false binaries (Federici, 2012; Pande, 2014; Battistoni, 2017). As surrogates transgress many of these carefully constructed boundaries, their work is met with moral upheaval and public concern in which they are structurally forced to 'choose sides': between motherhood or work; between 'being' life-and caregiving mothers in the

family sphere or ‘doing’ the waged work of commodity production and service provision in the realm of the market. This has fostered the compartmentalisation of the reproductive labour force into good and ‘dirty’ workers: good mothers versus bad surrogates, good altruistic surrogates versus bad commercial surrogates, good (commercial) surrogates versus bad whores.¹¹

The analytical and political fulcrum of our analysis is thus the Marxist feminist insight that motherhood *is* work, and that all mothers and caregivers are workers. Rather than framing motherhood and surrogacy as dichotomies (as is often the case in policy discourse), we have explored their material-discursive (dis)continuities as a dialectical relation between waged and unwaged forms of reproductive labour under capitalism. In his recent work on capitalism and ecology, Jason Moore (2015) (together with Patel, 2017 and Walker, 2018) introduced the term “cheap nature”, naming the capitalist strategy of appropriating the wealth of unwaged labour, food, energy, and raw materials, by presenting them as external to the capitalist circuit of commodity production. Moore argues that the history of capitalist value creation should be understood through ‘the shifting configuration of the exploitation of labor-power and the appropriation of cheap natures – a dialectic of paid and unpaid work that demands a disproportional expansion of the latter (appropriation of unpaid work) in relation to the former (exploitation of paid work)’ (2014:s.p.). As with the production of cheap food, energy, raw material and labour power, we conceive of fertility as a global capitalist frontier, in which a booming transnational fertility industry capitalises on the ‘cheap fertility’ of both surrogate and mother workers.

The transformation of fertility into a commodity frontier that operates “as a boundary between commodified and un-commodified life” presents a contradiction or crisis for capital (Moore, 2015: 222; Fraser, 2016). On the one hand, it suggests that fertility has been reconfigured into an immediate site of accumulation, in which a thriving fertility industry provides expensive fertility treatments on the market as a techno-fix for in/dysfertile people, based on ‘cheap’ and outsourced reproductive labour of surrogates, egg cell providers and mothers. On the other hand, it signals that ‘cheap fertility’ within the household, with its abundantly and freely available gifts of motherhood and reproductive biology, is being contested. With fertility rates in Europe, North America and East Asia sharply declining (what Mariarosa Dalla Costa termed ‘birth strikes’), it has been argued that the combination of toxifying ecological environments and women’s increased participation in waged employment since World War II is ‘exhausting’ or depleting their gestational and reproductive biologies and bodies, making it increasingly difficult to reproduce ‘naturally’ (Klein, 2014). ‘Cheap fertility’ is also being contested through the increased control and agency of (some) women over their reproductive bodies, and through demands of non-abled and non-heteronormative people who were previously

¹¹ Pande’s (2009, 2014) research suggested that many Indian surrogates justify their work and resist social stigma by differentiating it from sex work, i.e. “at least I am not a prostitute”.

excluded from biological parenthood. The global fertility industry is capitalising on this combined exhaustion and refusal to provide cheap fertility, in the same way as the care industry and service sector captures and capitalises on the decline of 'cheap' domestic and care work that was previously provided by unwaged housewives and enslaved women. However, as commodified fertility continues to rely on un-commodified fertility as its condition of possibility and profitability, this constitutes yet another aspect of capitalism's crisis of social reproduction (Fraser, 2016).

As the experiences of Georgian surrogates suggest, this dialectic between capitalist regimes of exploitation (of commodified fertility) and appropriation (of uncommodified fertility) is a negative one, in which the valuation of surrogacy as waged reproductive labour is grounded in the structural devaluation of motherhood as unwaged reproductive work (Walker and Moore, 2018). By presenting it as external to the capitalist circuit of commodity production - it is "houswifized". Surrogacy is thus exploitative, racialised, gendered and stigmatising work *precisely because* mothering is not recognised and valued as work at all. Georgian surrogates suffer from hyper-exploitation on the work-floor because as mothers they are expected to do the work of ovulation, gestation and parturition for free at home. By bringing together both capitalist forms of waged and unwaged gestation in an integrative analysis, we indicated that they co-constitute each other's condition of possibility. Without the unpaid work, skills and assets of motherhood and reproductive biology, surrogacy could not emerge as a commodity frontier. The co-dependency works in the other direction as well: without the paid reproductive work of surrogacy, intended mothers could not become mothers and surrogates could not perform the expected (motherly) duties of providing for their families.

The multiple and, at times, contradictory experiences and knowledge that emerge from the struggles of feminist, anti-colonial and anti-racist movements reveal that, within capitalist societies, what gets counted as (value-producing) work, who is considered a worker and, conversely, who is considered a mother have profound and, at times, violent ramifications. Our research suggests that rather than reifying these capitalist divisions and pitting reproductive workers against each other, we ought to break down the moral, ontological and disciplinary boundaries and forge new practices of solidarity between different groups of reproductive workers, i.e. mothers, altruistic surrogates, commercial surrogates, egg cell and breastmilk providers but also nurses, teachers, sex and care workers (Battistoni, 2017). Future research on the changing organisation and valuation of different types of reproductive labour across the globe, including surrogacy, egg cell provision, breastmilk provision, child and elderly care work, sex work, nursing, parenting etc could offer important cross-sectoral and cross-country insights into the complex ways in which capitalist frontiers of social reproduction operate, within co-constitutional regimes of exploitation and appropriation.

There are no doubt limits to a labour perspective on surrogacy and other reproductive practices and processes, as Susan Himmelweit (1995) Kalindi Vora (2012) and Kathi Weeks (2011) have poignantly argued, albeit from different angles. Yet, a unified labour-biology lens that explores how reproduction and life is put to work, can be a fruitful starting point to grasp the complex ‘intra-sections’ between ongoing histories of capitalism, colonialism and heteropatriarchy in/through the state, the market and the family.

Funding

This work was supported by the Belgian Fund for Scientific Research (FWO) for post-doctorate of Vertommen at the Department of Conflict and Development Studies at Ghent University. It builds on research conducted during postdoctoral research at the Department of Global Health and Social Medicine at King’s College London (H2020 Marie Skłodowska-Curie Actions: [Grant no. 704261]); and at the Department of Sociology at Cambridge University (Wellcome Trust: [Grant no. 100606]).

This work was also supported by the Leeds Business School for a CERIC research fellowship of Barbagallo.

Acknowledgements

We would like to thank our research participants and the anonymous reviewers for their generous time and input in contributing to this paper.

References

- Agustin, Laura. 2007. *Sex at the Margins: Migration, Labour Markets and the Rescue Industry*. London: Zed Books.
- Andrews, Peter and Fiona Wood. 2013. *Uberpreneurs: How to Create Innovative Global Businesses and Transform Human Societies*. Palgrave Macmillan.
- Arruzza, Cinzia. 2016. "Functionalist, Determinist, Reductionist: Social Reproduction Feminism and its Critics". *Science & Society* 80(1) pp. 9–30.
- Bakker, Isabella and Stephen Gill. 2003. *Power, Production and Social Reproduction Human In/security in the Global Political Economy*. Palgrave Macmillan.
- Bakker, Isabella. 2007. "Social Reproduction and the Constitution of a Gendered Political Economy". *New Political Economy* 12:4 pp. 541-556.
- Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.
- Battistoni, Alyssa. 2017. "Bringing in the Work of Nature: From Natural Capital to Hybrid Labor". *Political Theory* 45(1) pp. 5–31.
- Bindel, Julie. 2016. Outsourcing pregnancy. The Guardian. April 1 2016. <http://www.theguardian.com/global-development/2016/apr/01/outsourcing-pregnancy-indiasurrogacy-clinics-julie-bindel> (last entry 13/04/2019)
- Bindel, Julie. 2015. Commercial surrogacy is a rigged market in wombs for rent. The Guardian. February 20 2015. <http://www.theguardian.com/commentisfree/2015/feb/20/commercial-surrogacy-wombs-rents-same-sex-pregnancy> (last entry 13/04/2019)
- Blomberg, Matt and Yon Sineat. "Freed from jail, Cambodian surrogate mothers raise Chinese children". Reuters. 10 December 2018 (last entry 19/04/2019). <https://www.reuters.com/article/us-cambodia-trafficking-surrogacy/freed-from-jail-cambodian-surrogate-mothers-raise-chinese-children-idUSKBN1O912L>
- Caraway, T.L. 2005, "The Political Economy of Feminization: From "Cheap Labor" to Gendered Discourses of Work", *Politics and Gender*, vol. 1, no. 3, pp. 399-429.
- Castree, Noel. 2002. "False Antitheses? Marxism, Nature, and Actor-Networks." *Antipode* 34: 1 pp. 111–146.
- Colen, Shellee. 1995. "Like a Mother to Them: Stratified Reproduction and West Indian Childcare Workers and Employers in New York". In: Faye Ginsburg and Rayna Rapp (eds.), *Conceiving the New World Order: The Global Politics of Reproduction*, 78-102. Berkeley: University of California Press.

- Collins, Patricia Hill. 2000. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Psychology Press.
- Cooper, Melinda. 2008. *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era*. Washington: Washington University Press.
- Cooper, Melinda and Catherine Waldby. 2014. *Clinical Labour: Tissue Donors and Research Subjects in the Global Bioeconomy*. Durham: Duke University Press.
- Corea, Gena. 1986. *The mother machine: reproductive technologies from artificial insemination to artificial wombs*. Harper and Row.
- Cribb, Robert. "Attempts to clarify surrogacy rules could hurt altruistic surrogates in Canada" *The Star* 9 October 2016. <https://www.thestar.com/news/world/2016/10/09/attempts-to-clarify-surrogacy-rules-could-hurt-altruistic-surrogates-in-canada.html> (last entry 02/05/2019)
- Dalla Costa, Mariarosa and Selma James. 1972. *The power of women and the subversion of the community*. Pétroleuse Press.
- Databridge Market Research, 2019. Global Fertility Services Market – Industry Trends - Forecast to 2026 <https://www.databridgemarketresearch.com/reports/global-fertility-services-market> (last entry 07/09/2020)
- Davis, Angela. 1972. "Reflections on the Black Woman's Role in the Community of Slaves". *The Massachusetts Review* 13(1/2): pp. 81-100.
- Davis, Angela. 1981. *Women, Race and Class*. London: The Women's Press Ltd.
- Deomampo, Daisy. 2016. *Transnational Reproduction: Race, Kinship, and Commercial Surrogacy in India*. New York: New York University Press.
- Ehrenreich, Barbara and Arlie Hochschild, 2002. *Global woman: nannies, maids and sex workers in the new economy*. London: Granta Book
- Ekis Ekman, Kajsa. 2013. *Being and Being Bought: Prostitution, Surrogacy & the Split Self*. Spinifex.
- Elias, Juanita and Shirin Rai. 2015. "The Everyday Gendered Political Economy of Violence". *Politics & Gender*, 11(2), 424-429.
- Elias, Juanita and Shirin Rai. 2019. "Feminist everyday political economy: Space, time, and violence *Review of International Studies*". 45: 2 pp. 201–220.
- Elson, Diane. 1999. Labor markets as gendered institutions: equality, efficiency and empowerment issues. *World development*, 27(3), 611-627.
- Federici, Silvia. 1975. *Wages Against Housework*. Bristol: Power of Women Collective and Falling Wall Press.

Federici, Silvia. 1975. "Origins and Development of Sexual Work in the US and Britain", republished in Federici, S, *Beyond the Periphery of the Skin: Rethinking, Remaking, and Reclaiming the Body in Contemporary Capitalism* (2019) Oakland: PM Press

Federici, Silvia. 2004. *Caliban and the Witch: Women, the body and primitive accumulation*. Brooklyn: Autonomedia.

Federici, Silvia. 2012. *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. Oakland: PM Press.

Federici, Silvia. 2020. *Beyond the periphery of the skin: Rethinking, remaking and reclaiming the body in contemporary capitalism*. Oakland: PM Press.

Folbre, Nancy. 1994. "Children as public goods". Papers and Proceedings of the 106th Annual Meeting of the American Economic Association. 84 (2): pp. 86–90

Franklin, Sarah and Margareth Lock. 2003. *Remaking Life & Death: Toward an Anthropology of the Biosciences*. Sante Fe: Sar Press.

Fraser, Nancy. 2016. "Contradictions of capital and care". *New Left Review* 100 pp.1-19.

Frost and Sullivan, "The fertility business is booming". The Economist 8 August 2019. <https://www.economist.com/business/2019/08/08/the-fertility-business-is-booming> (last entry 16/09/20)

Griffin, P. 2007. Refashioning IPE: What and how gender analysis teaches international (global) political economy. *Review of International Political Economy*, 14(4), 719-736.

Haraway. Donna. Simians, *Cyborgs and Women: The Reinvention of Nature*. London: Free Association Books.

Himmelweit, Susan. 1995. The discovery of "unpaid work": the social consequences of the expansion of "work". *Feminist Economics* 1:2 pp. 1-19.

Hochschild Arlie Russel and Anne Machung, 2003. *The second shift: Working parents and the revolution at home*. New York: Penguin Group Inc.

Hoekstra Ate and Sineat Yon. "I love the boy': Cambodian surrogates forced to keep babies say they will care as best they can". Telegraph, 6 December 2018 (last entry 22/04/2019).

<https://www.telegraph.co.uk/news/2018/12/06/love-boy-cambodian-surrogates-forced-keep-babies-say-will-bear/>

Hoskyns, C., & Rai, S. M. 2007. Recasting the global political economy: Counting women's unpaid work. *New Political Economy*, 12(3), 297-317.

- Inhorn, Marcia. 2015. *Cosmopolitan Conceptions: IVF Sojourns in Global Dubai*. London: Duke University Press.
- Jacobson, Heather. 2016. *Labor of Love: Gestational Surrogacy and the Work of Making Babies*. New Brunswick: Rutgers University Press.
- Keeton-Olson Danielle and Sineat Yon. "Poverty and demand from China fuel illegal Cambodia surrogacy" *Al Jazeera* 13 December 2018 (last entry 24/04/2019).
<https://www.aljazeera.com/news/2018/12/poverty-demand-china-fuel-illegal-cambodia-surrogacy-181211042242119.html>
- Klein, Naomi. 2014. *This changes everything: Capitalism vs. the climate*. London: Penguin Books.
- Kroløkke, Charlotte, Karen Foss, Karen and Saumya Pant. 2012. "Fertility Travel: The Commodification of Human Reproduction". *Cultural Politics*. 8(2): pp. 273-282.
- Lewis, Sophie. 2016. "Gestational Labors: Care Politics and Surrogates' Struggle". In: S. Hofmann, A. Moreno (eds.), *Intimate Economies: Bodies, Emotions, and Sexualities on the Global Market*. Palgrave. pp. 87-112.
- Lewis, Sophie. 2017. "Defending Intimacy against What? Limits of Antisurrogacy Feminisms," *Signs: Journal of Women in Culture and Society* 43, no. 1: pp. 97-125.
- Lewis, Sophie. 2019. *Full Surrogacy Now*. London: Verso Books.
- Mac, Juno and Molly Smith. 2018. *Revolting Prostitutes. The Fight for Sex Workers' Rights*. London: Verso Books.
- Mezzadri, Alessandra. 2017. *The Sweatshop Regime. Labouring bodies, exploitation and garments made in India*. Cambridge: Cambridge University Press.
- Mezzadri, Alessandra. 2019. On the value of social reproduction. Informal labor, the majority world and the need for inclusive theories and politics. *Radical Philosophy*. 2.04 pp. 33-41.
- Mies, Maria. 1982. *The Lace Makers of Narsapur: Indian Housewives Produce for the World Market*. London: Zed Press.
- Mies, Maria. 2014 (first published 1986). *Patriarchy and accumulation of a world scale: Women in the international division of labour*. London: Zed Books.
- Mitchell, Katharyne, Sallie A. Marston and Cindi Katz. 2004. *Life's Work: Geographies of Social Reproduction*. Blackwell Publishing Ltd.
- Mitra, Sayani. 2018. Cross-Border Reproflows: *Comparing the Cases of India, Germany, and Israel. Cross-Cultural Comparisons on Surrogacy and Egg Donation: Interdisciplinary Perspectives from India, Germany and Israel*. S. Mitra, S. Schicktanz and T. Patel. Cham, Springer International Publishing: 83-102.

- Moore, Jason. 2014. "Capitalism as Frontier: On the Nature and Value of 'Socially Necessary' Unpaid Work"
<https://jasonwmoore.wordpress.com/category/uncategorized/page/2>
- Moore, Jason. 2015. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.
- Moreno, Adi. 2016. Crossing Borders Remaking Gay Fatherhood in the Global Market. Unpublished doctoral thesis. University of Manchester. Department of Sociology.
- Nakano Glenn, Evelyn. 1992. From Servitude to Service Work: Historical Continuities in the Racial Division of Paid Reproductive Labor. *Signs* 18(1): pp. 1-43.
- Office of National Statistics. 2017, Childbearing for women born in different years, England and Wales: 2016: The changing composition of families over time, comparing the fertility of women of the same age and the number of children they have had.
- Pande, Amrita, 2009. "Not an "Angel", Not a "Whore": Surrogates as "Dirty" Workers in India". *Indian Journal of Gender Studies* 16(2): pp. 141-173.
- Pande, Amrita, 2010a. "At least I am not sleeping with anyone": Resisting the Stigma of Commercial Surrogacy in India". *Feminist Studies* 36(2): pp. 292-312.
- Pande, Amrita, 2010b. "Commercial Surrogacy in India: Manufacturing a Perfect 'Mother-Worker'". *Signs: Journal of Women in Culture and Society* 35(4): pp. 969-992.
- Pande, Amrita. 2011. "Transnational Commercial Surrogacy in India: Gifts for global sisters?" *Reproductive Biomedicine Online* 23: pp. 618-25.
- Pande, Amrita. 2014. *Wombs in Labor: Transnational commercial surrogacy in India*. New York: Columbia University Press.
- Patel, Raj and Jason W. Moore. 2017. *A History of the World in Seven Cheap Things. A Guide to Capitalism, Nature, and the Future of the planet*. University of California Press.
- Rajan, Kaushik Sunder. 2006. *Biocapital: The Constitution of Postgenomic Life*. Durham: Duke University Press.
- Raymond, Janice. 1989. "Reproductive Technologies, Radical Feminism, and Socialist Liberalism." *Reproductive and Genetic Engineering* 2(2):s.p.
- Roberts, Dorothy. Killing the black body: race, reproduction and the meaning of liberty. New York: Vintage Books.
- Rollins, Judith. 1985. *Between Women: Domesticity and Their Employers*. Temple University Press.
- Rudrappa, Sharmila. 2015. *Discounted Life: The Price of Global Surrogacy in India*. New York: NYU Press.

Rudrappa, Sharmila and Caitlyn Collins. 2015, "Altruistic Agencies and Compassionate Consumers: Moral Framing of Transnational Surrogacy", *Gender and Society*, 29:6, pp937-959.

Schurr, Carolin and Laura Perler. 'Trafficked' into a better future? Why Mexico needs to regulate its surrogacy industry (and not ban it)" Open Democracy 17 December 2015.

<https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/trafficked-into-better-future-why-mexico-needs-to-regulate/> (last entry 02/05/2019).

Schurr, Carolin. 2017. "From biopolitics to bioeconomies: The ART of (re-)producing white futures in Mexico's surrogacy market". *Environment and planning. D, Society and space*, 35(2), pp. 241-262. Sage 10.1177/0263775816638851

Schurr, Carolin. 2018. The baby business booms: Economic geographies of assisted reproduction. *Geography compass*, 12(8), pp. 1-15. Wiley-Blackwell 10.1111/gec3.12395

Spar, Deborah. 2005. "For love and money: the political economy of commercial surrogacy". *Review of International Political Economy* 12(2): pp. 287-309.

Spar, Deborah. 2006. *The Baby Business: How Money, Science, and Politics Drive the Commerce of Conception*. Boston: Harvard Business School Press.

Starza-Allen, Antony. Council of Europe rejects surrogacy guidelines. Bionews 17 October 2016

https://www.bionews.org.uk/page_9573 (last entry 02/05/2019).

Steans, Jill and Daniela Tepe. 2010. 'Introduction – Social reproduction in international political economy: Theoretical insights and international, transnational and local sitings'. *Review of International Political Economy*. 17(5) pp. 807-815.

Van Hoof, Wannes and Guido Pennings. 2015. "Risks and challenges for patients crossings borders for infertility treatment." In: Parry, B., Brown, T. and Dyck, I. (eds). 2015. *Bodies Across Borders: The Global Circulation of Body Parts, Medical Tourists and Professionals*. London: Ashgate: pp. 115-9.

Vora, Kalindi. 2012. "Limits of labour: accounting for affect and the biological in transnational surrogacy and service work". *South Atlantic Quarterly* 111:4 pp. 681-700.

Vora, Kalinda. 2015. *Life Support: Biocapital and the New History of Outsourced Labor*. Minneapolis: University of Minnesota Press.

Vora, Kalindi. 2019. After the housewife. Surrogacy, labour and human reproduction. *Radical Philosophy* 2.04 pp. 42-46.

Vrinda Marwah and Sharmila Rudrapa, On the surrogacy bill in India, *UT Austin Sociology*, 1 September 2016 (last entry 15/03/2019)

<https://sites.la.utexas.edu/utaustinsoc/2016/09/01/vrinda-marwah-and-sharmila-rudruppa-on-the-surrogacy-bill-in-india>

Waldby, Catherine and Robert Mitchell. 2006. *Tissue Economies: Blood, organs and cell lines in late capitalism*. Durham: Duke University Press.

Waldby, Catherine. 2008. "Oocyte markets: women's reproductive work in embryonic stem cell research." *New Genetics and Society* 27(1): pp. 19-31.

Walker, Richard. 2017. "Value and Nature: Rethinking capitalist exploitation and expansion". *Capitalism, nature and socialism* 28(1) pp. 53-61.

Walker, Richard and Jason Moore. 2017. "Value, nature, and the vortex of accumulation". In: *Interrupting the Anthro-po-ob(S)cene: Political Possibilities in the Natures of Cities*, Erik Swyngedouw & Henrik Ernstson, Eds., Routledge. pp. 48-68.

Waylen, G. 1997. Gender, feminism and political economy. *New Political Economy*, 2(2), 205-220.

Weeks, Kathi. 2011. *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries*. Durham: Duke University Press.

Willows Jen. "Consultation on surrogacy begins" BioNews. 10 June 2019 https://www.bionews.org.uk/page_143228 (last entry 30/09/2019)

Winddance Twine, Francis. 2011. *Outsourcing the Womb: Race, Class and Gestational Surrogacy in a Global Market*. New York: Routledge.

S.N. "Cambodia releases surrogate mothers who agree to keep children" BBC, 6 December 2018 (last entry 20/04/2019). <https://www.bbc.co.uk/news/world-asia-46466888>