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Cyborg witches: class composition and social reproduction in the GynePunk collective

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ABSTRACT

This paper takes Haraway's techno-scientific concept of the cyborg as the basis for understanding a feminist theory of class that is rooted in socially reproductive labour. Arguing that the *Operaismo* notion of class composition ignored reproductive labour as either a technical or political component of proletarian composition, this article claims that social reproduction in fact provides the foundation for both. Through the notion of the cyborg, this article situates class as a human and machinic con, which is at once conquered by capital's technological methods of accumulation but also finds its modes of resistance within these same convergences. Using the GynePunk collective's DIY reproductive health technologies as an example of class composition through cyborgic social reproduction, this article aims to develop a techno-feminist concept of class suitable to the prevailing technological conditions of our time.

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Introduction

In the Catalanian mountains west of Barcelona lies the small enclave of Calafou. An eco-industrial, post-capitalist colony built on the politics of self-management and technological innovation, Calafou is the unbiological birthplace of the GynePunk collective. As a queer collaboration of hackers and feminists, the GynePunk collective focuses on bodies as reconfigurable and hackable technologies, and adopts the devices of gynaecology as weapons of resistance by 3D-printing speculums and making their own centrifuges and microscopes from discarded hardware. Using gynaecological technologies but rejecting their techniques, the GynePunk collective merge the situated knowledges of women in struggle with contemporary technologies, body hacking with techno-making, and queer futurisms with feminist pre-histories. They form a collective of "cyborg witches" whose stated aim is to decolonise the female body, sharing their tools and trainings with queer, trans, migrant women, and sex workers. Their work allows us to concretise the engagement of bodies and their technologies in projects of a highly mediated feminist class struggle.

In the three decades since Haraway's "A Manifesto for Cyborgs" was published, the essay has become a touchstone for feminist media studies and techno-science, a "legend of late twentieth century scholarship" (Katherine N. Hayles 2006, 159). A work of "political invention"

(Nigel Thrift 2006, 189), the “Manifesto” has been used to reconsider gender, sex and sexuality, race, human–non-human relations, nature, embodiment, and technology, in fields as diverse as media studies, gender studies, geography, science studies, and anthropology.¹ Within the field of feminist media studies in particular the concept of “cyborg” has been used to explicate a variety of political subjectivities. For example, it has been used to understand the “cyber-queer” (Nina Wakeford 2000) who resists heteronormativity online; racial coding through different kinds of labour in the information economy in Lisa Nakamura’s (2002) “cybertyping”; non-normative sexuality and pleasure with Beatriz (Paul) Preciado’s (2013) dildo as “sexual cyborg”; and the black cyborg rebel in search of freedom beyond nationalist struggles, predatory humanity, and the use of technology as a mode of warfare in Joy James’ (2013) rethinking of Fanon. Cyborgs have also been critiqued by feminist theorists such as Judith Squires (2000) who argued that something valuable is left behind in the “cyberdrol” of feminist techno-science. Regardless, for many feminist theorists attempting to grasp something (in) essential in the body of resistance of the contemporary high-tech moment, Haraway’s cyborgs have been a productive framing through which to see new, non-normative and resistant possibilities.

Although Haraway’s work has taken other directions—moving away from the cyborg as a lens, frame, or figure—the project she outlined remains vital, perhaps now more than it was in 1985. The cyborg is woven through much contemporary theory, but the “red threads” of Haraway’s thought—the implications of the cyborg for an understanding of class and labour—have been less well considered. Further Haraway herself has suggested that the “Manifesto” has been taken primarily for its technological analysis, with an inclination to “drop the feminism” (Donna Haraway 2004, 325). In this paper I want to insist upon the simultaneity of a feminist, socialist, and technological reading of the cyborg. In following the GynePunk collective, this paper begins to imagine (new) sites of labour resistance to capital’s machinic organisation of systems of material production, alongside systems of social *reproduction*, and roots this resistance in an acknowledgement of the role of the witch—and women’s bodies—in the history of capitalism. From this I seek to develop a feminist concept of class suitable to the prevailing technological conditions of our time, one that highlights the entanglements of patriarchy, capital, and technology in practices of exploitation and resistance.

This requires a rethinking of class, not just the polis and the body, through the necessarily feminist lens of Haraway’s cyborg. I use this cyborg to develop a feminist understanding of “class composition”—particularly new compositions in the highly technologised present—which can centre issues of sex, gender, and sexuality. This necessitates a recasting of Marx’s understanding of the reproduction of labour—that which feminist theorists expanded and deepened through the concept of social reproduction—as central to theories of class struggle even in the prevailing technological conditions. Organismic–technological class compositions are not new (class composition itself is a cyborg, as we will see, and Haraway reminded us that women’s bodies have always been machine). But in the body/hacking projects of the GynePunk collective we can begin to see the cyborg witch as an emergent and highly technological figure of a class composed through the *labour* of social reproduction and the kinship networks this labour requires. Such cyborg witches illuminate the previously declaimed foundation of class struggle lying in feminised labour (Silvia Federici 2004; Maria Mies 1986/1998), and mark the techno-scientific cross hatchings of body and machine as a site for liberation, not only exploitation. Karl Marx (1977) pointed to the commodity as

a chimerical object full of labour and hence both embodied and technical; class too is a “mash-up of flesh-tech” (McKenzie Wark 2015, 136), filled with labours both productive and reproductive, organic and machinic. As the commodity obscures the embodied labour held within it, so too do most theories of class, persistently obscuring the labours of reproduction and hence the feminist struggles, theories, and labours that undergird any expression of class or class struggle. In this article I seek to lift the veil to reveal the present moment wherein a feminist techno-scientific notion of class converges through media, technology, body, and history.

In this article I begin by offering a definition of the *Operaismo* concept of class composition, illuminating the key role of social reproduction in such proletarian assemblages. I then examine social reproduction’s increasing digital mediation—especially in the high-tech economies of advanced capitalist states—understanding the deep integration of socially reproductive labour into capitalist circuits, accelerated by emergent technologies and their techniques. But, much as cyborgs are unfaithful to their patriarchal capitalist origins (Donna Haraway 1991), so too are the labours of social reproduction. In fact even a “cyborg social reproduction” is critical to contemporary class compositions, marking sites of accumulation but also of resistance, forming what Silvia Federici (2012) called the “point zero” of revolution. In the mountains of Catalan, cyborg witches re-emerge as key proletarian figures of the present moment, highlighting the mergers of flesh, technology, and the labours of reproduction that mark resistance in the twenty-first century. Reconceptualising class composition though such flesh-tech assemblages of cyborg social reproduction may pay off, in the final moment, by helping us to understand the stakes of contemporary debates about sexuality, sex work, and other forms of intimate and gendered labour.

Class composition: brief lineages

Class composition is a way of understanding the relation between capital and class organising in particular historical epochs, and is perhaps the most distinctive theoretical contribution of the Italian *Operaismo* tendency, rooted in the extra-parliamentary struggles of 1970s Italy. For the theorists of class composition the working class is, just like capitalism itself, a mix of bodies and machinic technologies and their interrelations at particular historical conjunctures (Antonio Negri 1991; Rodrigo Nunes 2007; Ben Trott 2007). Reversing most Marxist theories of class struggle, and inverting Marx’s organic composition of capital,² the composition thesis defines the power and organisation of labour power configured *against* capital and sees this organisation as the primary—read initial—force in cycles of class struggle.

As such, class composition highlights a division within capitalist relations between the organisation of labour power by capital (the *technical* composition) and the organisation of the working class against capital (the *political* composition). The theory of class composition suggests that the way the working class organises to defeat capital configures how capital comes to organise labour in the factory, often by making use of advancements in productive technology. This then alters how the working class structures its resistance, again altering the capital’s organisation of labour, and so on in an on-going “cycle of struggle” that sees class power decompose and recompose with differing technological capacities in different historical epochs (Nick Dyer-Witheford 1999). This is to say, changes in the technical composition open up new modes of political composition or as capital changes its modes and

methods of production to better control labour struggles, certain possibilities for organising working class resistance are closed and new possibilities emerge. Class composition represents, at a theoretical level, a return to the central, historical importance of class struggle as waged by workers in processes of change, and “the process of socialisation of the working class, and the extension, unification, and generalization of its *antagonistic tendency against capital*, in struggle, and *from below*” (Negri 1991, xi).

Negri (1991) traces this history of class composition through the twentieth century; an abridged discussion of which can be found in Finn Bowring (2004). Citing Negri (1991), Bowring notes that the industrial revolution brought skilled labour into hierarchically organised factories—the technical composition of the class in this period. These workers were organised in Leninist style parties with an intellectual vanguard—the political composition, which was referred to as the “professional worker.” In the mid-twentieth century this skilled professional worker had been replaced by the massification of production in Fordist-inspired factories (technical composition). The collected workers were organised in the radical trade unions that Negri (1991) deemed emblematic of the political composition of this “mass worker.” By the 1970s post-Fordism began to proliferate, and workers were shunted out of the factory by the increasing computerisation and automation of production. With the increasing technologisation of production capitalist social relations grew increasingly immanent to the machine and thus the “social itself emerge[d] as a vast plane of capitalised activity” (Nicholas Thoburn 2003, 78). Both workers and their struggle leaked from the factory and settled itself into this social realm, as workers’ productive capacities increasingly became “embedded in, and work directly on, social networks of communication and cooperation which spread well beyond the domain of the factory” (Bowring 2004, 112). This vision of a “socialised worker” is primarily centred on productive labour through the expansion of struggles in the tertiary sector, what Marx (1977) considered the “unproductive” moments in capital’s circulation—communication, media, transport, education, health care, finance, and the production of culture—all of which come to be directly mediated by the wage.

This socialised worker and social factory thesis, then, do not do enough work comprehending the importance and value of that which has been specifically unwaged—the caring labour necessary to the maintenance of capitalist growth. Nor does it account for gendered social relations as determinate of broader relations of work articulated through affective labour, care, and communication. That is to say: as a theory class composition neglects entirely the reproduction of the material basis of the economy—labour power (workers) and the social relations and society in which they emerge. This reproductive labour has historically been the domain of women and people of colour, is often unpaid, and with great frequency is considered outside of, if not an obstacle to, processes of revolutionary transformation. *This* is the labour of social reproduction. Such labours, as accumulative but more so as resistant, are illuminated in GynePunk’s project of seizing the means of *reproduction*—the feminine body as embodied—and reimagining it as a site of struggle. Configuring this seizure as an explicit moment of *class* struggle necessitates the incorporation of feminist theories of social reproduction.

Social reproduction: embodied and machinic

In the nineteenth century, social reproduction theory sought to answer the question of

how a collection of associated individuals, members of specific classes (rentier, capitalist, worker) and connected only by contract, could reproduce itself in such a way that, after a cycle of production and circulation of commodities, the same individuals and classes would reappear. (George Caffentzis 2002, 5)

Karl Marx (1978) elaborated on the initial theory by noting that, in reproducing itself, capitalist production “produces not only commodities, not only surplus-value, but it also produces and reproduces the capitalist relation: on the one side the capitalist, on the other the wage-labourer” (Marx 1978, 578). In this, social reproduction reproduces its own contradictions. In the Marxist tradition, social reproduction tends to mean the reproduction of the social or society.

While in the Marxist tradition social reproduction often refers to the reproduction of the social relations of capital, the feminist Marxist tradition has been much more precise in its definition. Social reproduction is understood as the quotidian and intergenerational maintenance and reproduction of *life*. It designates the ways in which the physical, emotional, and mental labour necessary for the production of human populations is socially organised—i.e., as “food preparation, youth education, care for the elderly and the sick, as well as questions of housing all the way to questions of sexuality” (Cinzia Arruza 2014, np). The feminist analyses of social reproduction not only correct a gender blindness at the core of most theories of the economy and class struggle—including Marxist theories—but suggest an alternative mode of understanding capitalist and anti-capitalist relations that place care-giving at the centre (Kate Bezanson and Meg Luxton 2006). Such caring labours take place within the home,³ within the institutions of the state,⁴ and increasingly in the private sector.⁵ Social reproduction takes place in those sites wherein the labour of building the relations of both capital and resistance are carried out. Although not explicitly Marxist in their orientation, the GynePunk collective’s work in collectivising knowledge around sexual and reproductive health, particularly for marginalised people, is an engagement in the labour of social reproduction. GynePunk aims to seize—and then hack—the means of reproduction, both in terms of the feminine body itself, but also the tools that permit its visibility in health discourses. Shaking the feminine body loose from its position in circuits of capital accumulation, GynePunk turn to wield the body as an insurrectionary weapon. It is the feminist theorists of social reproduction that point us to understandings of GynePunk’s work as part of a recomposition of the class in the prevailing technological conditions.

Although Frederick Engels (2010) argued that control of women’s labour (sexual, reproductive, and productive) resulted from the social relations of capitalism neither Marx, nor generations of Marxists to follow, saw the unwaged work consumed in the production of labour power as a site for critical analysis of capital. Domestic or reproductive labour was never considered part of the production process or equivalent to productive labour. Throughout the late nineteenth and twentieth centuries Marxist-feminist theorists have insisted upon the productivity of the reproductive realm, and the fundamental role of reproductive labour to the circulation of capital.⁶ Federici (2012) reminds us that producing and reproducing labour power and the social world of human beings has been as important to capitalist development as the factory system and commodity production. Alongside caring labour in the home, Marxist feminists began looking at the “gendering of waged emotion labour in the expanding service industries” (Michelle Murphy 2015, 7) as an additional aspect of care politics. In designating social reproduction as a form of labour and in articulating how this labour is organised, this work emerges as an important element of the *technical*

composition of the class. In the twenty-first century Arruza examined the “mobile and porous qualities of the home” (2014, np), alluded to in early feminist theorisations of social reproduction. These qualities illuminate the extent to which social reproduction grows increasingly channelled through digital networks, mediated by consumer, medical, and communicative technologies (Ursula Huws 2014), as well as the networked communication technologies that create the pathways for social relationships and care (Kylie Jarrett 2014; Elise Thorburn 2014).

Channelled into advanced health and eldercare technologies for example, social reproduction that flows through emergent digital and mobile devices often minimises the need for labour power or the wage, contributing further to the capitalist organisation of reproductive labour power. All of these, I argue, constitute a component of the technical composition of twenty-first century capital, invoking a *machinic* social reproduction. Of this machinic social reproduction—especially in reference to robots for ageing populations—Evgeny Morozov asks: is this not the collapse of “socialised public institutions that were meant to deliver care of the more humane variety?” (2015, np). But as feminist scholars (Bezanson and Luxton 2006; Mariarosa Dalla Costa and Selma James 1972; Federici 2004, 2012) have long noted, this labour has always been, at least partially, in the service of capital accumulation and thus somewhat alienated. Machinic social reproduction simply tends towards the more subsumptive, further obscuring the reproductive *labour*—and hence feminised foundations—in class composition. Such highly technologised machinic social reproduction makes embodied socially reproductive labour even more invisible, and erasing the waged work of mostly women that previously defined, commodifying that reproductive labour within digital networks. Although none of these commodifying or securitising technologies of social reproduction pose a crisis for capitalism, such highly commodified and securitised machinic social reproduction does mark potential crisis points for the reproduction of human beings *outside* of their existence as labour power. Thus machinic social reproduction portends possible obstacles to the completion of a reproductive circuit.

But, as Federici (2012) has insisted, social reproduction—even a machinic social reproduction—possesses a dual character, holding the possibility of producing and reproducing resistance. While accumulating commodities for capital—docile and obedient subjects of labour power—social reproduction also (re)produces human life. Social reproduction is the labour upon which life depends, all those activities which “enable the basic means with which to create and sustain cooperative relationships” (Gareth Brown, Emma Dowling, David Harvie, and Kier Milburn 2013, 90), not simply relationships of accumulation. Like Haraway noted of cyborgs, social reproduction always holds the potential of being unfaithful to its origins, patricidal to the capitalism which bestows upon it its capacity as “labour.” The late 1960s and 1970s Marxist feminist fixation on reproductive labour emerged at the same time as the proliferation in GynePunk’s prefigurations: “feminist self help” projects. These were feminist reproductive and sexual health collectives that held lay-lead, do-it-yourself gynaecological exams, pap smears, and “menstruation extraction” or early-term abortions (Michelle Murphy 2012). Such feminist projects brought a racialised and transnational lens to theories of class struggle; in transnational political economic frameworks care came to be “stratified reproduction” which was bisected by capitalism, race, migration, and citizenship alongside class (Murphy 2015). In *this* way social reproduction can be seen as forming a component of the *political* compositions of the class—the organisation of working class resistance on a global scale, with a foundation in feminist networks, not fearful of seizing technologies, both

organic and inorganic. Following Haraway we might then call this a *cyborg* social reproduction. Understood as the foundation for *both* the technical *and* the political composition of the class, cyborg social reproduction might be a site out of which radical new modes of life may emerge that are, in tandem with the prevailing technological conditions, both ambiguously natural and crafted. Cyborg social reproduction may be a “technological polis based partly on a revolution of social relations in the *oikos*, the household” (Haraway 1991, 293)

Cyborgs, cyborg class composition, cyborg social reproduction

Haraway’s cyborg has been read as a figure of resistance, a lens through which to understand bodies as assembled both by machines as much as through difference. The cyborg is a figuration, but also “an obligatory worlding,” a “military project, a late capitalist project in deep collaboration with new forms of imperial war” and a model of resistance that “opens radical possibilities” (Nicholas Gane 2006, 139). Haraway inhabits the cyborg critically, neither in celebration nor in condemnation but rather “in a spirit of ironic appropriation for ends never envisioned by space warriors” (Donna Haraway 2003, 4). Initially the “Manifesto for Cyborgs” was written as a provocation against the feminisms that had articulated a deep division between nature and technology; it contended with the ways digital and electronic technological advancements reshape social relations and make possible new economic structures. In the tech-based economy that was only just emerging as Haraway’s cyborg came into being, both labour and poverty grow increasingly feminised and racialised, and militarisation expands to subsume even (and beyond) our imaginations (Haraway 1991). The nexus of forces—capitalist, military, patriarchal, and white supremacist—that gave rise to the cyborg highlighted a problem that called for newly resistant measures. There remains an urgency for feminist theory and practice to account for this integrated circuit.

In the “Manifesto” Haraway (1991) evoked the cyborg as a figure in which bodies and technologies intermingled, noting that we as humans have always been imbricated and interdependent with micro-organisms, affects, technologies, and other “others” who co-compose us. Noting the leaky boundaries of human and non-human entities she writes:

The machine is not an *it* to be animated, worshipped, and dominated. The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; *they* do not dominate or threaten us. We are responsible for boundaries; we are they. (Haraway 1991, 180)

And yet cyborgs cannot be considered ahistorically, she asserts, while at the same time resisting the suggestion that the cyborg figure of today has always existed in precisely this form. A metanarrative of the always already cyborg doesn’t adequately communicate the “ferocity and specificity of now” (Gane 2006, 146).

As a future model for socialist-feminist resistant strategies in techno-dystopian times the cyborg is one amongst many, Haraway later argued. It is the junior sibling “in the much bigger, queer family of companion species” (Haraway 2003, 11). Regardless of their junior or senior status, cyborgs enable us to determine a sociality between humans and non-humans, a relationality that is central to developing a feminist techno-scientific theory of class composition. In feminist theorisations this relational quality has been central—for Sandoval it was the relation of colonised peoples to systems and legacies of oppression that rendered them always already cyborgs, possessing the “cyborg skills required for survival under techno-human conditions” (Chela Sandoval 2000, 375). It was from Chela Sandoval (1991) that Haraway obtained the term US Third World Feminism, and it was Sandoval who perhaps

most famously made use of cyborgs to clarify a “methodology of the oppressed” which provides “guides for survival and resistance under First World transnational cultural conditions” (2000, 375). For James’ intensively racialised and anti-imperialist figure, the cyborg is a rebel intellectual who is “individual and collective, in overt and covert rebellion” and who is “born at that moment in which the convergence of interests among anyone and *everyone* seeking or dodging freedom is inescapable and inescapably recognised; the cyborg glimpses the possibilities of permanent revolution, as the veil descends” (2013, 61). Thus, in James’ account the cyborg is a figure of relational solidarity; following Fanon, the black rebel cyborg engages an expansive kinship that extends beyond the biological family and into the mass of people.

The cyborg is then a way of thinking solidarity—and composition—in transnational, inter-sectional terms, within and through conditions of twenty-first century techno-capitalism. For GynePunk the term “cyborg” has been invoked because of their embodied-technological interminglings, but this invocation reminds us that their project is collective, one of liberation for women regardless of citizenship, site of labour, gender, or class. Cyborgs are shaped by the relations developed through social movements around labour, race, gender, sexuality, indigenous rights, and anti-capitalism. In these struggles the machinic becomes ambiguous—neither entirely good nor bad but rather an “intimate stranger” (Wark 2015, 151) whose relation to us is powerfully felt.

Similarly class composition also marks a point of relation between bodies and machines, subjects and structures of the world, between technologies (infrastructures, orderings) and embodied subjects. Class composition describes a process wherein relations between people, politics, practices, and technologies converge at one site, expand outwards, break off, decompose, recompose, and converge elsewhere forming what *Operaismo* theorists called the cycle of struggle. But as a theory class composition has always been in uneasy relation to machinic technologies, as well as to the embodied technologies (broadly defined) of social reproduction. Bringing cyborg theory together with theories of class composition offers us a way to think through those relations of body and technologies, production and reproduction, and to disenable the “crafted/natural” binary of contemporary labour, de-centring certain “productive” proletarian bodies from discourses of resistance. In eradicating “naturalised” conceptions of the proletariat—i.e., white, male, industrial—class composition seen through the lens of the cyborg opens up the potential for affinity-based assemblages rooted in social reproduction. This can open theories of class to new configurations and new members from previously excluded subjects—domestic workers, racialised women, queer and trans people, the poor and unemployed, for example. This cyborg-enabled class composition can recentre social *reproduction* as both contributing to the technical and political composition of the proletariat thus demanding a feminist engagement. Finally, this cyborg class composition with its socially reproductive foundation highlights the cross-hatching of body and machine that has made up—and continues to make up—iterations of class and class struggle since at least the Industrial Revolution.

It is perhaps for this reason that Michael Hardt and Antonio Negri (2001) also invoked Haraway’s cyborg in their exploration of multitude as a post-class composition for the new century. Her insistence on the potential of cyborgs to construct “ontologically new determinations of the human, of living” (Hardt and Negri 2001, 217) became central to the thesis of multitude. Still, they remind readers that the cyborg is a fable and nothing more. To actualise the new terrains of autonomy that the cyborg promises, Hardt and Negri return to a focus

on the common experiences in the new productive practices, and “the concentration of productive labour” (2001, 218). They return us once again to the assemblage at the heart of capital *and* labour, but insist on the priority of the productive. For Hardt and Negri the new “new communicative biological and mechanical technologies” (2001, 218) reside on the terrain of production, and only here, in production, are resistant practices motivated. Conversely, the collective labours of GynePunk demonstrate for us that a motivating force capable of activating and grounding resistance resides precisely in the human machinic assemblage of social *reproduction*—a cyborg social reproduction indebted, in fact, to witches.

In this final section, then, I want to use Haraway’s cyborg to understand how the relations of class composition are deeply marked by both the “unproductive” labour of social reproduction, and the resistant recombinations of new technologies and old knowledges. As Hayles (2006) noted, although the “Manifesto” was drafted in a moment of deep political conservatism and technological enthusiasm, contemporary formations of life are even more transformed by networked, programmable, and automated technologies. Modes and theories of resistance must reflect this reality, and begin to mark the sites for potential class compositions that appear new but are connected to older processes evident since capital’s advent.

The cyborg witches of social reproduction: new class compositions in Catalan

To find the convergence point between cyborgs, social reproduction, and class composition we must travel back to the mountains west of Barcelona, returning to the GynePunk collective, those self-described “cyborg witches” (Ewen Chardronnet 2015) who hack the body and manipulate technology, uncovering and discovering new modes of resistance. Part of the political project of GynePunk is to dismantle patriarchal approaches to healthcare and resist healthcare systems that oppress, humiliate, and refuse treatment to people—primarily women and trans people—on the basis of their lack of official status or documentation, their engagement in sex work, their class position, or poverty. As hackers they work to develop their own technologies that permit people to reassert autonomy over their own bodies and reproductive capacities, and use their hacked-tech to allow people to develop knowledge and understanding of how their bodies work.

GynePunk’s focus on gynaecological health is no accident, and in fact fits into a trajectory of feminist social movements since at least the middle of the twentieth century.⁷ As a discipline, gynaecology came to be recognised through the work of one of the most decorated yet controversial American surgeons—J. Marion Sims. Sims’ career was built upon the repair of vesicovaginal fistulas, and the techniques for such repairs were honed over four years (1845–1849) of experimentation in which he performed dozens of unanesthetised surgeries on three enslaved black women—Anarcha, Betsy, and Lucy (Terri Kapsalis 1997). These and other enslaved women were human beings whom Sims had “purchased and kept on his property” (Sara Spettel and Mark Donald White 2011). Similar to the processes by which capitalism, private property, and enclosure find their foundation in, often racialised, women’s bodies and socially reproductive capacities, so too did gynaecology as a distinct medical subfield come to be through the convergence of patriarchy and economic imperatives. This was part of an on-going tradition of advancements (economic and professional) in the medical profession being made on the backs of marginalised populations (Spettel and White 2011).

Sims' surgical experimentations were not only for his own benefit—although he became a wealthy man, still today feted with statues and considered the “Father of American Gynaecology” and the “Architect of the Vagina” (Kapsalis 1997, 31).⁸ Gynaecological surgeries also served a purpose for private capital accumulation: the repair of vesicovaginal fistulas was meant to enable enslaved women to return to their work as both productive and reproductive labourers. As Angela Davis has noted

owners had a financial interest in slaves producing children and openly encouraged “breeding.” Women known as breeders brought higher prices on the slave market and might enjoy special privileges such as a job in the master's house rather than in the fields. (Angela Davis 1971, 2)

Enslaved women's bodies were viewed as both fixed capital and as commodities—the reproduction of the institution of slavery rested upon “the slave woman's reproductive capacity” (Deborah Gray White 1985, 124–125). They were also receptacles for white male sexual power—white slave owners “expected to exercise sexual freedom with women slaves” (John D'Emiliano and Estelle B. Freedman 1988, 94). In the medical foundations of women's reproductive and sexual healthcare, there is a centrality to histories of the capitalist enclosure of social reproduction and the patriarchal imperatives that made it possible.

This racist, patriarchal, and accumulative history of gynaecology as a discipline inspired GynePunk collective members to begin their own process of decolonising the body—the female-marked body in particular—reclaiming control over internal reproductive and sexual health (Chardronnet 2015). Their attempting to free sexual and reproductive health from its embeddedness in capitalist patriarchal systems offers an example of resistant social reproduction—labours of care struggling within and against exploitative paradigms. It is their view of the body as a technology and their invention of new and DIY diagnostic tools that marks them as cyborgs; their reclamation of ancestral women's knowledge around reproductive and sexual health that makes them witches. Taken together, this work marks the GynePunk collective as cyborg witches of social reproduction, emergent figures of an unfolding feminist class composition.

In practice these cyborg witches have, in collaboration with the Hackteria network, assembled a biohacking toolkit that can analyse body fluids and test for, for example, cervical cancer. To this end they have developed three technologies: a centrifuge made from a computer hard drive, a microscope developed from a webcam, and an incubator that grows bacteria in a petri dish. In the context of vaginal and pelvic exams, the centrifuge can be used to separate solids from liquids and to decant contents for microscopic examinations. The microscope identifies, by colour, urinary and genital fungal infections, and can pick up on cells indicating cervical cancer when the cervical area is sprayed with vinegar. They have also begun 3D-printing speculums—the tool invented by and often named after Sims—so as to allow people to perform their own basic gynaecological exams without accessing often hostile medical institutions (Chardronnet 2015). In this work their goal is to develop the tools of emergency and diagnostic gynaecological medicine, which they compare to the harm-reduction kits for drug users found at many shelters and drop-in centres. This kit, they believe, can be useful for undocumented workers and migrants who lack health coverage, for trans people, for refugee camps, and for sex workers (Chardronnet 2015).

Beyond creating such diagnostic technologies, GynePunk members define themselves as and collaborate with hackers. They understand the body as a technology to be hacked, reclaiming it “from the established ideas of sex and gender” (Chardronnet 2015, np). Collective member Paula Pin argues that body hacking enables GynePunk members to “find our own

ideas and technologies, to help us be free, autonomous, and independent from the system” (Chardronnet 2015, np). Such resistances that prioritise autonomy of (reproductive) workers aligns with the *Operaismo* aim of class composition which was to identify movements which emphasise “the autonomous power of workers—autonomous from capital, from their official organisations (e.g. trade unions, the political parties) and, indeed, the power of particular groups of workers to act autonomously from other groups (e.g. women from men)” (Cleaver, quoted in Steven Wright 2008, 116). As a theory, class composition meant to identify a new expression of struggle that would permit autonomy in revolutionary groupings and build alliances based on affinity rather than necessity. Similarly, so does GynePunk advance new prospective sites and expressions for the composition of class struggle, in both its technical and political components. Such cyborgic reproductive class resistances as those found in GynePunk connect to recent feminist histories of struggles over reproduction, such as the Jane Collective (also known as the Abortion Counselling Service of Women’s Liberation) based in Chicago in the 1970s. Such movements of cyborg social reproduction—bringing bodies, technologies, and knowledge together—are part of a class composition that can centre technological convergences and marginalised bodies as sites and subjects of resistance.

Federici (2004) has carefully elucidated this relation between women’s bodies and control over social reproduction as a key foundation for the development of capitalism—and also a key site of resistance. In *Caliban and the Witch* she argued that the subjugation of women, women’s bodies, and their reproductive capacities was a form of primitive accumulation that served as the originary ground for the development of capitalism. The witch hunts of Early Modern Europe were, she argued, no experience of mass murderous psychosis on the part of a patriarchal world order, but rather were a deliberate policy of the ruling class. The witch hunts served to terrify women into accepting a “new patriarchal order where women’s bodies, their labour, their sexual and reproductive powers were placed under the control of the state and transformed into economic resources” (Federici 2004, 170). At the same time, Federici notes that women’s sexuality was seen as a potential source of power over men, and thus an object of suspicion. New laws were developed to wrest control over reproduction from women. This involved making suspect women’s knowledge practices, banning birth control measures, replacing midwives with male doctors, and outlawing abortion (Federici 2004).⁹ Such an atmosphere of control over women’s reproductive knowledge and autonomy continued long past the witch hunts. It was this overarching ideology of patriarchal control that made possible Sims’ “discovery” of gynaecology and points to the ways that technological innovation and use are generated by and institutionalise structures such as racism, patriarchy, and accumulation via social reproduction. Federici argued that the enclosure of women’s knowledge—and by extension their bodies—was part of the process of turning women’s bodies into machines “for the reproduction of labour” (2004, 144). Of course, connected to this was the erasure of non-productive forms of sex and sexuality, and the estrangement of pleasure from sex.

It was no happy accident that the seventeenth century witch hunts co-occurred with the beginnings of capitalism, the processes of colonisation, and the transatlantic slave trade. Further, both the witch hunts and the “repairing” of enslaved women’s reproductive capacities were part of capital’s organisation of socially reproductive labour power—the technical composition of the (soon to be) working class. Taking away women’s control over their reproductive capacities was part of this technical composition—organising social reproduction

as labour—and marking women's bodies as sites for the production and reproduction of capital.

The twenty-first century cyborg witches of GynePunk aim to reassert autonomous control over this labour, “updat[ing] ancestral knowledge with the independent use of technology” (Chardronnet 2015). Such connects between cyborgs and witches centred on social reproduction helps us frame techno-embodied feminist reproductive resistances to a history—and present—of class composition in both its technical *and* political manifestations. With the reclamation of both the means of reproduction and the processes of social reproduction GynePunk's cyborg witches demonstrate how alternative working class organisation can take place. Their hacking of both bodies and technologies and their refusal of the subsumption of reproductive labour serves as an act of anti-capitalist resistance.

From Federici (2004, 2012) and Haraway (1991) we see that these reproductive resistances, these socially reproductive cyborgs, are not new, but perhaps only newly recognised as components of class composition and struggle. Through the lens of Haraway's cyborg we can de-essentialise the body of resistance, and reframe the subjects and sites of struggle, centring social reproduction in compositions of class, and insisting upon new class compositions emerging in the cyborg social reproduction of new collectives of witches. Such cyborg witches generate new understandings within the field of media studies, centring feminist approaches, demanding an understanding of media in both the domination and liberation of women's bodies. Understanding mediated social reproduction as central to the liberatory work of cyborg witches reshapes the narratives through which media studies has come to understand technological change, media technologies, and their uses, resistant and otherwise. Such cyborg witches as these of the GynePunk collective might serve as new figures of resistance: highly modern cyborgs assembled through centuries of resistant witchcraft, their hacked technologies repurposed as tools in struggle.

Notes

1. For example, a recent special issue of the Australian media and communication journal *Platform* revisited the legacy of “A Manifesto for Cyborgs” thirty years on, covering multiple topics including: the relevance of the cyborg today; the fungus *candida albicans* as cyborg-like companion species; a comparative reading of accelerationism with cyborg theory; amputation and prostheses read through the concept of the cyborg; as well as the films of Pola Weiss analysed with cyborg theory.
2. Coming directly from Marx's analysis of capitalist production in Volume 1 of *Capital*, the organic composition of capital refers to the ratio of constant capital to variable capital in the capitalist mode of production. Constant capital is the value invested in, and thus embodying, the means of production (Marx 1977). A physical asset whose value is transferred to a commodity in production, constant capital includes machines, raw materials, buildings, etc. Variable capital is the value invested in labour power through wages, and is embodied in the means of subsistence necessary for labour power's reproduction. This is sometimes referred to as the ratio between dead labour and living labour—dead being the inert parts such as tools, living being the active labourer. This merger of living and dead, variable and constant, is the specific form that the capitalist mode of production gives to the relationship between the means of production and labour. Marx's theory of value asserts that the exploitation of living labour is the source of surplus value; variable capital is the only part of capital that allows the capitalist to increase surplus value.
3. Childcare, eldercare, cooking, tending to emotional needs, and engaging in sex.
4. Healthcare, education, and the social safety net, for example.

5. In the retail and service sectors for example, and with the increasing privatisation of care work.
6. This includes, but is not limited to: Teresa Amott and Julie Matthaei (1991), Catherine Beecher (1841), Margaret Benston (1969), Angela Davis (1983), Christine Delphy (1984), Federici (2004), Charlotte Perkins Gilman (1898), Heidi Hartmann (1979), Rosemary Hennessy (2003), Lisa Leghorn and Katherine Parker (1981), Mies (1986/1998), Mary O'Brien (1981), Adrienne Rich (1980), Ellen Richards (1915), Helen Saffioti (1978), and Lise Vogel (1995).
7. For an unparalleled look at the history of "feminist self-help" movements in the United States see Wendy Kline (2010), Sandra Morgen (2002), and Murphy (2012).
8. While there is vigorous debate in popular and historical literature, within medical journals and textbooks debate about Sims' legacy has remained limited and static. Statues, plaques, and honours to him pepper South Carolina (where his experiments took place), as well as a controversial statue opposite the New York Academy of Medicine in Manhattan (Kapsalis 1997). A 2010 poll on EastHarlemPreservation.Org found that 62 percent of respondents wanted the statue removed, but medical texts continue to focus primarily on Sims' legacy as an originator of vesicovaginal fistula surgeries, making only the slightest nod to the controversy his practices ignited, even in the nineteenth century (see Kapsalis 1997; Spettel and White 2011).
9. It should also be noted that Sims claimed that the prevalence of vesicovaginal fistulas in enslaved black women resulted from their use of midwives in childbirth rather than medical doctors, ignoring the fear many black women likely felt at the prospect of visiting white, male, medical professionals.

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