

Transhumanism As the Evolution of the Real Subsumption of Labour Under Capital

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ABSTRACT: In the fight of living against dead labour, dead labour has consistently demonstrated a cunning ability to convert losses into victories. The enforcement of labour laws in key industrialized states in the 1860s, an apparent victory for the living, saw capital shift from absolute to relative surplus-value production, which was in the end a more efficient means to procure unremunerated value. In the mid-1900s (again in key nations) living labour won a greater “standard of living”: capital turned consumption into immaterial production, and generated a cunning stream of value creation that living labour engaged in without coercion or *wages*. Hardt and Negri call this (and the commodification of other realms of life) the real subsumption of *society* under capital. In our century, living labour is aiming higher, at a “pleasure existence” free of pain and death. A Marxist analysis of transhumanism ought to focus on the potentiality for the transhuman state to be one of constant unremunerated value creation. Kurzweil invites us to welcome nanobots into our bodies, or to climb out of our bodies into drones or even entirely digital worlds. Yet if there is still a battle waging between living and dead labour we should be wary of the colonization of our bodies by technoscientific capital and should eschew abandoning our bodies – if this represents the total absorption of living labour (which will no longer technically “live”) into dead labour *qua* digital capital.

KEYWORDS: Transhumanism; Marx; real subsumption; hyper-subsumption

Introduction

This paper argues that transhumanism is the evolution of the real subsumption of labour under capital, following a nascent thought of Marx’s from the *Grundrisse*, that the ultimate logic of subsumption is *incorporation*: dead labour pulling living labour into itself. “Thus the appropriation of labour by capital confronts the worker in a coarsely sensuous form; capital absorbs labour into itself – ‘as though its body were by love possessed’” (1973, 704).

The first part plots the past trajectory of the subsumption of labour under capital, and extrapolates the future of this subsumption, positing that real subsumption follows a path from brutality to

a more pastoral model – from a negative model of expanding and stealing labour-time (extending the realm of necessity) to a positive or creative model of converting not-labour-time into value production (colonizing and negating the realm of freedom). The second part studies the method of the evolution of the subsumption of labour under capital. In an expansion of universal alienation (Harvey 2018) – in which living labour is converted into a mere means of value creation, a servant of already existing values desiring ever greater valorization – dead labour attempts to erode the difference between living labour and itself, via an alteration of both, in which dead labour

gains for itself the traits of individuality, sociability, speech and thought, etc., becoming *lifelike*, and living labour becomes generic, predictable, programmable, less prone to physical breakdown and more rational, i.e., *machinic/thinglike*. Marx of course discussed this trend, noting “the conversion of things into persons and the conversion of persons into things” (1982, 209); and “progress ... result[ing] in endowing material forces with intellectual life, and in stultifying human life into a material force” (Marx 1969, 500), and these particular ideas – usually called his theory of “reification” because György Lukács applied this term in early discussions on this theme (1971, 49) – ought not to be left out of a discussion of Marx and transhumanism. Nick Dyer-Witheford (1999) has already noted that Marx followed the work of Charles Babbage, and saw human attempts to create more intelligent machines to be consonant with the general trend of “reification,” not something new and strange, but rather a perfectly logical continuation of what dead labour had been doing all along: becoming, or attempting to become, more *human*.

I argue in the second part that this continuing trend of universal alienation or reification is entering a heightened phase, beyond a somewhat vague notion of the personification of things and the reification of people. Today dead labour is deliberately and explicitly attempting to *attain* the basic attributes of life, and living labour is just as deliberately and explicitly attempting to *discard* the basic attributes of life: the goals of some variants of transhumanism (e.g., Ray Kurzweil), “spiritual machines” and human beings that do not age or decay, represent the culmination of reification and the finalization of the real subsumption of living labour under capital. The second part argues, admittedly rather speculatively, that the creation of the transhuman represents the extermination of both living and dead labour – which, as I will argue later, are today still distinct – and the creation of *homogenous undead capital* that has no purpose except to self-valorize: in short, it represents the *absorption* of labour into capital, the dream of capital now ideologically dreamed by us. The solution, which is gestured to in both parts, is to follow Marx, and 1) *embrace* the growing complexity and intelligence of

technology, and 2) *protect* ourselves from this system becoming one in which “the process of production has mastery over man, instead of the opposite” (1982, 174-175), by taking a cautious attitude of *distanciation* and *limitation*. The usual trope of *limiting* technology itself via failsafes is problematic. The sophistication of technology is in itself not a problem (for Marx, steam power was already advanced/human/social enough to reduce human beings to a mere means of value creation). The question of the mastery of human beings by human products is rather to be answered by good technological hygiene, an approach that becomes complex as technology evolves into forms that resist being quarantined and mastered (as Marx proposed the factory could be mastered), but not impossible, as long as we take steps away from technological development becoming synonymous with the heightening of reification discussed above.

This second part also utilizes Nietzsche to argue that the human cannot be converted into data and remain human: this is a definitive *extinction* of the human, and not an *untergang* that might beget a new or higher form of the human being – there is much of the ape still in us, and even the worm, but the transhuman represents a creature that misunderstands and breaks with humanity entirely (Nietzsche 2006, 6). This extinction event, from a Marxist perspective, is the creation of a total synthesis of living and dead labour as the perfect culmination of the subsumption of living labour under capital: the logical conclusion of this process. Marx’s belief that living and dead labour are ontologically distinct has fallen out of grace, but this paper explores the idea that this distinction is real, *and* under threat. Transhumanism frequently views all breaking down of the differences between people and things as progress. This paper counters that it is only progress in the continuing evolution of the real subsumption of living labour under capital.

The History and Future of the Real Subsumption of Labour Under Capital

Antonio Negri has for many decades written about the potential for Marx’s concept of the real subsumption of labour under capital to be extended into contemporary contexts, and with Michael Hardt has

recently reiterated the importance of this concept (Hardt and Negri 2018). In Marx's formulation, the formal subsumption of labour under capital begins before even the age of the manufactories, as capital, as yet young and unsophisticated, first appears tentatively in the parasitic form of a "usurer or merchant," and then begins its first steps towards "direct control over the labour process," taking "inherited, traditional" forms of labour and extending them in duration, crudely creating a surplus while basically leaving the form of labour as it found it, though the purpose of production is now shifting from the production of use values and artisans to the production of exchange values (Marx 1982, 645). Capital's next, bolder move is to a) bundle all the artisans under one roof, and b) divide the manifold tasks of a single artisan into a series of menial vocations. This is a special phase of formal subsumption that begins to approach the real, as people are still doing basically what they did before, only now one element of a whole task is repeated all day. In this special phase, though it is beginning to extract relative surplus value, absolute is still the *modus operandi*. As Marx states in *Capital*, capital has an ambivalent relationship with both technology and relative surplus-value extraction (409). It ignores industrial technology when this is invented at the end of the 1600s, and when it does begin to take it up, seventy odd years later, it does so in a sluggish and inconsistent manner, mainly as a means to make less skilled and physically weaker labour-power (women and children) viable as variable capital (Marx 1982, 526), swelling its mass and obliterating the final weak resemblance of the manufactory to artisan labour. It is only *labour laws*, or to be precise, *labour laws that are no longer "a dead letter,"* that force capital (after a sixty-year "civil war" against the said labour laws) to fully embrace technology and relative surplus-value exaction (1982, 626). In the 1860s, one hundred and sixty years after a viable steam engine is invented (and ninety years *into* the industrial revolution), capital now comes to believe what it had for so long firmly thought to be an impossibility: that profit is possible without extensive child labour and a 72–76 hour average week for adult labour, if it fully, finally, embraces the technology of large-scale indus-

try, and here, for Marx, the industrial revolution is finally released from the fetter of the small minds of capitalists who are obsessed with the logic of *absolute* surplus value extraction. To quote:

The Pharisees of 'political economy' now proclaimed that their newly won insight into the necessity for a legally regulated working day was a characteristic achievement of their 'science.' ... Hence the comparatively rapid progress since 1860. (Marx 1982, 409)

The conversion into real subsumption proper occurs here, in the 1860s, when frustrated capital (appalled at having to finally obey the law) pledges to extract as much or more value from protected workers (now largely male and adult, with exceptions) in the now limited time allotted. In short, the transition into the business of consistent relative surplus-value extraction, into the real subsumption of labour under capital, takes place *as* the complete leap into large-scale industry, at first, with dragging feet, believing it was losing its war with living labour, and soon with relish, seeing that the truth was otherwise, close to two centuries after machinery capable of supporting this shift is invented (Marx 1982, 496–497)! The form of this alteration (beginning between 1770–1780) consists of tools being taken from the hands of workers, and every manner of work that human beings had conceived for themselves in the past (generally forms in which they are the motive force of production) being rendered irrelevant. The body of the worker, her skill, steadiness, and strength, are cast out of the calculation. As the workers were earlier clumped together in association, to increase the productive force of all, now the tools are put into association as mega-tools, as machines, and now that they have their own intelligence, skill, and motive force – though Marx argues that these attributes are still ours existing in an estranged state (Marx 1982, 1024) – any piece of human meat, given a basic minimum of stamina, can create value at great speed. This is the beginning of real subsumption, and it means, in short, that capital is no longer content to fiddle with our existing work processes, but presents us with entirely new ones, "their physiognomy ... totally

changed,” redesigned for maximum value extraction: and all the while diverting agency, power, and knowledge from now thingified human beings into itself (Marx 1982, 390).

But there are problems for capital when it finally embraces technology and the concept of relative surplus value. Living labour, now largely male, adult, somewhat protected, and working under fully industrialized conditions (i.e., finally being *really* subsumed by capital, rather than just formally), does not create more value than before, but only embeds her value into a greater quantity of already existing values: she creates value equal to her wages at an earlier point in the day, but has created no more value *absolutely* than the old capitalist master of the manufactory could have extracted as personified capital. In a series of “damned figures” (Marx 1982, 961–962) that Marx wrestled with in *Capital*, he eventually shows how an increase in produced surplus value is not an increase in the production of real value: labour is a golden goose, but not as golden as the capitalist would like, for the only way to procure more unpaid labour is to embed it in smaller magnitudes into a greater gross of goods. Therein lies the rub, as for the capitalist to get her outlay back plus the surplus, somebody has to buy the staggering gross of low-value product, and the secret source of profit is that labour power is the unique commodity that not only *preserves* its value during production as its transferred and transformed but rather *produces more value than its own value*, its cost as a commodity (made up of the sum of the values of its production, in this instance the sum of the values it requires to survive and be basically “fit to work”), and thus capital cannot give labour the ability to consume more of its own product and keep its cost low at the same time. The labourer must be paid a sum sufficient to buy the goods she needs to *subsist* as a life form and no more: if her “style of life” is improved, her real cost is raised, and given that there are fixed limits to the amount of value that labour can produce during production, rising wages is a zero sum game that endangers the ability of capitalist production to be profitable. If the capitalist wants to sell all of her product she must raise wages, but the worker produces the value that constitutes these

wages, and while she is producing them she is not producing surplus value, and thus the eventual sale in which the worker spends this value she created during a greater portion of the working day yields less profit. The value of a commodity is only profitable to capital if this value is greater than the sum of the values of the component commodities consumed during its production, and this only occurs when the real value of labour power is fixed at a level such that its value is considerably less than the value it creates while being consumed: as labour’s value soars, it becomes like any other commodity, an existing magnitude of value that one buys only to see reappear in a new form, but with its *magnitude of value unchanged*. When wages go up, capitalist production becomes a benign exercise in use-value creation. One can inflate price above value, but Marx’s main lesson in *Capital* is that the secret to capitalist profit is buying commodities at their value and selling them at their value (with the caveat that the value of labour power needs to be less than the value it is capable of creating), a system that eventually leads capital to a dismal choice between low profits or crises of overproduction (and they tend to prefer the latter). Overproduction also has one benefit, that subsistence goods are plentiful and cheap, keeping the value and therefore real cost of labour low.

The nineteenth century capitalist, also, cannot imagine a world in which workers will *consume* above subsistence levels if they are given excess funds. In the mind of this capitalist, probably correctly, the cunning worker (whose subsistence wage already leaves some small leeway for vices, though probably at the cost of hungry children) will *horde*, buy a little plot of land, and create her own means of subsistence without the burden of also creating an unremunerated surplus.

The capitalist also finds that each time she fires a worker and adds a machine, this change in the composition of capital yields less profit than the time before, for although there are fewer wages to pay, there is also less fresh value being added to a growing mass of existing values being converted into commodities: rendering the gross value of the commodities produced little more than the value of

the raw materials purchased, the “ancillary” costs of oil, coal, etc., and the cost of the depreciation of the machinery. The “law of the falling rate of profit” is of course more complex than this (Marx 1991), but for our purposes this simplification will suffice. One may postulate that it was not fundamentally wrong to posit that this form of the real subsumption of labour under capital, not the mere reorganization of labour processes but their destruction and recreation, would eventually expand itself to death (Grossmann 1991).

And yet, as critics of Marx’s theory of the inevitable collapse of capitalism decry, capitalism did not fail. It had its most stable period sixty years after Marx died, and proved itself to be virtually invincible after surviving the decline of industrial manufacturing in the Global North/minority world nearly a century after his death. But the collapse of manufacturing is exactly the point here: it proves Marx’s point that capitalism on its old path was doomed. Marx was primarily wrong in not imagining that capital had the capacity and willingness to abandon the pursuit of surplus-value via the production of things or, to be more precise, to supplement this doomed form of surplus-value production tied to use-value *qua* exchange-value production with one that had fewer limits. As will be discussed shortly, capital discovered a way around the consumption paradox – that capitalism geared solely towards material production can only profit if workers are paid a wage beneath the level required to make the purchases that will valorize the capital in the finished commodities – that Marx (and capitalists of his age) did not foresee: that if the production of things is rendered less profitable by higher wages, then the consumption of things must be recoded to create value greater than the deficit.

Here, Hardt and Negi become pertinent. Against the traditional narrative, which holds that industrial manufacturing collapsed in the minority world because capitalism survived by fleeing in search of cheap and unprotected labour, they state that capital, though it was of course also encroaching on more foreign territory than ever before, had found a way to continue its dark work “at home.” Working alongside theorists of “immaterial production,” including digital labour, flexible accumulation, and informational

capitalism, Hardt and Negi moved beyond the old paradigm of real subsumption, stating that it can be “extended” into a study of the real subsumption of *society* under capital (2018, 442). Regarding the subsumption of society, one can posit that just as capital evolved (highly unwillingly) when it hit the barrier of “maximum working days,” so too did it evolve when it hit the barrier of a “minimum wage” indexed to the rising cost of labour power. It solved the first problem by radically changing what “work” means, figuring out a way to create a false economy in which it *seemed* that workers produced more value even though they could not actually produce more value. Capital could not grab time anymore, so it figured out a kind of imperfect magic in which it could squeeze workers harder in the available timeframes (this is the creation of relative surplus value).

It solved the second problem, not by fleeing, as traditional wisdom states, and converting the “third world” into a factory for the “first” (though, as above, it did this too), but rather by ingeniously deciding that if minority world workers insist on inflating their own value as commodities, endangering the basis of capitalism as profitable exchange-value production, then this basis needed to be *altered* so that there could be a stream of surplus-value production distinct from traditional forms of productive labour. Capital begins its subsumption of labour under capital with the conversion of traditional forms of use-value production into an exercise in exchange-value production: its first revolution. When this process hits the inexorable limits discussed above (limits on the magnitude of the working day, “minimum wages,” crises of overproduction, falling rates of profit), capital, as well as spreading to seek out unprotected foreign labour, also inaugurates its second revolution: value production *qua* “immaterial production.” It begins within the field of labour itself – an early example is the “commodification of feelings” noted in the emotional or affective labour of the endlessly smiling flight attendant (Hochschild 1983) – but more importantly for this paper, it soon traverses *outside* the traditional sphere of labour, invading the realm of freedom, the areas of *life* in which we used to recover as human beings from the inhumanity of labour: “an idea or

an image comes to you not only in the office but also in the shower or in your dreams” (Hardt and Negri in Camfield 2007, 26). More importantly again for this paper is the manner in which *consumption* is converted into labour. Here capital begins tentatively also: we become the “audience commodity” for a small portion of our discretionary time via television and the radio (Fuchs 2014, 74–132). But this is no *imperfect* magic, and the ways our non-work lives can be made into “free labour” seem limitless. Value production untethered from material production finally makes living labour into a true golden goose. If the goal of capital is in “curtailing the paid part of his work and extending the unpaid part while keeping the working day constant” (Marx 1982, 970), then it has made for itself the perfect world today.

The first revolution was bitterly contested for centuries: from the death battle of the guilds against the loss of guild production in medieval city states, to the refusal of yeomen to become wage labourers, so intense that unemployment became a crime punishable by whipping, branding, disfigurement and death. The protests of luddites, for some reason lodged in the popular imagination, were prefigured by hundreds of years of resistance to capital’s first revolution: the novel, perverse, and contested quest to link the production of things to the logic of profit, rightly guessing that this field of “sober” profitmongering would be more germane than its traditional means: piracy, profit *qua* “booty” (Weber 1976). It seems that the second revolution, in contrast, cannot occur fast enough for us: the quiet divorce of production and profit (a now loveless relationship, at least in the minority world), and the even more silent marriage of profit and life *qua* the marriage of the living and the dead.

Marx may have famously stumbled on the questions of “non-productive labour” and “specialist labour,” but in the end he accepted that a) use-value creation is necessarily productive, but *value creation* need not be (Ringer and Briziaelli 2016, 40), b), “aggregate labour” or “collective labour” meant that all the kinds of non-productive labour taking place were contributing to the reproduction of existing conditions of existence as well as the total magnitude of value produced by a given society (Ringer and

Briziaelli 2016, 40), and c) “universal labour” meant that thinking and invention in relation to “the general state of science and ... the progress of technology” added value to the “general intellect” *qua* “techno-scientific power” directed against the proletariat (Dyer-Witheford 1999, 3–4). Value is social, after all, and so it can be posited that all wage-labourers are contributing. If one can accept this, it is not a large leap to accept that unwaged activities are potentially value producing also: free labour. “Housework” and childbearing/raising as “unpaid labour” were early contributions of feminist Marxism, as well as the Frankfurt School notion of the “culture industry” and Dallas Smythe’s concept of the “audience commodity.” All of these are noted by Hardt and Negri, but they also include in their paradigm of real subsumption: thinking, speaking, inventing, and interacting, or in their own words: “languages, codes, immaterial articulations of being together, cooperation, affective elements” (2018, 415). All elements of life are commodified, and human existence is split between waged labour and free labour.

As above, capital is wont to regress, and as we can see from “Special Economic Zones,” it will travel far and even can revert all the way back to the form of the manufactory in the face of truly vulnerable labour. Yet the crux of the evolution of the real subsumption is that nobody is spared. “At home,” among the more comfortable classes who do not work in factories, it means that not only has the modality of your work been given a new form, in which exploitation has been made opaque and basically bearable (our reward, material consumption, is also the same thing that keeps capitalism afloat), but in addition your whole life, how you speak, move, and even think, is rewritten, commodified, and given a form more favourable to capital’s hunger for surplus value: your *being* is subsumed by capital. If your exploitation “at work” has been rendered tolerable, perhaps even almost human, and you believe you are well remunerated for the value that you generate, then this situation is offset by the surplus that you create by living outside of work, value that you create for no remuneration, sometimes even paying for the privilege (as Marx taught us well, if capitalism is functioning, value is being generated

that is not being paid for). In various ways, in recent times, thinkers have been putting forward a new Marxist message: if you are awake, you are creating value. One can focus on the “culture industry,” games, social media, all technologically mediated communication, or the fact that to live means being in debt. Hardt and Negri state: all of this, yes, and more.

But here I respectfully part with Hardt and Negri, for they posit that the transition from organized mass labour on the factory floor to the “social labour” (Hardt and Negri 2018, 417) of a multitude is a process that alienates human beings from their own activity, but not in any particularly obstinate or odious manner. Against a theorist such as Christian Fuchs, who states that present forms of digital communication basically prohibit any true expression of self or act of self-emancipation (we need to build new forms if we want our use of digital technology to be anything but free labour for capital) (2010), Hardt and Negri see the seizure of technology basically as it is by the multitude and its turning away from the valorization of capital toward the valorization of self as an emancipatory possibility immanent to our own times, despite also understanding precisely how adroit capital can be when it comes to “usurping ... creative dimensions for its own purposes” (Camfield 2007, 31). I am sympathetic towards Fuchs and what has been called the “foreclosureist approach” (Greaves 2016, 50), but my main reason for departing from Hardt and Negri is the concept of hybridization in relation to the emancipatory joining of people and technology. Hardt and Negri state that Marx understood that the antagonism between “man and machine” was false, and a coming together of both need not follow old power dynamics (Hardt and Negri 2000, 367). However, despite seeing tools as always already being prostheses (Marx 1973, 706), Marx is also wary of the coming together of “man” and “machine.” He only really has two suggestions as regards how technology can be mastered, how it can be used by us rather than we being used by it. In the first, technology becomes automatic, and we oversee it from a distance. Marcuse sums up this position from the *Grundrisse*: “At the same time, an increasingly automated machine system, no longer

used as the system of exploitation, would allow that ‘distantiation’ of the laborer from the instruments of production which Marx foresaw at the end of capitalism: the workers would cease to be the principal agents of material production, and become its ‘supervisors and regulators’” (Marcuse 1971, 49; Cf: Marx 1973, 692–693; 704–705; 709). In the second, he states that our contact with machines during a working day needs to be contained and must be made as short as possible: he even calls this the prerequisite of freedom (Marx 1991, 958–959).¹

For Marx, “civilized man” is an animal who develops machines that allow her to be surrounded by value/wealth (“need satisfiers”) without having to expend much time or energy on their production. Alienated humanity is the opposite: labouring long on machines (their own productive powers in objective form) for benefits that are definitively capped by the capitalist system of production. Marx’s two visions of the communist use of machinery prescribe first *distance* and later *making contact with machines as brief as is possible*, brief, rational, voluntary, and socially organized. No freedom is possible without this basis, and unfree/alienated human beings thrown into a capitalist world cannot attain freedom by becoming part machines themselves. For Marx, this would make his advice on how to become free and communist (keeping one’s distance from machinery if possible, and minimizing contact in duration if it is not) impossible. Real wealth, as he writes in *Capital III*, is about reducing surplus-value production, and the key is a super-productive means of production turned away from that specific end (capital’s constant end, though it changes means) and towards the reduction of time

1 The entire quotation is as follows: “Just as the savage must wrestle with nature to satisfy his needs, to maintain and reproduce his life, so must civilized man, and he must do so in all forms of society and under all possible modes of production. This realm of natural necessity expands with his development, because his needs do too, but the productive forces to satisfy these expand at the same time. Freedom, in this sphere, can only consist in this, that socialized man, the associated producers, govern the human metabolism with nature in a rational way, bringing it under their collective control, instead of being dominated by it as a blind power; accomplishing it with the least expenditure of energy and in conditions most worthy and appropriate for their human nature. But this always remains a realm of necessity. The true realm of freedom, development of human powers as an end in itself, begins beyond it, though it can only flourish with this realm of necessity as its basis. The reduction of the working day is the basic prerequisite.”

spent metabolizing with one's sophisticated means of production (958).

Antagonism can be overcome, as Hardt and Negri note above, and machines can create time and freedom instead of confiscating both. But when Marx dreams of this he prescribes *distance*, spacial and temporal distance between "man" and "machine," at least in contexts in which a tool is a "conductor, directing his activity" onto/into an object of labour (Marx 1982: 285). We can choose to follow Marx or not: but we must not posit that Marx would be enthusiastic about cyborgs. When Marx had his science fiction moment (his advice in *Capital III* is more sober than his position in the *Grundrisse*, *reducing* rather than *overcoming* the need to work, *shrinking* the necessity that cannot be overcome), he dreamed of a factory capable of auto-valorization, "a moving power that moves itself," so that none of our lives would be necessity and all of it freedom (Marx 1973, 692).

Marx clearly understood that we require technology, and was contemptuous towards anybody who thought that freedom could be attained without technology:

Slavery cannot be abolished without the steam-engine and the mule and spinning-jenny, serfdom cannot be abolished without improved agriculture. ... In general, people cannot be liberated as long as they are unable to obtain food and drink, housing and clothing in adequate quality and quantity. (Marx and Engels 1998, 61)

However, though technology is basically neutral for Marx (neither good nor evil in itself), it is clearly pernicious under capitalist conditions, and even under proposed communist conditions Marx clearly prescribes an attitude of distance and caution. Freedom means that the "development of human powers ... [is] an end in itself" (Marx 1991, 958–959), and this means ultimately that little of our mental and physical energy goes into considerations of survival. It is naive to think that we can have food, the means of communication, basic corporeal health, and clean clothes always ready-at-hand without also being surrounded by technology. But for Marx the condition of technology "working for us" is a clear demarcation between

work and life, necessity and freedom, the technology of working and the technology of living, a demarcation that for us barely exists at all, and that would, as above, become unthinkable if we become cyborg hybrids. Optimal technology for Marx, as regards the technology of work, of mundane considerations, is a clearly demarcated factory that we approach as little as possible, and preferably never, except as a "watchman and regulator" (Marx 1973, 705).

When this space exists, and each and all get all basic needs met in exchange for a few *carefully quarantined* hours of voluntarily metabolizing with the technology of work as associated producers, then we can think about what kinds of benign technology we might like to have around (or perhaps inside) ourselves: technologies of health, entertainment, cleaning, transport, communication, i.e., technology that we utilize in the realm of freedom, in the portion of our day in which we are free, precisely because we have completed the value-producing segment of the day and have moved into the not-value producing segment.

Until we move into associated production and a circle is finally drawn around necessity, in hybridization we are naively embracing vampires and werewolves as friends, and falsely signifying capital's exponential expansion of necessity as freedom, in an abuse of language that makes Marx's conception of freedom difficult even to think. It is challenging (counter-intuitive, even) to imagine that the expansion of necessity could take the form of the end or mitigation of work, hunger, sickness and death (at first glance, such a world appears to be one of expanded freedom). But given Marx's calculus of necessity and freedom, necessity is necessary labour time plus whatever surplus labour time must be performed as a condition of being permitted to work (nobody is permitted to work only the hours necessary to create value equal to their means of subsistence). The realm of freedom expands or shrinks in inverse proportion to the magnitude of surplus labour one is coerced into performing. If all time becomes value producing, then all time is necessary – and surplus – value producing, and thus all time is brought within the realm of necessity, even if value production no longer

has the character of toil. As phrased in the introduction, capital has shifted its emphasis away from expanding necessity and towards the colonization of freedom. After the discussion above, we can see that the original intent of capital remains intact, though in more ingenious form. One's exploitation "at work" entitles one to the means for the greater exploitation of "living," and the ostensible expansion of freedom is in fact the opposite, the grotesque swelling of necessity so that it engulfs all of life, in such a manner that those still excluded have only one complaint: capital has not yet swallowed me.

Marx's paradigm of freedom equals not-labour time has been outsmarted by capital. We must now state that freedom equals not-value-producing time, with of course the caveat: unless that value creation is definitively an end-in-itself, i.e., not for any purpose or profit. Marx's strange praise of *useless* activity in the *Grundrisse* becomes clearer in this context. He writes that today any human growth is human sacrifice, participation in "total alienation" (488). To become an end-in-itself not devoted to an external end we need at least to begin to experiment. Time on social media, for example, appears to be useless. But if we were to go on strike in this context, and go for a walk that is not documented, we may see just how valued/valuable our "downtime" really is.

Living labour has fought against the expansion of labour time, because it was obvious that it was not living while it was working. The danger facing living labour today is less obvious: that the very act of living is being converted into value creation, that not just all time but even all *being* is being converted into value production, not as an end-in-itself (as a *human* existence) but as a means-to-an-end (the production of value for harvest by capital).

One might rebut that the term "value" is here being stretched out to the point of incoherence. But value has always been a *sooky* thing in the works of Marx: it is there, but cannot be seen, and yet the value in one object can help us determine the quantity in another. "It has been shown ... how not merely at the level of ideas, but also in reality, the social character of his labour confronts the worker as something not merely alien, but hostile and antagonistic; when it

appears before him objectified and personified in capital" (Marx 1982, 1025). It is there in specific magnitudes in the pages of *Paradise Lost*, and in a piece of linen, spun into these objects in different ways by that strange silkworm called the human being. Today it is there in the data that we cannot not create if we wish to "live" and work. The transhumanist wish to oneself become data/information in this particular climate is hard to fathom. It is imagined to be a kind of freedom, but Marx would ask: can a digital person perform an act that is an end-in-itself, which is to say, that creates value as a *praxis* with no reason/purpose external to itself, value that cannot be appropriated by capital? If one is digitally converted into capital, immaterial value that has no purpose except to metamorphose into a greater sum of value, then no act can be an end-in-itself, for every act is directed toward the grubby end of valorization.

To return more explicitly to real subsumption, Hardt and Negri understand and also somehow miss that in the coming together of technology and human beings, capital is doing what it did first to work, and then to all elements of life. To reiterate: in the formal stage, in relation to work, the way we used to do things is altered in non-paradigm shifting ways: they still resemble the old, and are limited, though they create more value than before. In the real stage, a new way of working is thrust upon us, in which our physical and psychological limitations become irrelevant. But something similar happens with life. In the formal subsumption of life outside work, the way in which we used to do things is again altered in non-paradigm shifting ways, so that they produce value where they did not before. But though capital faces fewer limits here than when it took over production processes, eventually it faces restrictions as regards the extent to which "languages, codes, immaterial articulations of being together, cooperation, affective elements" can be commodified and create value, boundaries linked to tradition and biology (two things that transhumanism states are its enemies). In the real subsumption of life, a new way of being with others and even *being alive* is thrust upon us, in which the physical limitations of pain, death, disagreement, and the need for external machinic aids are made

redundant. If these “enhancements” are being made available within capitalism, we can safely assume that it is not objective development – an impossibility anyway – but, like all advancement under the tutelage of capital, progress only in the obliteration of boundaries to human surplus-value extraction, the development of capital’s ability to get value and not pay for it. The evolution of the real subsumption means that capital is imposing new forms of living just as it once imposed new forms of working. But this means we should fear rather than embrace hybridization, as this could be the imposition of a new form of being alive more conducive to constant value creation. Hard and Negri of course have the clear precedent of the factory: for Marx the factory was only an ill thing when it, as capital, ran itself via the management of personified capital, capitalists. But, as will be discussed below, hybridization is now the means that capital is using to make benign use of technology impossible. The factory can steal or create discretionary time, depending on its method of use.² As Fuchs understands, new means of value theft have no other possible means of utilization but value theft. Capital has evolved past the point at which it can be seized and turned to uses that are salutary for living labour: once capital is in us, its predatory nature becomes invisible, and its use of us is a warm feeling that we no longer associate with work and do not want to be without – it now kisses as it bites.

I will also respectfully depart from the concept of “hyper-subsumption,” which is less based in Hardt and Negri’s extension of the concept, but somewhat more modeled on Stiegler’s concept of “grammatization” (Dyer-Witheford, Kjøsen, Steinhoff 2019, 51). In my reading, the next stage of the victorious subsumption of labour under capital is not a further autonomization, humanization and enlivening of crystalized human activity: “capitalism without humans,” or without need of humans. I understand that “capitalism without humans” is not a predicted future, but more a correction to the optimism of left

accelerationism and “luxury socialism,” which assume that full automation of production, combined with a UBI, or other means of guaranteeing equal access to wealth produced, will lead to happy, post-work lives for human beings. The “hyper-subsumption” reading simply states that there is more to fear than AI “going wrong,” either by worsening class inequality or increasing general surveillance, in the best case, or deciding that all puny humans must die, in the worst. AI could, on the contrary, “go right” and, in the best case, leave us behind, or in the worst case, lead to environmental catastrophe or total global war, in an equal, post-work world. But there is another manner in which AI could “go right” that would be disastrous: transhumanism, or, to be fair, transhumanism viewed cynically.

Against the concept of “hyper-subsumption,” I will propose that, though for Marx, human activity has indeed, over the history of capitalism in the minority world, been becoming more independent from human beings, more abstract and more “erected opposite ourselves” (Marx 1973, 162) as an increasingly autonomous, sentient, and sinister power, for him this becoming other of the human species being is positive, and its absolute othering, no matter how complex it becomes, is an element of a simplified Hegelian dialectic, in which humans are overpowered by their immanent humanity, then overpowered by their own transcendent humanity, and then overcome their own humanity as an externality (Marx 1973, 158; 164). Consequently, the concrete externality and even autonomy of human relations is not something to be feared but rather something to be aimed at, against capital’s current trajectory – a reversal of its old one – in that capital has ceased its mission to exist apart from us, and does not want to *supplant* us, but rather wants to *become* us, by changing what it is, and what we are, in such a manner that there will no longer be any meaningful difference between living and dead labour.

In short, in the next stage of subsumption, capital, having reached the limits of sucking our entire living time as an externality, is not about to float away and cut its ties with us, but is rather about to come home, back into our bodies, to suck from within, as hybrid

² Lukács questioned Marx’s optimism regarding how easy it would be to make a modern factory serve the modern worker (Márkus 1982, 158). The danger to human beings lies not just in the ‘social forms of application of these civilisational achievements, but *grips their material content as well*.’ If this was not the case then, then it certainly is today.

beings in which capital is truly the soul, and we just the vessel. At this point we will truly be post-human, living and dead labour as one, and the commensurability of both will enable flows of capital into us and us into capital – on the one hand, technocized biological forms, on the other, humanized technological forms, digital “minds” that can be disembodied, and “animate” inorganic constructs, perhaps “driven” by erstwhile humans, perhaps just thinking because they finally can.

“Hyper-subsumption” assumes that Marx’s concern about people becoming things and things becoming people could result in the production of fully autonomous and sentient capital, capable of auto-valorization, and with no need for the human beings who have exported their humanity into their godlike products and retain little within themselves. The “real subsumption” feared by this paper is different, based on the solid prediction of Kurzweil that soon there will be no significant difference between people and things (Kurzweil 2005), which is to say, the future is not fully personified capital facing off with fully depersonified human beings, but instead the homogenized and democratic personhood of everything, the sameness of “man” and “machine” and the annihilation of both in this sameness. For this paper, this prediction has merit, though it will be signified as the path of the victorious subsumption of labour under capital: not a hyper but a *literal* subsumption. Signified in this manner, this paper will clearly be less enthusiastic than Kurzweil about the coming of this state, which is not capitalism without humans, but rather a capitalism that swallows humanity whole, so that things have become people and people become things in such a manner that neither exist any longer: just *persons, post-machines/post-humans*.

I am aware that this prediction will read a little strangely in this issue, in that for many authors, including the editors, the lines that Marx draws between life and non-life, and the human and the animal, are based in a more or less unreflexive and perhaps even toxic humanist anthropocentrism: against Marx, it is posited that human beings are not radically different to all other things, and dead labour

could, at least theoretically, learn to do anything that living labour can do today (Dyer-Witheford, Kjosen, Steinhoff 2019). For this paper, the possibility of the production of an AGI capable of value production is less of a concern than is the possibility of the *production* of human/non-human *commensurability*, and I posit that if we worry about machines becoming human and the human becoming thinglike, or machines becoming superhuman and the organic subhuman becoming obsolete, we miss the point that there is a vast chasm between a machine and a human, and if this ontological break did not exist, we would not have had to work so exhaustively, and frequently uselessly, at degrading it.³

Debates about whether sentient AI would serve, destroy, or ignore us, frequently assume that distinctness would remain between us and our “mind children” even when they became “just like us,” that they would have good or ill effects on a *still distinct* human species. Kurzweil and Hans Moravec had a better sense that the human/non-human distinction would be obliterated with a certain level of technoscientific development. On the right of transhumanism, the sameness of “man” and “machine” is the culmination of humanism: “man” becomes rational master of the universe, by freeing pure consciousnesses from impure flesh. On the left, the “personhood” of all things represents the happy death of humanism, and the coming of an age where mastery is abandoned and all “persons” embrace non-exclusionary forms of being together. Resisting voices generally assume that we are already human and that this humanity is precious (Fukuyama 2002). I resist because a) transhumanism can be read as the evolution of the real subsumption of living under dead labour, and b) humanity, though our current state is ontologically unique, has not yet been attained, and none of the

3 Donna Haraway makes a strong early argument for us already being cyborgs (1991), and Bruno Latour perhaps makes the most impressive argument against the logic of thinking about tools and human beings as being in any way distinct (2002). I posit that Marx was not a naive realist, and that his phenomenological materialism (in which “nature” becomes saturated with human activity, and to some extent “agentic”) is superior to new materialist approaches that do not allow any substantial demarcation between people and things. We lose a lot when we discard the concept of dead versus living labour: in particular, we abandon the ability to *resist* subjugation to our products and absorption into our products.

above approaches will get us there. Our uniqueness lies in being animals that have made massive errors about themselves and the world (that there is being, and that both exist). The errors have to an extent been salutary thus far, in that we have begun to transform so as to match them – “Error has transformed animals into men” (Nietzsche 1999, 182). Ironically, speeding up the transformation will be our undoing, for if we come to match our errors verbatim, we will no longer exist.

It is theoretically possible to develop AI that functions as we do (something that overestimates the power of its own will and is primarily motivated to act by a vast “primary processor” unknowable to itself, a machine capable of hating and harming itself)⁴ and possible to augment a human being so that its psychic functions are transparent, programmable, and upgradable (a human being incapable of, for example, breaking a promise or its own moral code). In this instance, everything would become “human,” or everything would become “machinic,” and at least one side would remain, but this is not what we are presently trying to achieve. What we want is AI with

4 This paper largely takes the position that this is in actuality impossible. Others have written on “AI drives” (Omohundro 2008) and a “digital unconscious” (Le 2020) but what tends to be overlooked is that drives would not be what they are in organic life unless they created tensions sufficient for inorganic material to actually become “animate.” In this hypothesis, the created machinic entity would be classifiable as inorganic life: as in us, “dead matter” would be compelled to follow contradictory motivations, wanting to grow, become larger and more complex, and wanting to diminish, becoming smaller and simpler. Drives are not drives if they do not create life, and nothing can be like us if it does not have drives: nothing that is not alive can be like us. That something that is not alive can appear to think or even actually “think” to the extent that it can “fool” a human is and has always been irrelevant. Given, however, that life is already a species of death (a rare species) (Nietzsche 2007b, 109–110), it is theoretically possible that we could create an ever rarer species of death, inorganic material animated by drives. This is what it means to create life, but this is of no interest to us, and we grind on in the game of making AI and robots that resemble our illusions about ourselves. Omohundro for me misunderstands the nature of drives when he assumes that AI will be dangerous because it will understand its own goals and ruthlessly pursue them according to its own understanding of them. To be alive and drive-driven means that one is always driven by at least two mutually exclusive drives: life is the impossible tension between drives that make conflicting demands that never present themselves clearly to consciousness. To have one primary goal, understand it, and pursue it by ignoring competing goals is not how life works, and is not how any human being works. An AI that operated in this fashion might be dangerous: psychopathic and self-altering/protecting, but this danger does not come from drives. That it operated in this manner would be evidence that it is without drives, a form of machinic life that is already rational, not a drive-driven thing seeking rationality.

some limited ability to break its programming (an anti-machine) and a (post)humanity that is more agentic/rational and less prone to decay. The human and the machine will meet in the middle, and to say that humans and machines are the same on this day makes no sense, because there will be no such thing as either anymore. If we want to see this process clearly, we need to posit a hard ontological difference between the human and the machinic today, engaging in a much maligned “human exceptionalism,” and ask some questions as to why we are so determined to deny this difference on the one hand (there are manifold campaigns to assert a) that human beings are not special in any way, and b) the personhood and “agency” of everything that is) and exert Herculean efforts to destroy it on the other (those who see the machinic as *not yet* like us will not rest until it has been made so). As I will demonstrate below, there is room to exist between an unreflexive humanism and the liberal transhumanism that, as Adorno quipped, predicting the coming of Althusser and Derrida, substitutes the toxic narcissism of humanism for the masochistic pleasure of dissolving the self utterly (1999, 65). It is possible to believe in a distinct human state that is not static and not even agentic, but is nonetheless something more than, as Castoriadis said in his critique of Lacan, tape recorders capable of adjusting to one another and making appropriate faces (1997, 170), and something less than a being that is divine because it partakes in some kind of beautiful, immutable essence.

I find more logic in the idea (which I see in Marx, Nietzsche and Freud): “man” does not exist, *let us finally make her*, than the popular logic of the left: “man” does not exist *and* must be annihilated as soon as possible. The enthusiasm for the post-human is rendered a little odd by the fact that we have not yet been human: in that it can be seen as a desperation to no longer be what we are not now. I also, however, take issue with “making man” via an “industrial revolution of the human genome” (Kozubek 2016).

As regards the coming forced commensurability of the living and the dead, the young Marx did of course imagine a reconciliation between living and dead labour – our wayward powers, knowledge, and

wealth coming home as an end of estrangement, a “genuine appropriation” of objective development for subjective individuals – but *literal* subsumption as proposed here is a nightmare version of the *Gattungswesen*, capital’s genuine appropriation of us, as it climbs into our bodies, and makes the act of living itself “immaterial labour”: constant value creation. This final victory of dead over living labour, the actual subsumption of life (as opposed to all of our *time*), is not an inexorable fate, but it is something that we are investing a lot of time in attaining. Some work at making dead things think, others work at “engineering” the biological, others still work at forcing machines into flesh and flesh into machines: generally we see the processes of enlivening dead things and learning how to “engineer” the living as obvious elements of “objective” technoscientific development. This paper makes an argument for these processes being the extremely partisan evolution of the subsumption of labour under capital: the creation of human/non-human commensurability via the extermination of both and the creation of something new.

This argument, as already intimated above, will be heard badly on the left, for either “human exceptionalism” has always already been a myth or, if it does exist, it needs to be destroyed, as it supports racism, ableism, sexism, homophobia and transphobia, as well as speciesism/anthropocentrism. It will also be heard badly on the right, because there, human beings are nothing but inferior machines and machines are nothing but incomplete humans, so that both sides win when they come together. For this paper, in destroying the real and significant difference between living and dead labour, capital has finally found the best way to tan a hide: to stop living labour fighting it by erasing the difference between the living and the dead. If we can do so we are promised the end of death, pain, prejudice and irrationality. But in the history of the minority world thus far, capital has never lost, but only gained, when ostensibly things get more “comfortable” for human beings. It is time to consider the possibility that a being who feels no pain, boredom, or hatred of difference, is not a good-in-itself: these “improvements” may be ideological, our

domestication for the benefit of capital – the creation of “an abased (more specifically a diminished) form of humanity, a mediocritization and depreciation of humanity” (Nietzsche 2009, 91) – appearing to us as objective progress.

The rise of “artificial selection” and the end of the gruesome chaos of natural selection is primarily critiqued because it is or could become “eugenics” (Rikowski 2003). We worry what will be deemed a “defect,” on what criteria, and what richness and diversity might be eliminated in the search for perfection. These concerns are legitimate, and only loom larger if we posit that insane capital, and not just a “mad professor,” begins to consciously take over the direction of evolution, not in the direction of a “master” but a perfect “slave” race.

This of course brings the paper into the orbit of biopolitics, and others have written about transhumanism as what Foucault called biopower: the turn away from taking life and letting live toward making live and letting languish: providing health for ideal liberal citizens as a new means of control.

Biopower, Foucault wrote, is “what brought life and its mechanisms into the realm of explicit calculations and made knowledge-power an agent of transformation of human life” (Foucault 1978, 143). Life – its enhancement, amplification, quality, duration, continuance, and renewal – has become an urgent economic and political concern that government policy and practice address to wrest management and control of it (Tremain 2017).

Capital and biopolitics has been discussed before (Dyer-Witheford 1999). My emphasis, however, will be different, in that I will focus less on the horrors, harms, indignities and disappointments of the transformation of modern life, the broken promises of health, dignity, bodily autonomy and happiness, and more on the elements that make transhumanists *excited*, the actual potential to rewrite life in ways that might be experienced positively by transfigured or enhanced post-humans.

As Nietzsche noted long ago, the drive towards making life easier and less painful is sick, the dream of the weakling crushed by the same vicissitudes that

make vital beings yet stronger, and its culmination or success is sickness falsely signified as “improvement,” a being in whom there is nothing to fear, and nothing to love, the “last man,” a disaster and divine abortion, precisely because the maladies of life have been cured and the beast within actually tamed (2007a, 185–186; 2009 92; 89). Today it can be posited that capital is herding us in a similar direction, for its own purposes. We are too engulfed by the “slave morality” to hate the transhuman “ultimate man” for the reasons that Nietzsche would hate it (to despise a being for being incapable of cruelty and treating all equally is something that has fallen out of grace, except among nationalistic xenophobes). We can however question this direction from a Marxist perspective, and ask: what would it mean if toil and strife, pain and death, were actually removed from our lives within a still capitalist framework? Some would argue that this would be proof in itself that capitalism was dead, but I am not convinced, and would perhaps be a gadfly even in “paradise.” Those who believe in extropy want to remove the limits of biology. Objections, as noted above, are largely “humanist,” and are easily critiqued as being Quixotic quests to protect a mysterious essence, but we can object as Marxists from a different angle. We can, at the very least, with the concept of “literal subsumption,” ask if this desire to move into a world without limit is really capital’s desire to remove all final limits on our ability to create value, not by changing work, or the way we live, but by reaching into us and redesigning us, “improving” us.

On the Means of the Evolution of Real Subsumption

In 2005 Kurzweil proclaimed that the singularity is near: in 2022 he will release a claim that it is nearer. Following Charles Thorpe, I will define the singularity not as the moment in which AI “surpasses” us, but as the moment, eagerly anticipated by Kurzweil, at which there is no longer any significant difference between human beings and machines (Thorpe 2016, 96). In this paradise, a human being may choose to have an organic body that does not die, may choose an inorganic robot body of some kind, may choose some kind of middle ground between cyborg and android,

or may choose no body at all, preferring to live a disembodied “digital life.” Following Hayles (1999: 1-6), I will suggest that these newfangled ideas (beginning in analog form, as a human being sent via telegraph and a brain being put in a blender and poured into a computer) are old fashioned Cartesianism, inheriting myths about the mind/body split and human subjectivity/will that render many predicted outcomes problematic or impossible – exactly why will be explicated below. However, what is impossible today may not be so tomorrow. The machinery of large-scale industry, for example, was impossible in the ancient world, but it was made possible via the logic of technical specialization, changing work into menial drudgery that a machine can do better than a person (it is impossible to leap from *handwerk* to *die grosse Industrie*, but is made possible via the intermediate step of *Manufaktur*).

In the same way, a digital person is impossible today, but can be made possible tomorrow, if humanity is changed into the kind of being that could operate without a body, a being that actually does have a causal will, rather than just flattering itself by imagining that it has one. However, possibility is not desirability, and I will posit, against Kurzweil, that this world is not a perfect *aufhebung* in which the human and the machinic are both preserved, destroyed, and perfected at the same time. This is not a sublation but rather a subsumption, a macabre continuation of the “human” that is really its extinction. The loss of the human will not be noticed, because those bringing about the subsumption will not know what the human is. As Thorpe notes, it is engineers who will be the midwives of posthumans, engineers who are piously Cartesian without knowing it (Thorpe 2016, 71–72).

The axiom they take to be apodictically true is that the thinking substance can be lifted off the expendable extended substance, and placed into any other “body.” The Cartesian/engineer logic cannot doubt that, given that an organic body is always already a prosthesis anyway, a machinic body need only have the basic equivalents of an organic body (some kind of brain and two thumbs), and a “consciousness,” once “mapped/coded,” can be

“transferred” from one to the other. The myth of *res cogitans* – the faith in “the I as substance” (Nietzsche 2007a, 169) – looms large here: *thinking is thinking is thinking*, and it matters little whether one thinks (or feels) with flesh or circuit boards, because the *res extensia* of/for thinking is a mere means, something that cannot think itself without the addition of the thinking substance, now conceived of materialistically, as some kind of pattern/code that can be digitalized.

In short, the idea of a transferable consciousness is absolutely Cartesian. One may accept this, and speak of a “digital soul” – or “robotic spirituality” (Kurzweil in Thorpe 2016, 121) – or one may speak more agnostically/pragmatically about some kind of “pattern of mind,” but in the latter move one is simply making mind/brain signify what “soul” used to signify: i.e., the divine- or pseudo-divine thing in (but not of) our bodies that animates the dumb clay, and that can be in some way be “lifted out”: in the new iteration, via digitalization.⁵ Ultimately the concept of the digitalization of one’s “essence” is (at least today) pure nonsense, based in the myths that cluster around and support the larger myth of *Ego Cogito*: “soul,” “will,” “action” and “causality.” The crux of our extinction will be the creation of robots that are imagined to be “just like us,” when in fact their manner of operation will emulate only our false beliefs about “how we work.” Once we have created a perfect simulacrum of ourselves in robot form (which, as above, is really an inhuman anti-machine), we may then emulate the thing that we only falsely believe already emulates us, and via this series of distorted mirrors disappear completely. In the engineer logic, perfect, uncorrupted/uninfluenced efficacy equals perfected humanity/freedom (Thorpe 2016, 110). But a being of perfect efficacy has nothing to do with human being.

On the nature of the misunderstanding: if one follows Nietzsche here, consciousness is not respon-

sible for actions but only reacts to them: “The will does not do anything ... it just accompanies processes, but it can be absent as well” (2007a, 178). If one could somehow digitalize consciousness, and put it in a drone, the voice of the “I will” would be severely depressed, as the drone would “do” nothing at all. In a body, the drives of this body that do not *think* wage war against each other, and the will attaches itself in various ways to whatever drive happens to be in ascendance at a particular moment. The flea perched on the donkey’s head is sometimes happy and sometimes sad about the paths that the donkey takes: but regardless, in the mind of the flea it is the flea that is “driving.” In Nietzsche’s example from *Daybreak*, a man at a market responds to somebody laughing at him (2003, 120). To paraphrase, on one day he laughs back: but on another he feels paranoid, fears that he looks ridiculous in some way, and becomes depressed and self-conscious. On another day he snarls out a challenge for a duel, sure that the laugh is mocking. In each case a drive has surfaced and demanded satisfaction. The will can, of course, admit that it had contrary intentions, but it causes despair to say “I willed thus and did the opposite” (the addict, in a glimpse of the truth, believes herself to be a failed human instead of a normal one, when she utters, I am a “feeble windbag” with a will of little efficacy) so instead we generally choose the positive feeling of saying “I willed thus and did thus,” though in reality, the order is that “I did thus, and then as an afterthought willed thus,” with the will being a master only of backdating effect and calling it cause. The doer is an illusion created by the deed (Nietzsche 2007c, 26).

If a machine could say, “I will it thus,” and then “act” on this “will,” or the digitalized conscious element of a human being could manage to get a drone off the ground, these modes of being would not in any way resemble the human mode of being. Whatever has been copied and downloaded would not be you: as Thorpe says in this context, one is *dead* if one leaves one’s body (2016, 80). A brain is not a soul and there is more to being human than thinking: that I think is not proof that “I am,” because thinking is a secondary process that creates only

⁵ Heidegger makes a version of this argument in *Being and Time*. As he accuses Descartes of putting window-dressing on deeply religious conceptions in the guise of philosophizing, I in turn accuse the logic of the digital mind/soul of smuggling in the old Christian soul unaltered, except in terminology (2005, 123). The dressing is very thin in the case of Kurzweil, when he speaks of digital chapels (Thorpe 2016, 121). One could imagine Freud’s response to this predicted “future of an illusion”: given that for him religion only exists where wishes are stronger than reason.

the illusion that I am what I believe myself to be, a thinking substance “trapped” in a body that “drives” this body, and could just as easily drive some other vessel, more easily if inferior “spindle cells” could be replaced with microchips. Nietzsche would advise that the consciousness that you want to “copy” is the “most impoverished and error-prone” element of you (2007c, 57). If an engineer could “copy” your consciousness, digitalize it, and put it in a machine, in reality this is akin to making a copy of that flea on the head of the donkey, and then expecting it to “drive” a cunningly constructed robotic donkey. The bulk of what we are *is* the donkey, and this is not understood. The death of the donkey is the death of you. If the engineer can “make it work,” can make the ghost of a flea “drive” a body, she has only given flesh to a myth, and created something that did not exist before as a false copy based in a false understanding.

Though, as above, the existential impossibility of “digitalizing” a self today does not mean that it is impossible for all time. If we give our false beliefs about ourselves a solid form, we will become something easily digitalized. The only problem is that this is suicide, Socraticism perfected, an old wish to leave the body, its instincts, demands, and lying/defective senses, and live as pure reason in pure happiness/virtue, finally getting at *real* being, away from this mess of becoming that must not be true, that must somehow be a corrupted copy of something more eternal and unchanging (Nietzsche 2007a, 167). Plato of course said more explicitly that you have to die to leave your body and get to the invisible realm – though philosophers can get glimpses that will help their souls fly straight and true immediately upon death (1997, 71).⁶ Today, Cartesian engineers do not understand that death is the cost of leaving the imperfect world that we live in. This logic is, in Nietzschean terms, decadence perfected, for if life was

6 “But I think that if the soul is polluted and impure when it leaves the body, having always been associated with it and served it, bewitched by physical desires to the point at which nothing seems to exist for it but the physical, which one can touch and see or eat and drink or make use of for sexual enjoyment, and if that soul is accustomed to hate and fear and avoids that which is dim and invisible to the eyes but intelligible and to be grasped by philosophy – do you think such a soul will escape pure and by itself. ... Those, for example, who have carelessly practiced gluttony, violence, and drunkenness are likely to join a company of donkeys or similar animals.” (Plato 1997)

still ascending, we would prefer the older truth: “happiness is equal to instinct,” and the old understanding that ridding ourselves of drives is ridding ourselves of life (2007a, 167). A being who is vital in this manner has no need of a myth of a “real” world beyond this one of untrue appearances: they love the world they are in and have a means of navigating it that has nothing or little to do with *thinking*. Nietzsche despises the being for whom “death, change, age as well as reproduction” are objections to life and even grounds for refutations of life: of the value of life (we can include suffering and hardship here as well). They are rather proof of life: if we rid ourselves of them, we have rid ourselves of life (2007a, 167).⁷

Following Nietzsche, we must posit that the drive to replace organic with inorganic components, to increase our power of reason, decrease the influence of the base drives, and get rid of change and decline, is a *death drive*. What the right-leaning transhumanist wants to rid herself of is life. Death is the only doctor here, and life the only disease. Inorganic life remains a theoretical possibility, but that is not the aim here. We are racing towards something that cannot be called life, something that requires no body or drives, perhaps because we want to die, perhaps because capital wants to create for us a state that is neither death nor life, or perhaps both, in that we do not fight capital this time because what it wants resonates with our own death wish.

As regards our current progress, there is, as above, a significant trend in the minority world today towards obliterating the distinction between “artificial” and “real” life, in that on the one hand we hunger for (and create) increasingly “lifelike” robots and AIs, better external simulacra, and on the other lose our fear of becoming cyborgs, better walking and talking simulacra of ourselves. The inorganic is *learning* to surprise and self-determine (though, as above, this growing *personhood* of things, thinking things, is more remote from actually being *human* beings

7 Kurzweil is the epitome of what Nietzsche despised: “Whereas some of my contemporaries may be satisfied to embrace aging gracefully as part of the cycle of life, that is not my view. It may be ‘natural,’ but I don’t see anything positive in losing my mental agility, sensory acuity, physical limberness, sexual desire, or any other human ability. I view disease and death ... as problems to be overcome” (Thorpe 2016, 113).

than we imagine), and the organic is learning how to be “programmed” via biotechnological innovations and augmentations (as we move away from humanity towards an “improved” version of what we mistakenly already believe humanity to be), and via these dual processes some kind of coming together of the biological and the technological is becoming possible, as they become more alike, and less like what they once were (the human and the thing). The creation of artificial life that does not live is a “missing link,” through which we can create an undead state to step into. The existential impossibility of digitalizing the self – William Connolly quips that the two pounds of bacteria we carry around must determine at least partially who we are (2013, 401) – does not negate the real trends that are occurring, eroding the difference between death and life (shattering the meaning of both) so that we can slip between them.

Kurzweil celebrates this process, and sees in it the end of pain, death, and even irrationality (2005, 163). This paper has already suggested that Marx might have a different response: that technology is evolving, not for our benefit, but for its own. Though Marx focuses on human stupidity, deformation, and general thingification in the face of the growing intelligence, power, and sociability of things, a careful reading of Marx suggests that human pain, death, and suffering are just one way for capital to tan a hide: Marx himself writes more than once that slavery to capital is capable of becoming more civilized and refined (Marx 1982, 486), hypothetically to the point of becoming “easy and liberal” (Marx 1982, 768-769) – though, as above, in Marx’s paradigm, there are limits here, as for the reasons explained above, the expansion of worker consumption represents a danger to profit greater than the danger of unsold wares.

Following this nascent idea in Marx (and positing that today capital has well and truly solved the old problem of worker consumption resulting in loss of profits) it can be posited that presently technology *qua* capital is evolving in such a manner that the reduction of human pain, death and suffering and the maximization of surplus-value extraction have become one and the same process. It could be that the coming transhuman condition is nothing

but the most recent, perhaps even final stage of the real subsumption of labour/life under capital. Marx wrote about the obvious exploitation of living by dead labour in the age of large-scale industry, but that does not mean that we cannot use him today to study the possibility of the less obvious exploitation of human beings in spheres beyond wage-labour today, following Harvey, Hardt and Negri, Fuchs and many others, and the even less obvious exploitation of the transhumans of the future, who cannot kill the capitalists and master the external factory for her own benefit, given that at this stage of the evolution of technology the factory will have been dismantled and will have colonized our bodies (disguised perhaps as “nanobots” that “service” our “organic components” and “micro-processors” that “help us to think”) and we will no longer understand what “surplus-value extraction” means, because it will have been re-signified as (eternal?) “life.” There is a basic consensus today on the concept that the “free labour” that we engage in while performing “digital labour” perpetuates the old separation of worker and tool, but this is a misconception (Greaves 2016, 54). In the old regime, the tool was taken from the worker so that the worker was only provided access to tools if she created value equal to her wages, and then a magnitude of surplus value. In the new regime, it is imperative that “social workers” are never without the tools of value creation, and indeed, after the commodification of communication and socializing, it is living labour who diligently makes sure that she is never without the means of “free labour.”

In other words, one could say that Marx is *more relevant* than he has ever been today, in the “digital age,” in that the leap from steam to digital technology was a quiet victory for capital, as technology evolved in its ability to suck time from workers, dismantling the clumsy factories, shrinking technology and making it portable, making it “fun,” making the worker exploitable at his meal table at home (and in his bed, in the toilet, anywhere, anytime), converting the world into a factory floor of “universal alienation” in which the “breaks” are a continuation of work by other means. Just as for Michel Foucault, outmoded stone and steel prisons (which have nothing to do

with preventing or reducing crime) only remain to hide the fact that the real prison is outside, and the real power is being exercised on those who are ostensibly “left alone” by the state (Foucault 1991), perhaps we can propose that capital only leaves a few factories around in the so called “developed world” to hide the fact that *the real exploitation* (the most effective, which is *not* to say the most unpleasant) is occurring outside of them.

A large part of the evolution of technology is to make the “user” enjoy being used, to hide the fact that the technology is getting more out of the interaction than the human being, as technology *qua* capital turns the user into the “product” in what was erstwhile “not-labour”/free time. And it goes beyond mere enjoyment: “The need for possessing, consuming, handling, and constantly renewing the gadgets, devices, instruments, engines, offered to and imposed upon the people, for using these wares even at the danger of one’s own destruction, has become a ‘biological’ need.” (Marcuse 1971, 11). The coming generation, who will live more of their lives “OL,” will have *no sense* that “virtual reality” is a limitless factory that feasts on their being. To “unplug” is no escape, if one’s body is swarming with nanobots. COVID-19 and whatever comes next is the perfect preparation for such a future, as we are trained to substitute real contact for digital and to think of our bodies as liabilities and real contact as a risk.

The thought of changing technology so that it *serves* human beings could become unthinkable in this totally reified future, for slavery to capital will have become so “fun,” “safe,” “interactive,” and so indistinguishable from life *per se*, that changing anything would result in a kind of ontological (and perhaps literal) death. If Kurzweil is correct (and a Marxist analysis of his work makes it look less like science fiction, despite its unreflexive metaphysics) then future generations, when no more of their lives can possibly be lived “OL” (when the body itself, on top of being vulnerable to infection, becomes a limit to accessing new forms of thinking and experience that “upgrades” can no longer overcome) will attempt to relinquish the last segment of “life” remaining to them and climb out of their bodies, into capital

qua technology, into the virtual factory of fun. This would be the perfect victory of capital over labour, the dead over the living. The precursor to this stage is the total colonization of the human body by sentient or near sentient machinic capital, changing the way that we exist: rewriting the human so that it is so different to traditional, inherited forms (though it may match our delusions well) that it could actually be digitalized.

Ironically, this final victory of capital might be celebrated by Marxists, who will declare a) that their fear about “unequal access” to augmentations and enhancements was exaggerated, and b) that we are finally in a “post-work” world – unable to see that in fact we are in a world of constant labour: creating undreamed of surpluses of value for capital in our comfortable, “post-work” “lives.”

It must also be considered that this talk of real and virtual life is anachronistic. One could perhaps in the future be in a public bar or classroom, without the means of being able to tell or care who is physically present, and who is physically elsewhere.⁸ This flexibility would of course register to users as a benefit. But the technological means to make it possible would also render impossible any mode of being together that was not technologically mediated: live conversations would be phone calls, just in case the person was not there, even when they were, or perhaps just because cybernetic implants made all speaking and hearing into digital processes. Visual and perhaps even tactile data would run through the same technology that takes over the task of Kant’s imagination: making the absent present, just in case the person was not there, even when they were. The commercial failure of “Google Glass” could be seen as a signal that such a thing would be rejected, but Google has not given up, and the next generation of AR glasses are rumoured to be coming soon: cheaper, lighter, and using Lidar technology instead of visible cameras. We will soon see if the next iteration will be rejected also, or this time embraced. If it is not

⁸ This article was written before the announcement of the rebranding of Facebook as “meta” and the proposed creation of the “metaverse” of which Mark Zuckerberg said: “We’ll be able to feel present – like we’re right there with people no matter how far apart we actually are.” (Paul 2021).

embraced, we should not discount pressure being asserted, via the creation of applications specifically designed not to function on earlier devices.

Whether the transhuman is an inhuman being that can be converted into pure data in a final evolution of subsumption, or whether the difference between the digital and real will be rendered redundant with the obliteration of the difference between life and death, this paper has suggested that there are reasons to fear the coming transhuman state.

Concluding Remarks

It is odd that today what is feared by many, that our intelligent products will outgrow and enslave us if we develop them too highly, is basically what Marx called “business as usual” under capitalist conditions: this is his technical definition of alienation (Márkus 1978, 43). The future we fear is what we are living, and have been living, for a very long time. The future we fear is also the future we are building: not because we are insane, but because we are already subjected, and the future of our subjection is that capital has rebranded it as greater comfort and less illness: “new life” (perhaps “life flavoured death” sums it up best). Clever capital lets us huddle in fear watching HAL 9000 and SKYNET so that when it really gets us we will sigh with relief, and signify our final subsumption under capital as a disaster averted. For human beings to be mastered by human products is no world fit for life, and the answer is not to bring the technology currently mastering us from the outside inside of us, or at least Marx’s answer is not. The answer, or at least Marx’s answer, is to master the means of production at arm’s length, with constant vigilance, and by maintaining as much distance as is possible. As Thorpe notes, technology has become our everything: devices that we work on, talk through, view the products of the culture industry through, and have sex with, so that all of these things become dehumanizing/labour (2016, 185).⁹ The coming together of the human and the machinic has been viewed in many ways:

as something already occurring and potentially positive, in as far as it could be the end of “human exceptionalism” (Haraway), as something that is beginning, and cannot be stopped, but that is for all that definitely positive (Kurzweil), and as something to be railed against, because it will mean the end of “human nature” (Fukuyama). The “human nature” that this paper wants to preserve from extinction is about as different from Fukuyama’s as is possible: deluded, unagentic, and generally mad (Fukuyama, despite a strange engagement with Nietzsche, overestimates the power of the will almost as much as the right transhumanists, sharing the perverse idea that human beings have a strong will but that the best political systems are the ones that minimize conscious human intervention).¹⁰ It is difficult to argue that these qualities should be preserved. Some transhumanists may even celebrate the extinction of the human being for the very same reasons and, even following my logic, state that it does not matter that we are destined to become a copy of something that never existed. Is it not the point that what we are means nothing, and has nothing to do with what we can make of ourselves? Against this strong argument, I reiterate my proposition that transhumanism could be the victory of capital over living labour, the final subsumption of labour under capital via the destruction of the differences

10 To be fair, my own proposition is inversely perverse, understating the human will but demanding conscious and democratic human direction of human affairs. But with Marx, Freud, and Nietzsche, I only stress the “death of man” as a corrective to misunderstandings, a continuation of Schopenhauer’s critique of the general overestimation of the sovereign will. My reservation regarding the gleeful determination to pronounce the end of the human and denounce any claim that the human being might be something special is that we are celebrating the demise of something that never was. Against the call: “man” never was, death to “man,” I posit that actually attaining some degree of the agency we have always supposed ourselves to have will give us a greater power to clean up our messes than forbidding any desire for agency or control, or stating that these things are impossible. Right transhumanism of course also wants greater power to will, but the path towards it lies in understanding our present dearth of will and developing it internally, rather than in creating external wills and emulating them: which is the death of “man” via other means. A figure such as Nietzsche’s “sovereign individual” can only be developed by training our drives and then letting go of consciousness. This kind of “self-responsibility” is very different to pure, transparent will, with nothing to guide it but a logic of rationality/efficiency that it thinks is objective.

9 “The device that is the gateway to an infinite variety of sexual pleasures is also the device to which office workers are tethered during the working day.”

between them. We need not perhaps be as cautious as Marx, and demand that technology be kept at a distance forever. We should, however, demand that technology be kept out of our bodies for as long as it retains the character of capital. For most of the history of the minority world, technology and capital had nothing to do with one another. As above, against the pervasive myth (which should be dispelled in kindergartens) that greed is innate, that capitalism is about greed, and that therefore capitalism as we know it is a foregone conclusion, Weber instead tells us that the marriage of capital and productive technology in the medieval world was absurd and contrary to all known logic. Guild logic was so opposed to production for profit that this marriage effaced the guild from the earth, and if the guilds had won, beating the revolutionary bourgeoisie who deformed the logic of nobles and pirates into something strange and new, legal and sober piracy via production (production that cares naught about production) the world would be a very different place.

Today our task is to affect a divorce between capital and technology. If we can do so, and still desire some kind of transhuman state, then that will be an entirely new question. But if we do, we must ensure that this is not a literal subsumption of humanity, not capital seeking direct control over the *life* process, as it once sought and gained “direct

control over the labour process.” Adorno once said that we are no longer alive if we become a mere addendum to the production process (1999, 15–16; 27). If being alive itself becomes a production process, even eternal, pain-free life will be nothing but eternal death: tension-free, walking, waking, death.

To finish on a less dramatic note, Glenn Rikowski (2003) notes that the whole transhumanism debate is marred by a misconception: we need not be invaded by alien technology to become capital: for him this is something that has already occurred. There is merit to the idea that the fight against capital is psychological, an internal war. Yet this leaves unexplained the desperation with which techno-scientific capital is presently attempting to degrade the difference between us and it. The fight of living against dead labour may well be psychological as well. But as living labour, we are different than dead labour. To degrade this difference is to become transhuman, and to overlook the more modest aim of the nineteenth century, still not attained: to teach us that we are not yet human, but could become so, by becoming a little more ego and a little less id; by ceasing to have only the soul of capital in our breast, if we are bourgeois, and no soul, if we are worker; by binning morality (and especially the drive/body/world hating morality of Socrates/Plato/Christianity/liberalism), which is today a death cult of reason, and becoming what we are.

References:

- Adorno, Theodor. 1999. *Minima Moralia: Reflections from Damaged Life*. London: Verso.
- Camfield, David. 2007. "The Multitude and the Kangaroo: A Critique of Hardt and Negri's Theory of Immaterial Labour." *Historical Materialism* 15: 21–52.
- Castoriadis, Cornelius. 1997. *World in Fragments: Writings on Politics, Society, Psychoanalysis, and the Imagination*. Stanford: Stanford University Press.
- Connolly, William. 2013. "The 'New Materialism' and the Fragility of Things." *Millennium: Journal of International Studies* 41(3): 399–412.
- Dyer-Witheford, Nick. 1999. *Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism*. Illinois: University of Illinois Press.
- Dyer-Witheford, Nick, Atle Kjøsen, James Steinhoff. 2019. *Inhuman Power Artificial Intelligence and The Future of Capitalism*. London: Pluto Press.
- Foucault, Michel. 1991. *Discipline and Punish: The Birth of the Prison*. London: Penguin Classics.
- Fuchs, Christian. 2010. "Labour in Informational Capitalism and on the Internet." *The Information Society: An International Journal* 26(3): 179–196.
- Fuchs, Christian. 2014. *Digital Labour and Karl Marx*. New York & London: Routledge.
- Fukuyama, Francis. 2002. *Our Posthuman Future: Consequences of the Biotechnology Revolution*. New York: Farrar, Strauss and Giroux.
- Greaves, Matthew. 2016. "Cycles of Alienation: Technology and Control in Digital Communication." *New Proposals: Journal of Marxism and Interdisciplinary Inquiry* 9 (1): 49–63.
- Grossmann, Henryk. 1991. *The Law of Accumulation and Breakdown of the Capitalist System: Being Also a Theory of Crises*. London: Pluto Press.
- Haraway, Donna. 1991. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge.
- Hardt, Michael and Antonio Negri. 2000. *Empire*. USA: Harvard University Press.
- Hardt, Michael and Antonio Negri. 2018. "The Powers of the Exploited and the Social Ontology of Praxis"; "The multiplicities within Capitalist Rule and the Articulation of Struggles." *Marx @ 200: Debating Capitalism & Perspectives for the Future of Radical Theory* 16 (2): 415–423; 440–448.
- Harvey, David. 2018. "Universal Alienation and the Real Subsumption of Daily Life under Capital: A Response to Hardt and Negri." *Marx @ 200: Debating Capitalism & Perspectives for the Future of Radical Theory*. 449–453.
- Hayles, Katherine. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. Chicago: University of Chicago Press.
- Hochschild, Arlie. 1983. *The Managed Heart: Commercialization of Human Feeling*. Berkeley: University of California Press.
- Heidegger, Martin. 2005. *Being and Time*. India: Blackwell Publishing.
- Kozubek, James. 2016. *Modern Prometheus: Editing the Human Genome with Crispr-Cas9*. Cambridge: Cambridge University Press.
- Kurzweil, Ray. 2005. *The Singularity Is Near: When Humans Transcend Biology*. USA: Viking.
- Latour, Bruno. 2002. "Morality and Technology: The End of the Means." *Theory, Culture and Society* (19): 247–60.
- Le, Vincent. 2020. "What AI Wants: An Anamnesis of the Future." *Ljubljana Strophe: Alien Perspectives, Journal for Contemporary Art Criticism and Theory*. Special Issue(14): 2021–2028.
- Lukács, György. 1971. *History and Class Consciousness*. London: Merlin Press.
- Marcuse, Herbert. 1971. *An Essay on Liberation*. Boston: Beacon Press.
- Márkus, György. 1978. *Marxism and Anthropology: The Concept of "human essence" in the Philosophy of Marx*. Assen: Van Gorkum.
- Márkus, György. 1982. "Alienation and Reification in Marx and Lukács." *Thesis Eleven* 5/6.
- Marx, Karl. 1969. Speech at the Anniversary of the People's Paper, April 1856. *Karl Marx and Friedrich Engels, Selected Works, vol. 1*. Moscow: Progress Publishers.
- Marx, Karl. 1973. *Grundrisse: Foundations of the Critique of Political Economy*. London: Pelican Marx Library.
- Marx, Karl. 1982. *Capital Volume I: A Critique of Political Economy*. London: Penguin Classics.
- Marx, Karl. 1991. *Capital, Volume III: A Critique of Political Economy*. London: Penguin Classics.
- Marx, Karl and Friedrich Engels. 1998. *The German Ideology*. USA: Prometheus Books.
- Nietzsche, Friedrich. 1999. *Human, All Too Human: A Book for Free Spirits, (Including Assorted Opinions and Maxims and The Wanderer and his Shadow)*. Cambridge: Cambridge University Press.

Nietzsche, Friedrich. 2003. *Daybreak: Thoughts on the Prejudices of Morality*. Cambridge: Cambridge University Press.

Nietzsche, Friedrich. 2006. *Thus Spoke Zarathustra*. Cambridge: Cambridge University Press.

Nietzsche, Friedrich. 2007a. *The Anti-Christ, Ecce Homo, Twilight of the Idols*. Cambridge: Cambridge University Press.

Nietzsche, Friedrich. 2007b. *The Gay Science*. Cambridge: Cambridge University Press.

Nietzsche, Friedrich. 2007c. *Genealogy of Morals*. New York: Cambridge University Press.

Nietzsche, Friedrich. 2009. *Beyond Good and Evil*. Cambridge: Cambridge University Press

Omohundro, Stephen. 2008. "The Basic AI Drives." Self Aware Systems website. https://selfawaresystems.files.wordpress.com/2008/01/ai_drives_final.pdf

Paul, Kari. 2021. "Facebook announces name change to Meta in rebranding effort." *The Guardian*. Fri 29 Oct 2021 07.06. <https://www.theguardian.com/technology/2021/oct/28/facebook-name-change-rebrand-meta>

Plato. *Phaedo*. 1997. *Plato: Complete Works*. USA: Hackett Publishing Company, Inc.

Rikowski, Glenn. 2003. "Alien Life: Marx and the Future of the Human." *Historical Materialism* (11) 2: 121-164.

Ringer, Aishesha and Marco Briziarelli. 2016. "The Ambivalent Spectacle: A Critical Inquiry on Web 2.0 Media and Alienation." *New Proposals: Journal of Marxism and Interdisciplinary Inquiry* 9 (1): 38-48.

Thorpe, Charles. 2016. *Necroculture*. New York: Palgrave McMillion.

Tremain, Shelly. 2017. Commentary on Melinda Hall's *The Bioethics of Enhancement: Transhumanism, Disability, and Biopolitics*. Symposium on Melinda Hall's *The Bioethics of Enhancement*. 06/05/2017. Accessed 03/09/20. https://philosophycommons.typepad.com/disability_and_disadvanta/2017/06/symposium-on-melinda-halls-the-bioethics-of-enhancement-tremain.html

Weber, Max. 1976. *The Protestant Ethic and the Spirit of Capitalism*. London: George Allen & Unwin Ltd.