Workers' right to the subject: the social relations of data production

Phoebe V Moore

Abstract: The use of data to profile and make decisions about data subjects for citizenship, targeted advertising, job recruitment and other reasons, has been eminently normalised, which is an emerging threat to protected spaces for personal subjectivation and identity formation. The 'right to the subject'; or to agency via personal subject formation outside bilateral profiling; is at stake. This is especially true for workers. Algorithmic management infused with worker control mechanisms occurs in structurally and objectively unequal conditions within subjective, and unequal, social relations. Data harms protections in European privacy and data protection law, despite being heralded as the strongest in the world, are insufficient to protect workers' right to the subject. Indeed, structural features of inequality within the capitalist data political economy mean that workers experience different power relations to consumers and citizens. Analysing the social relations surrounding policy features of 'consent', and 'risk', with focus on the General Data Protection Regulation (GDPR) and the negotiations for the AI Act, it is not difficult to see that these policies do not protect all data subjects' rights to the subject identically. Indeed, workers never have the capacity to truly *consent* at work; and the *risks* workers face are different from that of other data subjects such as consumers. Data subjects do not, across categories, have equal access to equality, within, and because of, the social relations of data production. From a cross-disciplinary perspective and with contributions to sociology, critical theory, media and policy studies, this article argues that workers' right to the subject is at stake, in datafied social relations.

Introduction

People regularly tell other people who they are, based on their social status, such as a police officer and a criminal, or an immigration official, and an immigrant. This is not in itself new. What is new, is the use of data and advanced surveillance technologies for profiling in workplaces, where employment has become increasingly securitised. Employers have begun to prescribe subjectivities and identity orientation to workers, via advanced surveillance technologies biometric recognition technologies. However, the 'self' is more than someone who is *identified bilaterally,* e.g., via a 'labeller',[3] such as an immigration officer viewing a passport number, or employer asking for a workers' home address. A profile can also be recognised by 'physical,

physiological, genetic, mental, economic, cultural or *social identity* [italics added]' related data (GDPR, Art.4). Within work and production environments, workers' rights to self-depiction and what I am calling the 'right to the subject', is already not guaranteed. As data collection, digitalised profiling, and algorithmic management increase dramatically, data subjects' access to analogue autonomy and agency of selfhood is diminishing (see Mittelstadt, 2017; Albers and Sarlet, 2022; Crawford, Lingen, Karpii, 2015; Colman, 2010; Amoore, 2020). Threats to human subjectivation in the data political economy are prevalent in digitalised workspaces (Moore, 2020a), and the possibility and/or impossibility for regulatory protections, must be interrogated.

Profiling is covered by a justifiably large area of research in technology and cultural studies (Santosh and Wall, 2022; Ajana, 2013; Hidefumi, 2022; Grinnell, 2020) and legal researchers are calling for serious action in privacy, data, and AI regulation (De Stefano and Wouters, 2022; Justo-Hanani, 2022; Adams-Prassl, 2022). However, machinic identification and profiling at work holds different pressures and power relations to other social contexts. Neither research, nor legal protections, deal sufficiently with psychosocial risks, nor surrounding subjective elements relating to human agency, in datafication. Data subjects' ability to consent to, or refuse, data collection; and therefore, to stave off the risks surrounding; differs, depending on what type of data subject is experiencing it. Indeed, a citizen, a consumer, and a worker exist within varied subjective social relations. However, data harms and other technology policies are written as though the individual exists somehow isolated or suspended in mid-air, not in a complicated constellation of social and affective relations, nor within historical and material circumstances, or the social relations of data production.[4] Significant limitations to formations of *intersubjectivities*[5] are also inherent to the individualising ontologies of current data harms reduction policies, furthering the limitations to the right to the subject.

There are significant psychosocial and affective relations in datafication processes which have relevance for human subjectivity (see Karatzogianni and Kuntsman, 2012), now amplified alongside hyped news of the imminent sentience of artificial intelligence (AI) seen with the introduction of new large language models (LLMs) which generate text that is already seen to be far superior to anything humans can generate (see Gmyrek et al, 2023). Elsewhere, I have referred to the metaphor of a mirror to query who, and what, is viewing what, and who, in the supposed bilateral relation defined by artificial intelligence (is the machine mimicking the human or vice versa?) (Moore, 2019, 2020b). Building on my arguments, I am arguing here that there are limited prescriptions for all recognisable intelligence given the supposed competences of machines, putting our sovereignty over self-depiction into question. What is necessary now, are more explicit discussions around specific pressure points, threats, and limitations posed to human subjectivity, agency, and expression (see Read, 2022) in relation to datafied profiling and social relations.

The first section of this article begins with my thesis on the right to the subject (and therefore to emancipatory processes), working with sociological and philosophical concepts about subjectivation and subjection in capitalism. There are both ontological and epistemological problems with the way European data and privacy protections policies are framed. Ontologically, there is insufficient attention paid to difference across the different data subject typologies, i.e., a working data subject is not identical to a consumer data subject. Quantification is the abstraction of the concrete, and because profiling and its usage for algorithmic management is based on quantification and metrics, the idea that the natural person is protected within supposedly human rights centred policies, where metrics ultimately depict subjects, is an epistemological error, like a ghost in the machine. Data subjects do not have equal access within the unequal structure of capitalism. This inequality results in a detriment to the possibility for subjects to depict their own subjectivity despite European policy is intended to be 'humans in command' oriented, and 'human rights centred'. One issue is that the definition of the data subject found in the GDPR, which refers to an 'identifiable natural person' (GDPR, 2020), is at best, tautological, and at worst, gives significant autonomy and agency to the

---

[4] The 'social relations of production' is a Marxist concept relating to the seemingly objective conditions within which human behaviour can occur within a specific mode of production, such as within the current capitalist frame. Adding 'data' to the term updates the concept to identify the role of data in supposedly furthering the objective conditions within which people interrelate. Data does not inherently objectify relations but can be seen as making subject formation more difficult for the reasons I outline in this article.

[5] This article does not develop the concept of 'intersubjectivity' but further research should incorporate this into the arguments I am presenting here. The concept begins with Husserl who discussed human interchanges as occurring at the unconscious as well as conscious level and how subjects are affected by one another. German idealist philosophy, including Fichte, Hegel; the social psychologist Mead; Levinas, Heidegger and psychologist Freud, further develop the concept. Merleau-Ponty 's work on intercorporeality and Spinoza on conatus then influenced later research on affect, including within new materialist feminism. Dowling, Nunes and Trott (2007) edited a special issue in 2007 in the journal *ephemera* called 'Immaterial and affective labour: explored' https://ephemerajournal.org/contribution/immaterial-and-affective-labour-explored which contains several early and important pieces on this topic.

labeller, but no agency to the one who *is* identified, i.e., the labelled data subject him/her/themself. So, despite naming the human as a 'natural person', policy does not permit qualitative potentials for the emancipatory subject.

The second section looks at one EU data protection regulation: firstly, the GPDR; and secondly, negotiations leading up to the product safety regulation, the AI Act.[6] Both legal instruments have progressive potential to protect workers against data harms, but unfortunately, they are both weak. This is because the limitations within data harms policies are that they focus on *individual* protections, rather than recognise multiplicity of subjective social relations of inequality, within which harms occur. Further, due to their individualised framing and the resultant bilaterality implied, these regulations do not address the issue that working data subjects are not at liberty to consent/not consent to data collection, and thus, to be algorithmically managed. This is because of subjective and objective power relations within neoliberal capitalist social relations of data production (see Cox, 1987; Harrod, 1987). This is used as an example for the new pressures placed on the employment relationship: the absence of workers' right to consent sits within a constellation of risks, i.e., negative externalities of intensified data production, collection, and use, where self-expression and the right to the subject are at risk.

The next two sections look further at the threat to agency and the right to the subject. First, I look at the psychosocial imaginary of the homogeneity of equality of access to giving 'consent', appears as a bilateral gesture. To be bilateral, the relation would require autonomy on both sides. This is not possible within the structural inequality of the employment relationship. Even when achieved, a subject's self-awareness does not automatically lead to an emancipated subject (Fromm, 1993: 41).[7] When a seemingly objective technology is added to the employment relationship, it adds a potentially authoritarian automaton. Consent requires subjective autonomy. Choice is not identical to consent, either. Consumers have choice, plus consent capacities. To be a consumer, one already possesses some level of capital and 'freedom' within capitalism to choose whether to buy something or not. Workers are only 'free' to sell their labour, and therefore cannot choose to work or not; nor to consent to work, or not.

The second myth for a cross-data subject equalities, is the concept of 'risk', which in safety and health circles often stops at the physical. Insufficient attention is paid to social relations or their impact on the psychosocial (Ball, 2021), and this cannot be resolved with safety-by-design principles (Cefaliello, Moore, and Donoghue, 2023). Working data subjects risk different things to other data subjects, which are arguably the worst, compared to other data subject types (e.g., consumers, see Tables 1 - 3). This is because working data subjects risk material loss, where within capitalism, the working class has the freedom to sell its labour - but their (our) subjectivity is not free, because workers must have access to a wage for material survival (Marx, 1976). While the AI Act offers a series of risk levels that will determine the types of checks necessary for management decision-making technologies to be released onto the market, these classifications, and their associated assessment requirements, cannot reduce the extent of the psychosocial risks that occur resulting from datafication. Psychosocial risks sit within the subjective realm, including anxiety, which is known to result from excessive workplace surveillance (Moore, 2018a; Todoli-Signes, 2021; Aloisi and Gramano, 2020). Anxiety's physical manifestations often appear in the form of burnout or mental health failures. Arguing that data driven decision making about work and about workers already introduces a significant depletion of the right to the subject, I look at specific moments in a labour process and in the employment relationship, where the reduction of the capacity for *consent* in decision making introduces new psychosocial *risks* for working data subjects.

---

[6] The full name for the AI Act is: "Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts". See: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex% 3A52021PC0206. At the time of publication, the AI Act is entering its trilogue phase.

[7] Orwell's 'Newspeak' in *1984* (1950) is a similar idea, where terminology is a trap rather than authentic. Orwell's lesser studied concept of 'Duckspeak' introduces a captivating concept. This insightful literary foreshadowing reflects the ambiguity around ideologically oriented profiling and the ways that a bilateral relationship involves surrounding assumptions, prescriptions, and the distinct possibility for resulting domination with the final risk of 'vaporisation' predicted by this early science fiction oracle. In a café in the early part of the story of 1984, Winston is having Victory beverages with Syme, who is a philologist colleague and specialist in Newspeak. In discussions about Newspeak, Syme says 'There is a word in Newspeak… I don't know whether you know it: Duckspeak, to quack like a duck. It is one of those interesting words that have two contradictory meanings. Applied to an opponent, it is abuse; applied to someone you agree with, it is praise' (Orwell, 1950: 54).

The right to the subject

The pursuit of datafication (Van Dijck, 2014; Kennedy, Powell and Van Dijk, 2015) and data-based profiling of the human subject only occurs between humans in everyday circumstances. To deal with the tensions that emerge, current data governance policies are working to adapt, particularly given even a mainstream 'techlash' (Economist, 2018), where people are becoming aware of the potential harms that data production, collection, and use, pose to them. Data collection *en masse* has been heralded for usage in technological innovation, but the celebration of the big data revolution fails to recognise human data subjects' rights in data production. Big tech and population analyses have revealed structural inequalities, where pattern recognition of data revealed workplace harms such as in the discriminatory Amazon CV sorting scan (Dastin, 2018). Data protection policies are not fit for purpose (see Ebert, Sildhaber, Adams-Prassl, 2021). What is missing is recognition of the social relations of data production. Rights should begin even before a human begins to produce data (sometimes even unconsciously) and before data is used to quantify and profile subjects. All productive forces exist within an ecology, where people's subjection, as described by Foucault in his later works (1982), is such that the only subjective identity we are permitted such as the 'employable' subject I have discussed elsewhere (Moore, 2010), is that which is codified and collapsed. Labellers have more power to depict our supposed true selves than we have, even in cases where the subjected cannot depict who that 'other', is.

The owners of data 'own the future', which is not an ideologically neutral historical point, because we are embedded in a capitalist model for social relations (Bloom, 2019: 2; see Adler-Bell and Miller, 2018). The owners of data are disproportionately managers, police, and policymakers. Research looking at the rise in technological practices of algorithmic management, worker control, discrimination, and surveillance, illuminates the risks workers face when data is used to make decisions about them (Berg et al., 2018; Aloisi and De Stefano, 2022; O'Neil, 2016; Ajunwa, 2019; Adams-Prassl, 2020; Köchling and Wehner, 2020). Research that identifies algorithms as being ascribed identity prescriptions (Amoore, 2020) and which finds algorithms to be discriminatory (Williams et al, 2018; Ajunwa, 2020; Köchling and Wehner, 2020), is now relatively well known. Black box processes lead to unclear outcomes of processes, where even the algorithm's designer may not understand how results emerge (Pasquale, 2016) and data doubles are at play (Ruckenstein, 2014). However, research so far in this area, does not focus on the risks emerging because of the imbalance in the convergence of data production, ownership, and use; worker subjectivity; and how the inclusion of machinic decision-making depletes the rights to the subject, for workers.

Becoming a 'data subject' does not occur in a vacuum; nor does 'the subject' equate to individually, nor shared, 'subjectivities' nor 'intersubjectivities'. Work in capitalism is couched in a set of social relations that are not experienced the same, when one is acting as a 'consumer'; or a 'citizen'; or a 'worker'. Relations of production are carried out by people with self-understanding within a dominant model; or the universality of the commodity form in capitalism. The working data subject automatically loses some of their aptitude or supposed right to self-expression and the supposed 'authentic [subjective] self' some companies expect people to bring to work (e.g., Meta Careers, 2019), within capitalism. Data subjects are *subject to* the decisions that are made about them, *subjects within* and *subjects of* specific social relations (see Tables 1 – 3). In this way, data subjects are also *subjects within* and *subjects of* specific 'economic and social processes' in neoliberal capitalism.

The 'digital subject' was already expertly discussed within the current journal *Convergence's* Special Issue 'From emergence to convergence: New critical perspectives, innovative methods and novel approaches to the study of the digital subject', edited by Kennedy and Atkinson (2019). Formation of digital subjectivity discussed by these authors is an emancipatory process of becoming, where affective engagements occur, and materiality involves both bodies and the technologies themselves. Also in Communication and Media studies, Couldry and Hepp (2016) describe a 'materialist phenomenology of the digital world' whereby the social world ideally remains accessible to people by virtue of their own understandings and interpretation as mediatisation becomes increasingly pervasive, where there are real possibilities for collective becomings, and in that sense, possibilities for empowerment in neoliberal enclosures. I intend to build on these conceptualisations of the 'digital subject', by sourcing a series of further social theorists to look at the diminishing right of the subject to subjectivity and agency in the political economy of datafication, focussing on power, social relations, and political aspects of data production, extraction, and use.

Marx discussed the metaphysical realm with regards to human as 'species being' (*Gattungswesen*) and alienation (Marx, 1884; see Morgan, 2018; Byron, 2014; Wartenberg, 1982). Within capitalism, structural features of this form of the economy mean that behaviours within it are restricted, where the objective nature of capitalism is dominant. If the proletariat owned the means of production, they would shift this objective nature to communism and behaviours within communism would prevent commodification and competition, and social relations would become emancipated. There are socialised sanctions to prevent some of the detrimental behaviours of capitalism, such as those who refuse to work may starve; or those who demonstrate too much care for others, are considered ignorant. There are possibilities for some ethical framing for social relations within capitalism within social democracy. However, authentic social relations can also be laden with unethical subjective intentions, such as interpellation and domination. Marx did not deal directly with micro-practices/social relations (such as consent and risk) which further oppression, nor link those to subjectivity as such (see Bratich, 2022).

Some Marxists have interpreted 'class consciousness' Vs 'false consciousness' to equate with human subjectivity Vs, respectively, the lack thereof. However, subjectivity is not the reserve of the emancipated, but can, and does, exist, within other political orientations. Spinoza argued that bodies impact one another affectively, but affect is not necessarily affirming, but can also result in the limitation in power to act (1888); De la Boétie wrote a very early essay (in secret) (1577) about voluntary servitude which keeps tyrants in power; Burawoy wrote that consent is generated through schooling, family, and the media (1979) identifying how workers consent to their own violation; Lordon (2014) theorises desire and its exploitation as contingent for operations of capital; Gramsci (2005) discussed the *trasformismo* of specific ideas across political parties, in order to generate a form of consent that is balanced with coercion, and prevents resistance. The difference between 'common sense' which exists within a hegemonic frame, and 'good sense', which occurs as emancipatory (Gramsci, 2005) still relies on structural hegemony, rather than conceives the authoritarian nature of capitalist relations of data production, where the permission for self-depiction is eroded, where there is no opportunity for emancipatory collective social relationality.

Critical Theorists of the Frankfurt School wrote about Marx's concept of alienation and other aspects through the lens of Hegelian social philosophy, rather than Kantian liberalism (Jaeggi, 2014). The difference between Hegelian and Marxist epistemologies is that Hegel held that: 'As long as there is not an ethical concern, self-interest and mutual deception will prevail in human relationships and in activities which seek objectification in facts' (Santilli, 1973: 85). Hegel's thesis differs from other social theorists, where concepts of recognition involve subjectivity formation that require intersubjectivity rather than isolated accidents of identity within structurally inherent power opposition (Honneth, 2005). Of interest for thinking about restrictions imposed on emancipated (inter)subjectivity for data subjects based on early Critical Theory, Althusser (1970) wrote about a 'theoretical theatre' wherein a policeman calls out to another person on the street: 'hey, you there!'. When this occurs, a subject is depicted as a *suspect*. Althusser calls this process interpellation, whereby subjectivity is narrowed based on the labeller's decision. Althusser (1970) talks about this as a feature of ideological processes leaning toward fascism, rather than as accidental. A police officer has state-sanctioned violence in their job description with authoritarian personality normalised, as discussed by Adorno (1950). 'Being' is an ontological question, which may sit in antithesis to 'having' (Fromm, 2008). Fromm writes that awareness is obscured within capitalism, and references Marx for critical consciousness, where enlightenment is the way for the working class to achieve liberation. The problem is that there is no *incentive* to achieve awareness of one's own exploitation in capitalism because this kind of awareness is likely to lead to personal unhappiness (Fromm, 1993: 41). There is also no guarantee that personal awareness of structural conditions will lead to critical class consciousness and subjective solidarity.

Post-autonomist Lazzarato, who was influenced by the Frankfurt School, identifies reasons for the collapse of potentials for emancipation and the limitations of agential subject formation as resulting from the 'war machine' of capitalism within a wider multiplicity of relations. He notes that legal and institutional apparatuses in capitalism are built in ways that consolidate existing power structures and all nodes of relations via governing the 'divisions of sex, race, and class, guarantors of the enslavements and subjugations implied by these divisions' (2021: 166). So 'subjectivities choose, make decisions, but these decisions and these choices are meant to establish or re-establish the functioning of the machine' (ibid.), which is at war against humanity. The drive for elite-defined subject restriction becomes even more evidenced during a crisis, when the intentional closing of multiplicities constitutes an explicit attack on subjectivation. Today we face a 'cost-of-living crisis' or what we have called the exponentially burgeoning crises emerging due to the 'costs of living'

within capitalism. People are expected to retreat from communal support in fear and to turn on one another during crises, and indeed, the apparatus of capitalism operates better when relations are narrowed into bilaterality. Inequality and oppression are better obscured when people are divided from one another, making it difficult to also identify how to combat subjection effectively.

In Sociology, with a similar argument to Althusser's interpellation thesis, 'labelling' is where:

> …deviancy is not a quality of the act a person commits, but rather a consequence of the application by others of rules and sanctions to an "offender". Deviant behaviour is behaviour that people so label. (Becker, 1963)

Also in Sociology, Goffman wrote about identity as being oriented around 'interaction', differentiating between expression (relayed by a person) and impression (gained by a receiving person) (1959) with a critical view of bilateral social relations. People do not have entire control over how features of personalities and/or values may be interpreted based on how one's voice sounds or how someone smells. Hogan (2023) advances Goffman's thesis by discussing the ontological status of 'likenesses'. Hogan notes that the performance of the self and the act of assigning a proper likeness are far more complicated today, because of advanced technologies like facial recognition (FR) which can detect a face and thus encode it through distinguishing it from other objects - such as a rose. FR can 'recognise' a face, if its image is stored in a database, and give the face a proper name. FR technology is not advanced in its assignment of 'counterfactuals', nor is it capable of attributing all the types of symbols people detect about others based on other affective characteristics which allow us to try to give others a 'proper likeness' (Hogan, 2023.) or to make *inferences* (see Wachter and Mittelstadt, 2019). Nor is a machine reliably able to depict the likeness of someone to the level that the individual can necessarily recognise themselves, that technologies also play a part in subject depictions outside of a bilateral relation between humans.

Work and employment researchers Purcell and Brook (2022) argue that there is a contradictory dimension between objective social relations and subjective experience, which 'mystify capitalist exploitation and establishes an institutionalised hegemonic coordination of interests' (2022). This argument does not answer the question of whether forms of subjectivity can also be power-driven or oriented around authoritarian traits, rather than only a form of emancipatory class consciousness. Mystification can also be precisely a mystification of nefarious subjective intentions (similar to Gramsci's thesis on *trasformismo*).

One of the best-known theorists of the 'subject' is Michel Foucault, who wrote that:

> …there are two meanings to the word "subject": [1.] subject to someone else by control and dependence; and [2.] tied to his own identity by a conscience of self-knowledge. (Foucault, 1982: 782). *Numeration added by current author*

In the first meaning, a subject position involves a power relationship surrounded by potential inequality, degradation, violence. *Subjection* entails the submission of subjectivity i.e., where a subjectivity is determined by a process which is not individually decided or chosen, whereby:

> …all types of subjection are derived phenomena, that they are merely consequences of other economic and social processes: forces of production, of class struggle, and ideological structures which determine subjectivity. (Foucault, 1982: 782)

In this way, data subjects are also *subjects within* and *subjects of* specific 'economic and social processes' discussed and reflected within the Tables 1 – 3 presented.

The second meaning of 'subject' discussed by Foucault is potentially emancipatory, where the 'conscience of self-knowledge' allows self-freeing subjectivation to emerge. The discovery of agency is whereby a subject personally derives identity formation and selfhood despite the potential for subordination via 'technologies of power' (Foucault, 1988: 18). There is complexity surrounding Foucault's depictions for subjectification and subjection, where the former is more active, and the latter is linked to some passivity of the individual. The act of self-becoming operates through the technology of the self, which constitute 'operations on their own bodies and souls, thoughts, conduct, and ways of being' (ibid.). Judith Butler more recently writes that subject formation has to do with locating autonomy of the self, and giving an account of oneself is one of the most important nodes in a process of subjectivation or freedom of the self and selves (Butler, 2001).

The political economy within which data subjects operate is discussed by others who speak of the neoliberal subject (Hardy and Thomas, 2015; Cooper, 2008; Mirowski, 2014; Chowdhury, 2022; Bandinelli, 2019; Chandler and Reid, 2016; Brook, 2013). Chowdhury (2022) argues that externally derived subjection occurs at a personal level via a dualistic gaze, where outlying characteristics which do not fit values of competition and optimisation and other capitalist norms, are 'othered' internally and therefore self-assumed to be part of one's personality and subjectivity. For example, a worker who actively pursues faster performance by pushing herself harder at work would, within this theory of self-formation, correlate her behaviour with her ambitious personality, which she is proud of. This worker simultaneously overlooks how others might be harmed if she paces herself beyond others' competences. This would matter where management increases quotas for all workers regardless of ability. It could also be seen in gig work, where rider platforms begin to include more dangerous routes and related pace quotas, inadvertently set by faster workers as algorithmically pushed requirements (see Badger, 2022), where the fastest rider generates data that is used by management to idealise a worker, where the bar is raised despite physical pressure to ride faster and the surrounding psychosocial pressures of competition and performance. For ideal control of workers, people will internalise externally mandated requirements for performance and become 'quantified workers' (Moore and Robinson, 2016), who 'optimise for fit' (Dencik and Stevens, 2021; also see De Stefano, 2019). Alignment to even unreasonable requirements becomes internalised and part of subjection. Problematically, policy is written in a way that imagines it can give data subjects little more than supposed equal access to what is an already unequal landscape, made worse by the obfuscation of subjective accountability, via the machinic object.

All these theorists from various disciplinary bases ask how subjectivities can be formed, and whether the subject can or will find emancipation, within capitalism. Finally, in law and policy studies, Viljoen (2021: 571) criticises data harm management policy (such as the GDPR), for restricting workers' rights to equality. A 'propertarian' reform methodology sees data as property and sees personal ownership of data as a solution. However, this methodology sees data as property; a commodification solution that does not account for the social relations surrounding it. While there are very good arguments indicating that human data ownership will enhance agency (Powell, 2021; Pybus et al, 2015), if workers must ask for 'property', even if it is rightfully theirs, they can, and are often, victimised. Viljoen then discusses the 'dignitarian' reform model, which holds that threats to autonomy in data collection and use could be resolved by revisiting and re-establishing fundamental rights, but the data subject's right to self-articulation suffers singularly. Neither propertarian nor dignitarian approaches to data harms is sufficient for addressing all issues emerging in the realm of datafication and social relations. Viljoen notes that 'social processes of datafication not only produce violations of personal dignity or autonomy, but also enact or *amplify social inequality*' [italics added by current author] (2021: 581).

My thesis on the right to the subject is based on looking at specific actions within an unequal labour process: consent, and risk. Authentic consent and behaviours to avoid psychosocial risks, require a level of conscious, non-alienated subjectivity, which is not an objective, nor simply a bilateral, relation. Authentic consent and risk defence cannot occur in a relation where an authoritarian personality (Adorno, 1950) features. Even where these behaviours are carried out subjectively, both actors (e.g., the labeller being a manager, with assistance from an 'objective' machine; and a worker) can behave illiberally. Where a hoped socialist consciousness and subjectivity that can emerge after common sense becomes good sense (Gramsci, 2005), there also lies a potential for right wing subjectivity (see Worth, 2019; Teo, 2021; Lilly, 1999; Bruff and Tansel, 2020). The problem with identifying subjectivity solely with working class consciousness as being automatically linked to solidarity is that it can rely on subjectivity as being emancipatory in and of itself. However, it is also possible to be subjectively oriented around having things or objects, and consumerism; and at worst, subjectivity can be authoritarian.

To imagine that access to equality is identical across various data subject types (Viljoen, 2021) is to imagine that data subjects have equal access to equality. At best, subjects experience 'equal access to inequality' (Morris, 2019). To write policy as though an individual's choices for decision-making such as within a consent dichotomy are *not* set in a wider constellation of social relations is to ignore the historical and material conditions within which agency and access to subjectivation can exist. Invisibilised aspects within the data political economy include invisible labour, and power, gender, race, and class (Cherry, 2017). Consent cannot be consensual in conditions of inequality, where 'force is camouflaged by consent; the consent is brought about by methods of mass suggestion' (Fromm, 1993: 25). Capitalism is the structure and the object

within which production occurs. Machines used for management for decision-making are portrayed as being objective, but the integration of affective action into quantified models (Moore, 2018b) does not turn consent; nor risk avoidance; into objective relations. They are still performed by people who are subjective actors, who consciously perform behaviours. So, in order to prevent the advancement of the inequalities within which workers work, a challenge to entirely abstracted numeration via datafication must be enacted, and we should be discussing intention within these relations, where ideologically influenced subjectivities can be revealed.

Consent and risk are not bilateral, equal relations

The 'data subject' was institutionally termed as such within the 1995 Data Protection Directive; the Data Protection Act 1998; and now the GDPR, which went into force in 2018. These Directives, Act and Regulation have been formulated to determine best implementation of technologies designed to collect personal data. The data subject him/her/them-self, can be a worker, but also refers to a data subject who is a consumer, a citizen, a criminal, a black person, a gay person, a religious person, and so on. There is no specific definition of the data subject made available even within the Definitions section of the GDPR. In Art. 4, the definition of 'personal data' helps, where the term 'data subject' appears within parentheses after the phrase 'natural person':

> 'Personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. (GDPR, Art.4)

There is recognition of specific rights for workers such as the GDPR Art. 22 and the AI Act Annex III, no. 4. The problem is the distinct possibility for homogenisation of policy, despite the supposed varieties of subjects that can be encapsulated within one term.

The act of identifying a data subject within regulation could have a positive effect, i.e., to allow regulators, authorities, and technology users and providers, a way to think about who is (or should be), protected, and how. However, issues surrounding consent and risk demonstrate the problem of assumptions that all data subjects have equal access to equality in subjective social relations of production. No identification is merely a bilateral process, where one side is the viewer, and the other is the viewed (Marx, 2016). This introduces significant questions about whether people can consent to the identification that is made, and, what, exactly, a data subject risks. The power relations between the labellers (managers and machines), and the labelled (workers), differ depending on the subject's social position, and workers experience the world far differently from consumer data subjects. Even 'worker' is not a universally definable category, given the variation in contract types (i.e., employee; self-employed; agency worker; zero-hours contracted; independent contractor including the bogus self-employed; etc.) (Berg, 2016). Relational and material experiences and the sheer possibility of a priori agency across categories of subjects, even workers who work with different kinds of contracts, are not identical across data subjects. Agency to speak out against algorithmic decision-making likewise is not identical across categories either.

Consent.

In 2016, the EU adopted the GDPR. EU member states were given two years (2016 - 2018) to work to ensure that it is fully implementable into local regulation and in 2018 as of May, the GDPR was recognised as law across the EU. Importantly, the Regulation sets out the criteria for 'Lawfulness of Processing', indicating that data collection, processing and usage are lawful 'only if and to the extent that at least one of the following applies' (GDPR Art. 6):

1. **The data subject has given consent** to the processing of his or her personal data for one or more specific purposes;
2. Processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract;
3. Processing is necessary for compliance with a legal obligation to which the Controller is subject;

4. Processing is necessary in order to protect the vital interests of the data subject or of another natural person;
5. Processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the Controller;
6. Processing is necessary for the purposes of the legitimate interests pursued by the Controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

In other words, a Data Controller must carefully decide whether at least one of these criteria can be defended as a reason for data collection and use.

The first criterion asks that the: 'data subject has given consent'. Clearly, any consideration of worker/employer transparency around communication and workers' capacity for consent, is complicated by the variable dynamics and organisational histories of specific work environments. Consent is defined as follows:

When a person voluntarily and wilfully agrees to undertake an action that another person suggests. The consenting person must possess sufficient mental capacity. (Cornell, 2022)

While there are loopholes and Data Controllers can select other criteria of lawfulness for data collection, a consumer's capacity to consent may be easily blurred with the idea of 'choice', and their possession or agency in that social relation with a company, and a workers' capacity for choice to do work or not,[8] are epistemologically antagonistic.

'Consent' for data collection in an employment relationship; and 'consent' to use a product or online service; are not identical transactions. Nor do dialogic experiences contain identical capacity for 'voluntary' and 'wilful' actions on both sides in both these bilateral relations. Consumers have the chance to choose, whereas workers do not, necessarily. The synthesis and the risks entailed with specific actions cannot be held in equal measure. There are supposed choices between e.g., affective joy or sadness, whether at work or in the supermarket (Lordon, 2014), but making a 'choice' to buy a type of soap advertised online; and 'consenting' to brutal working conditions resulting from the acceleration of working pace based on data collection; are ultimately, not the same. Working data subjects exist within relationships of structural dependence, due to material needs, and in a social form, where reproductive labour is part of invisibilised data production.

Lordon writes about consent and 'enlisted desire' in the working environment, referring to Spinoza's and Baranski's theses on the sovereign subject and affect (Lordon, 2014: 84). Lordon states that workers even 'imagine themselves as subjects although they are nothing of the sort' (97). Management rules by 'subjectivising normalisation' and carrying out a 'makeover of affective temperaments' (ibid.: 97). Consent, Lordon argues, relies on an 'exogenous requisite' for producing what *appears* to be 'endogenous motivation'. This is where management leads data subjects into a position where 'they think that they are not led… but [think that they are] living after their own mind, and according to their free decision, where the 'institutions of capture' are enlisted and where workers *feel* they have consented, because they *desire* to align with an employer's interests via 'co-linearisation'. Where 'external imperatives, those of the enterprise and its particular objectives, [are transformed into] joyful affects and a personal desire, [there is the possibility for] a desire that ideally they can call each call their own' (ibid.: 98). However, consent is a relation that is set against a 'backdrop of threat' (*Ibid*: 100), where seemingly passionate servitude depletes agency within what Hayles (2017) speaks of as the unconscious. A worker/employer 'consent' relationship can never embrace co-linearisation which would be expected for workers to enjoy the full dream or promise of e.g., the product they are selling. Subjectivity formation, 'even when it is happy, consists fundamentally in locking employees in a restricted domain of enjoyment' (ibid.: 107). In these ways, it is difficult to understand how a working data subject can be expected to provide real consent, at all.

I do not agree that workers are inherently *not* autonomous subjects, just because they appear to consent to workplace surveillance, as Lordon indicates. Rather, I argue that working data subjects are limited

---

[8] Note Herman Melville's parable, where the worker, Bartleby the Scrivener, states 'I would prefer not to' (Desmarais, 2001).

in subject formation because of profiling at work, via management's use of data. Chowdhary (et al, 2023), like me, argues that workers cannot meaningfully consent to data gathering in the workplace. Trzaskowski also illuminates the imbalances of power in 'business-to-consumer' relationships, where consumers do not have full freedom to consent. He indicates that workers are even less likely to have freedom to choose to consent or not (2021: 68), arguing that consent is only 'not problematic' when:

       a. The consent is properly informed.
       b. The user can withdraw consent to the processing of personal data.
       c. The user is properly informed about the right to withdraw consent. (2021: 69)

Consent also requires a *line of communication* to exist first, which it is not often seen at work. For a data subject to have consciously made a decision, which is genuine and informed, they must be equal to the labeller.

Lawmakers have begun to realise that workers do not have the same potential to consent that other data subjects have. The European Data Protection Board (EDPB) established updated Guidelines 05/2020 o*n consent* under Regulation 2016/679, stating that: 'Given the dependency that results from the employer/employee relationship, it is unlikely that the data subject can deny his/her/their employer consent to data processing without experiencing the fear or real risk of detrimental effects as a result of a refusal' (EDPB, 2020). So, 'given the imbalance of power between an employer and its staff members, employees can only give free consent in exceptional circumstances, when it will have no adverse consequences at all whether or not they give consent' (EDBP, 2020). The suggestion was that employers probably cannot use the first of six criteria to determine lawfulness, and 'for the majority of such data processing at work, the lawful basis cannot and should not be the consent of the employees (Article 6(1)(a)) due to the nature of the relationship between employer and employee' (Ibid.). So, one of the six criteria for data harms reduction is eliminated for workers, meaning workers have only five criteria to defend themselves against data harms. This is inherently unfair, demonstrating my points exactly. Policy has been written as though data subjects experience only bilateral relations. Equality across a subject and a labeller is not equal nor identical across data subject types. Data rights for a consumer and all other data subject types are prioritised over workers' data rights.

Risk.

The next area within the 'social relations' remit is the concept of *risk*. Risk originates in safety and health law and has to do with how likely it is that harms will ensue if an event, usually something that would be seen as an accident, occurs (see Aloisi and De Stefano, 2023). The definition of risk in the AI Act draft is: 'the combination of the probability of an occurrence of a hazard causing harm and the degree of severity of that harm' (Bertuzzi, 2023). This definition does not deal with the complexity of hazards and harms emerging for specific data subjects, and is particularly unhelpful for psychosocial risks. Indeed, product safety law typically frames 'risk' as though it is a liability question. Without better relevance for human risk e.g., *psychosocial* risks of technology integration into workplaces (see Cefaliello, Moore and Donoghue, 2023), the risk is that technological risk becomes entangled in its own tautology.

The problem at hand is that the production of workers' data and their limited ability to give or withhold consent for its collection and processing - especially as it pertains to profiling – itself, poses significant risks that current technology, data, and privacy protection laws have yet to effectively address. When considering risk parameters with new technological implementations and profiling at work, data subjects who face a risk, do not face risk solely in a bilateral relationship with one other person in the workplace/space, nor just one product or device (over which they have control). What is not considered in legal frameworks sufficiently is the fact that risk is part of a social relation, whereby someone will experience a harm because of either an enacted behaviour from another. Limitations or errors within a product *may not be predictable,* despite this, the AI Act is written as an *ex ante* policy (see Maglieri and Pasquale, 2022; Veale and Zuiderveen Borgesius, 2021).

The AI Liability Directive (European Commission, 2022) indicates that liability questions are a major block for companies' use of AI. Existing liability rules require a victim to prove that a person who is seen to cause damage has carried out a wrongful action, or made an omission. Given definitive characteristics of AI are its 'complexity, autonomy, and opacity (the so-called 'black box' effect)' (Cameron, 2022; see Ajunwa, 2020), it will be difficult to apply existing liability law to prove fault. If damages and fault cannot be proven, due to the

black box effect of AI, likewise, how can 'risk' be proven if more detail about surrounding social relations are not accounted for? Indeed, a consumer's risk of harms resulting from entering a website, are very different from a worker's risk of harms for refusing to consent to data collection.

The only hard law legislation being drafted to manage product safety as linked to AI, at the time of writing the current article, is the EU's AI Act. This draft law is explicitly digital single-market focussed and provides significant facilitation for AI to enter the European market. It will require conformity assessments and other regulatory processes that must be followed by technology providers before putting a product or service on the market if the product is within a 'high risk' category. The text under negotiation was written as a product safety and *risk-based* legislation and as such, the list of proposed 'high-risk AI systems' is within Annex III. 'High-risk' systems would be:

> (a) AI systems intended to be used for recruitment or selection of natural persons, notably for advertising vacancies, screening or filtering applications, evaluating candidates in the course of interviews or tests;
> (b) AI intended to be used for making decisions on promotion and termination of work-related contractual relationships, for task allocation and for monitoring and evaluating performance and behavior of persons in such relationships. (Annex III, EC 2021)

Organisations wishing to integrate high-risk AI-systems will be required to carry out conformity assessments and risk tests, ensuring they follow a series of guidelines that provide transparency, robustness, accuracy and traceability of data and documentation (EC 2021, 3.3. Impact Assessment, 9).

Many of the key decision-making processes experimented with so far in machine learning and algorithmic governance in platform work and human resources processes, such as people analytics, therefore, fall within the high-risk list. The AI Act indicates that 'providers' of AI systems must provide 'users' with manuals for compliance which must contain instructions for risk prevention and guidelines for how humans will be kept in the loop. But it is unclear which risk models will be most effective. Building on Edwards' work (2022), Circiumaru suggests replacing 'user' with the term 'deployer' which would 'bring a clearer distinction between those who deploy systems created by providers [who are currently called 'users' within the AI Act] and those who use or are ultimately affected by the use of AI systems' (2022: Title 1.2). 'Affected person' would be a much better term than the supposedly all-encompassing 'data subject' to prevent the worst harms. While it is good to put work related AI into a 'high risk' bracket, there is insufficient attention paid to the 'affected persons'. The Act does not provide suggestions for compensation or relief from harms that could emerge for specific categories of persons (Circiumaru :2022: Title 1.3).

The original definition of AI within the AI Act makes it very clear that humans define the objectives for AI to come to 'life':

> Artificial intelligence system (AI system) means software that is developed with one or more of the techniques and approaches listed in Annex I and can, for a given set of *human-defined* objectives [italics by present author], generate outputs, such as content, predictions, recommendations, or decisions influencing the environments they interact with (Article 3, 1, EC 2021: 39).

Compliance is built into this definition where humans must set the objectives for a tool that contains some form of technological augmentation, where software will generate 'content, predictions, recommendations, or decisions' which have influence. While technology's predictive capacities may technically surpass humans', because of the political economy within which social relations exist, predictions are not automatically objective - nor are they even correct. Sometimes, just a suggestion that an algorithm could have been used to make a decision (that allegedly could not have been made without technological assistance and based on human judgement alone) has been enough for a company to make workers redundant (Vieira, Moore, Donoghue, 2023). Many dubious practices are operational within management surrounding fraud and other claims, further throwing shade upon any authenticity in profiling (see Grohmann et al, 2022). Current algorithmic models for decision-making have been proven to be unpredictable, so *ex post* risk management is a tautology. Risks could emerge precisely *because* of AI and algorithmic unpredictability, making compliance more difficult than with other technologies with understood predictable risks and precedent. Thus, both *ex ante* and *ex post* models for risk prevention could be entirely inept.

In the gig economy workers' agency to decide which passengers to pick up, how long to wait between jobs and so on, is depleted by algorithms. Workers' materiality or incomes which provide the basis for social reproduction is likewise depleted. Workers risk the loss of livelihood if too many negative reviews are given, leading to taxi workers' deactivation (Woodcock, 2021). The use of data for objective decision-making was not, originally, seen to pose any kind of risk, where 'numbers don't lie', and the data may even now not be seen as possessing a subject position in and of itself. The problem with this supposedly objective decision; which is synonymous with being suspended or fired; is not only that a worker loses income. Customer feedback also limits human subjectivity based on the removal of context for social relations. Indeed, the bilateral relation embedded within this technological function is entirely one-sided. The qualitative dimension of human experience is absent. The GDPR's algorithmic management component attempts to dampen this kind of decision-making and in the Spring of 2021, Case C / 13/696010 / HA ZA 21-81 in the Netherlands led to successful re-hiring of two taxi drivers who, the court decided, had been fired by algorithm.

So, algorithms do not protect workers against risks of psychosocial violence like customer bullying, but aids management depicting risky workers (see Irani, 2023). What about 'risky' work environments? Or risky management behaviour? Or the risks that ensue when workers are profiled as risky workers? The depiction of the risky subject may not be known to the subject at all, such as in the case of CV rating systems, where someone's terminology on an application is not correct, or heat maps are used to draw inference for union membership (ITUC, 2020). Sometimes a data subject is told they are risky, sometimes by notification, and any capacity to defend the self is eliminated. Data collection and usage exist within social relations of data production, but the process is automated, meaning risky subjects are interpellated, without redress.

Working data subjects are the most vulnerable (amongst non-clarified characteristics outside those which are protected); but they are still least protected. While there are some inroads for protections of the data subject in the GDPR, there is already not enough finessing in recognising the differences between the various subject parameters. The struggle between capital and labour oscillates around perceived risks, where the risks that work and work expectations for workers is often far less considered than their risks of behaviour or actions taken by their counterparts, or their employers. Quantified parameters are set for worker performance, but workers have very little capacity for asking how much, is 'too much', employer surveillance and data collection.

There are distinctions and protections made for workers within the GDPR and the AI Act, but they are consistently weak. Indeed, worker protection tends to be left up to hiring institutions and organizations. As indicated in the Tables 1 - 3, workers are 'subject to' (Table 1) the risk of the loss of livelihood, psychosocial violence, exploitation, and depersonalisation resulting from algorithmic management. The context for these limitations means we see that subjects exist 'within' (Table 2) environments where they do not necessarily have access to data, where their voice, dignity, right to personality and access to benefits such as social security, upon which decent work relies, is never secure. In most cases, consent is probably simply not possible for workers, which exacerbates the risks (Table 3). So again, the power differentials between labellers and the labelled, interpellators and interpellants, are not identical across data subjects. This means that privacy and data protection regulation today cannot fully be applicable for all data subjects, given the limitations.

	Loss of livelihood	Psychosocial violence	Exploitation	Depersonalisation	Algorithmic management
Consumer	No	No	No	No	no
Worker	Yes	Yes	Yes	Yes	yes

Table 1: Data subjects: Subject *to*

	Access to data	Voice	Dignity	Right to personality	Social security
Consumer	Yes	Yes / No	Yes	Yes	n/a
Worker	?	?	?	?	?

Table 2: Data subjects: Subject *within*

	Surveillance	Possibility for consent	Discrimination	Hierarchies
Consumer	Yes	?	?	?
Worker	Yes	No	Yes	Yes

Table 3: Data subjects: Subjects *of*

As discussed, there is little in the way of protection in technology law for workers as data subjects. There are distinctions and protections made for workers within the GDPR and the AI Act for 'consent' and protection from 'risk', but these are consistently weak. In that light, data subjects find contrasting power differentials as they are subjects to, subjects within and subjects of contrasting social relations as depicted in Tables 1-3, and it remains to be seen whether regulation can fully take these variations into account.

Conclusion

There are subjective and psychosocial processes and pressures which are related to consent and risk, which are not experienced by all data subjects equally, within social relations of inequality. This leads to the reduction of agency for working data subjects based on the conflation of more than one subject positionality into one regulatory concept, the data subject. The implications of the machinic as entering social relations of production, whilst humans continue to operate in human relations both at population levels and bilaterally mean that 'consent' and 'risk' both lose their substantive significance. The subject in capitalism is not liberated sufficiently anyway already, so to find even basic protections in current data and privacy regimes, given consent and risk are not identical nor equal social relations across all data subjects, is unlikely. Therefore, the right to the subject is at stake. Future research should identify the scope of possibility for *intersubjectivities* to become realised in a progressive and emancipatory way, to ultimately, challenge capitalist inequalities.

There has been a cognitive distortion, if not cognitive error, in attempts so far to regulate privacy and data protection as it applies to workers. While the delineations in protected characteristics which are protected in the GPDR are necessary and correct, and there is some headway for the AI Act, it is not enough. While workers' agency and their right to the subject was already under duress, the new world of profiling and datafication is a threat. This is because of the insufficient delineation of data subjects' access to consent and experience of risk, across various types e.g., consumers, workers, citizens. The current state of play for remote working (which accelerated during the COVID-19 crisis), introduces yet another complication, which deems further research, whereby companies are seeking international talent, without wanting to harmonise labour law. In that context, citizen and worker data subjectivities are not only threatened because of datafication but because of technological work mobility (Berg, Humblet, Soares, 2021). Harmonisation in European law is always complicated, so De Stefano and Wouters (2022) recommend due focus be placed on existing Member States' national laws particularly around social dialogue and must be applied to provide better protections for workers. While not perfect, some European national labour law allows co-determination, which is a good way to mitigate against the worst workplace abuses where technology is integrated (Krzywdzinski et al, 2022). Further, the Universal Declaration of Human Rights Article 22 protects the right to personality,[9] which is useful for a defence against datafied profiling and subjection.

Today, humanity sits within an unprecedented uncanny valley, where the disturbing affective experience of familiarity balances with the proximity of machines, where in principle, we become strangers to ourselves (MacIntyre, 1953: 23) and we lose our right to self-formation of our subjectivity. A data subject may be the latest most 'advanced' form of the alienated self, and specific exchanges or instances in the employment relationship demonstrate how this works. The appropriation of 'consent' and 'risk' into commodified social relations leads to restrictions of agential identity formation. As indicated, where they do, they are framed as solely bilateral relations within policy, risking the vaporisation of the right to the subject. Workers cannot consent to data collection and the use of digital tools for profiling and subject depiction with democratic subjectivity, because of the objective nature of the technology involved. Because the risks faced are invisibilised behind the façade of this objectivity, and because many risks are psychosocial, workers are disadvantaged significantly in the ways that current policy is framed.

---

[9] See: https://www.un.org/en/about-us/universal-declaration-of-human-rights

The problem is not *only* that social dialogue and collective bargaining law is not always followed. Nor is it that existing data protection privacy policy does not provide any protection for anyone nor protections of specific characteristics. The issue is that a one size fits all category for a human i.e., the 'data subject', cannot, and will not, protect workers from the looming potential degradation and destruction of the employment relationship in several important ways. Workers are *subjects to*, *subjects within, and subjects of* distinctive pressures and power relationships within material conditions of capitalism, when consenting, or when faced with risks, which are inherent to structural inequalities in capitalist social relations and made increasingly complex in digitalised social relations.

This article has challenged researchers and policymakers to look at what is at stake for working data subjects, as data production becomes increasingly abstracted from people, and profiling takes new forms. Data subjects already do not have equal access to equality, because different types of data subjects have unequal access to consent and experiences of risk. Working data subjects are expected to survive as individuals with access to very limited, bilateral relations, in the epistemological framing of data harms regulations. Future research should identify who or what humans can/may 'become' as our 'becoming' is increasingly restricted? Will big data become the object, where we have begun to even interpellate data with decision-making qualities, placing agency on machines more than on ourselves? Who do we 'become' when the choices to derive our subjectivities, diminish? Once subjectivity is realised, is there a guarantee that it will be emancipatory, and not fall into an ideological trap of authoritarianism? Is this a process of control, where workers will suffer depleted agency and become profiled as risky subjects, if ideologically oriented conformity is not evident? Can regulation provide adequate worker protections, enabling not only basic rights but support agency formation and subjectivation? As we experience continued precarity of working conditions and struggle for basic rights at work, the question of emancipation depletion is very real and increasingly vital. Who now has the right to 'enunciation', or the right to formulate the self, the right to subjectivity and in that context, agency and intersubjectivities? The ontological and epistemological problems lie within the concept and the operationalisation of the data subject, where consent and risk contain different significance for various types of subjects, where inherent power differential puts workers at significant risk as isolated individuals. Contemporary data harms reduction policies are therefore more likely to deplete agency and the right to the subject for workers.

References

Adams-Prassl, J. (2022). Regulating algorithms at work: Lessons for a 'European approach to artificial intelligence.' *European Labour Law Journal 13*(1): 30–50.

Adams-Prassl, J. (2020). What if your boss was an algorithm? The rise of artificial intelligence at work. *Comparative Labor Law & Policy Journal 41*(1): 123 – 146.

Adler-Bell, S., Miller, M. (2018). The datafication of employment: How surveillance and capitalism are shaping workers' futures without their knowledge. The Century Foundation. https://tcf.org/content/report/datafication-employment-surveillance-capitalism-shaping-workers-futures-without-knowledge/?agreed=1

Adorno, T. (1950, 2019). *The authoritarian personality* (London: Verso).

Ajana, B. (2013). *Governing through biometrics: The biopolitics of identity* (New York: Palgrave Macmillan).

Ajunwa, I. (2020). The 'black box' at work. *Big Data & Society 7*(2): 1-6.

Ajunwa, I. (2019). Algorithms at work: Productivity monitoring applications and wearable technology, 63 St. Louis U. L.J. 21.

Albers, M. and Sarlet, W.I. (2022). *Personality and data protection, rights on the internet: Brazilian and German approaches* (USA: Springer).

Aloisi, A., De Stefano, V. (2023). Between risk mitigation and labour rights enforcement: Assessing the transatlantic race to govern AI-driven decision-making through a comparative lens. *European Labour Law Journal, 14*(2): 283–307.

Aloisi, A., De Stefano, V. (2022). *Your boss is an algorithm: Artificial intelligence, platform work and labour* (Oxford: Hart Publishing Bloomsbury).

Aloisi, A., Gramano, E. (2020). Artificial intelligence is watching you at work: digital surveillance, employee monitoring, and regulatory issues in the EU context. *Comparative Labor Law and Policy Journal 41*(1): 95–122.

Althusser, L. (1970). Trans. by B Brewster. *Ideology and ideological state apparatuses* (La Pensée).

Amoore, L.A. (2020). *Cloud ethics: algorithms and the attributes of ourselves and others* (Duke: Duke University Press).

Badger, A. (2022). Labouring at the interface: Exploring the rhythms and resistances of working in London's food delivery gig economy [PhD Thesis]. https://pure.royalholloway.ac.uk/en/publications/labouring-at-the-interface-exploring-the-rhythms-and-resistances-

Ball, K. (2021). *Electronic monitoring and surveillance in the workplace: Literature review and policy recommendations.* European Commission, Joint Research Centre, Publications Office of the European Union. https://data.europa.eu/doi/10.2760/451453

Bandinelli, C. (2019). The production of subjectivity in neoliberal culture industries: the case of coworking spaces. *International Journal of Cultural Studies 23*(10): 3–19.

Becker, H. S. (1963). *Outsiders: studies in the sociology of deviance* (London: Free Press of Glencoe).

Berg, J. (2016). Income security in the on-demand economy: Findings and policy lessons from a survey of crowdworkers. *Conditions of Work and Employment Series* No. 74 InWork (Geneva: International Labour Office).

Berg, J., Furrer, M., Harmon, E., Rani, U., Silberman, M. (2018). *Digital labour platforms and the future of work: Towards decent work in the online world*. International Labour Organization publications, https://www.ilo.org/global/publications/books/WCMS_645337/lang--en/index.htm

Berg, J., Humblet, M., Soares, S. (2021). *Working from home: from invisibility to decent work* (Geneva: International Labour Organization).

Bertuzzi, L. (2023). AI Act: EU Parliament's crunch time on high-risk categorization, prohibited practices. *EURACTIV* 07.02.23. https://www.euractiv.com/section/artificial-intelligence/news/ai-act-eu-parliaments-crunch-time-on-high-risk-categorisation-prohibited-practices/

Bloom, P. (2019). *Monitored: business and surveillance in a time of big data* (London: Pluto Press).

Bratich, J. Z. (2022). *On microfasicm: Gender, war and death* (Common Notions).

Brook, P. (2013). Emotional labour and the living personality at work: labour power, materialist subjectivity and the dialogical self. *Culture and Organization, 19*(4): 332–352.

Browne, S. (2015). *Dark matters: On the surveillance of blackness* (Duke: Duke University Press).

Bruff, I., Tansel, C. B. (2020). *Authoritarian neoliberalism: Philosophies, practices, contestations* (London: Routledge).

Burawoy, M. (1979). *Manufacturing consent: Changes in the labour process under monopoly capitalism* (Chicago: University of Chicago Press).

Butler, J. (2001). Giving an account of oneself. *Diacritics, 31*(40): 22-40.

Byron, C. (2014). Applying species-being to the workplace. *Critique 42*(2): 197-208.

Cameron, C. (2022). Cited in: AI liability addressed in fresh EU proposals. Out-Law News. https://www.pinsentmasons.com/out-law/news/ai-liability-addressed-eu-proposals

Cefaliello, A., Moore, P. V., Donoghue, R. (2023). Making algorithmic management safe and healthy for workers: Addressing psychosocial risks in new legal provisions. *European Labour Law Journal* 14(2): Special Issue *Regulating Algorithmic Management*, eds. Adams-Prassl, J. Kelly-Lyth, A., Abraha, H., Silberman, M. DOI: https://doi.org/10.1177/20319525231167476

Chandler, D. and Reid, J. (2016). *The neoliberal subject: Resilience, adaptation and vulnerability* (Rowman & Littlefield International, London).

Cherry, M. A. (2017). People analytics and invisible labor. *St. Louis University Law Journal 61*(1): 1–17.

Chowdhury, N. (2022). The affective-discursive 'pruning' of neoliberal selves: Introducing the notion of self-othering. *Subjectivity 15*: 205–222.

Chowdhary, S., Kawakami, A., Gray, M. L., Suh, J., Olteanu, Al, Saha, K. (2023). Can workers meaningfully consent to workplace wellbeing? *Technologies Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency 2023*. https://arxiv.org/abs/2303.07242

Circiumaru, A. (2022). People, risk and the unique requirements of AI: 18 recommendations to strengthen the EU AI Act. https://www.adalovelaceinstitute.org/policy-briefing/eu-ai-act/

Colman, F. (2010). Affective self: Feminist thinking and feminist actions. *Contemporary French and Francophone Studies: Sites 14*(5): 543 – 552.

Cooper, M. (2008). *Life as surplus: Biotechnology and capitalism in the neoliberal era* (Washington: University of Washington Press).

Cornell Legal Information Institute (2022). Definition of consent. *Open Access to Law.* https://www.law.cornell.edu/wex/consent

Couldry, N., Hepp, A. (2016). *The Mediated Construction of Reality* (Malden, MA: Polity Press).

Cox, R. (1987). *Production, Power, and World Order: Social Forces in the Making of History* (New York: Columbia University Press).

Crawford, K., Lingen, J., Karpii, T. (2015). Our metrics, Ourselves: A Hundred Years of Self-Tracking from the Weight Scale to the Wrist Wearable Device. *European Journal of Cultural Studies 18*(4-5): 479 - 496.

Dastin, J. (2018). Amazon scraps secret AI recruiting tool that showed bias against women. *Reuters* (11/10/18). https://www.reuters.com/article/us-amazon-com-jobs-automation-insight-idUSKCN1MK08G

De La Boétie, E. (1577/1993). *The Politics of obedience: The discourse of voluntary servitude* (France, Editions Flammarion).

Dencik, L., Stevens, S. (2021). Regimes of justification in the datafied workplace: The case of hiring. *New Media & Society, 0*(0): 1-19

Desmarais, J. (2001). Preferring not to: The paradox of passive resistance in Herman Melville's "Bartleby" », *Journal of the Short Story in English*, 36, spring 2001: 25-40.

De Stefano, V. (2019). Negotiating the Algorithm': Automation, Artificial Intelligence and Labour Protection. *Comparative Labor Law & Policy Journal 41*(1): 15 - 46. Amoore

De Stefano, V., Wouters, M. (2022). AI and digital tools in workplace management and evaluation: An assessment of the EU's legal framework. *Osgoode Legal Studies Research Paper* No. 4144899.

Dowling, E., Nunes, R., Trott, B. (2007). Immaterial and affective labour: Explored. *ephemera* 7(1).

Ebert, I., Sildhaber, I., Adams-Prassl, J. (2021). Big data in the workplace: Privacy due diligence as a human rights-based protection. *Big Data and Society 8*:1.

Economist (2018). The techlash against Amazon, Facebook and Google—and what they can do: Which antitrust remedies to welcome, which to fight.
 https://www.economist.com/briefing/2018/01/20/the-techlash-against-amazon-facebook-and-google-and-what-they-can-do

Edwards, L. (2022). Expert opinion: Regulating AI in Europe: four problems and four solutions. Ada Lovelace Institute. https://www.adalovelaceinstitute.org/wp-content/uploads/2022/03/Expert-opinion-Lilian-Edwards-Regulating-AI-in-Europe.pdf

European Commission (EC) (2022). The Proposal for a Directive of the European Parliament and of the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive), Brussels 28.9.2022 COM(2022)496 FINAL (European Commission) https://commission.europa.eu/system/files/2022-09/1_1_197605_prop_dir_ai_en.pdf

European Commission (EC) (2021). AI Act draft proposal for a regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts {SEC(2021) 167 final } – {SWD(2021) 84 final} – {SWD(2021) 85 final} (Brussels, 21.4.2021). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206

European Data Protection Board (EDPB) (2020). Guidelines 05/2020 on consent under Regulation 2016/679 Version 1.1. Adopted on May 2020.
https://edpb.europa.eu/sites/default/files/files/file1/edpb_guidelines_202005_consent_en.pdf

Foucault, M. (1982). The subject and power. *Critical Inquiry 8*(4), 777 – 795.

Foucault, M. (1988). Technologies of the self, in L.H. Martin, H. Gutman and P.H. Hutton (eds.) *Technologies of the self: A seminar with Michel Foucault* (USA: University of Massachusetts Press).

Fromm, E. (1993). *The art of being* (London: Robinson books).

Fromm, E. (2008). *To have or to be?* (London and New York: Continuum).

General Data Protection Regulation (GDPR) Article 4.1 (2020). Definitions. https://gdpr.eu/article-4-definitions/

Gmyrek, P., Berg, J., Bescond, D. (2023). Generative AI and jobs: A global analysis of potential effects on job quantity and quality. ILO Working Paper 96 (Geneva: ILO).

Goffman, E. (1959). *The presentation of self in everyday life* (Anchor Books).

Gramsci, A. (2005). *Selections from the prison notebooks* (Lawrence & Wishart Ltd; Reprint edition).

Grinnell, G. C. (2020). *The social life of biometrics* (New York: Rutgers University Press).

Grohmann, R., Pereira, G., Guerra, A., Abilio, L. C., Moreschi, B., & Jurno, A. (2022). Platform scams: Brazilian workers' experiences of dishonest and uncertain algorithmic management. *New Media & Society, 24*(7), 1611–1631.

Hardy, C., Thomas, R. (2015). Discourse in a material world. *Journal of Management Studies, 52*(10): 680– 696.

Harrod, J. (1987). *Power, Production and the Unprotected Worker* (New York: Columbia University Press).

Hayles, N. K. (2017). *Unthought: The power of the cognitive unconscious* (Chicago: University of Chicago Press).

Hidefumi, N. (2022). Bodies and borders in post-imperial Japan: A study of the coloniality of biometric power. *Cultural Studies 36(*1): 120 – 140.

Hogan, B. (2023). The Proper Likeness and the models that matter. Presentation for
Channels of Digital Scholarship workshop, 02/02/23, Maison Française d'Oxford.

Honneth, A. (2005). *The struggle for recognition: The moral grammar of social conflicts* (Cambridge: UK).

International Trade Union Confederation (ITUC). *2020 ITUC Global Rights Index. The World's Worst Countries for Workers*. https://www.ituc-csi.org/IMG/pdf/ituc_globalrightsindex_2020_en.pdf

Irani, L. (2023). Algorithms of suspicion: Authentication and distrust on the Amazon Mechanical Turk Platform. Available at SSRN: https://ssrn.com/abstract=4482508 or http://dx.doi.org/10.2139/ssrn.4482508

Jaeggi, R. (2014). *Alienation* (New York Chichester, West Sussex: Columbia University Press).

Justo-Hanani, R. (2022). The politics of Artificial Intelligence regulation and governance reform in the European Union. *Policy Sciences* 55: 137 – 159.

Karatzogianni , A. Kuntsman, A. (eds) (2012). Digital Cultures and the Politics of Emotion: Feelings, Affect and Technological Change (London: Palgrave Macmillan).

Kennedy, H., Powell, T. van Dijk., J. (2015). Data and agency. *Big Data & Society, 3*(1-2): 1-7.

Kennedy, H. W., & Atkinson, S. (2019). From emergence to convergence: New critical perspectives, innovative methods and novel approaches to the study of the digital subject. *Convergence*, *25*(2): 163–170.

Köchling, Al., Wehner, M. C. (2020). Discriminated by an algorithm: A systematic review of discrimination and fairness by algorithmic decision-making in the context of HR recruitment and HR development. *Business Research*, Springer; *German Academic Association for Business Research 13*(3): 795-848.

Krzywdzinski, M., Gerst, D., Butollo, F. (2022). Promoting human-centred AI in the workplace. Trade unions and their strategies for regulating the use of AI in Germany. *Transfer: European Review of Labour and Research*. ETUI. https://journals.sagepub.com/doi/full/10.1177/10242589221142273

Lazzarato, M. (2021). *Capital hates everyone: Fascism or revolution* (California, USA: semiotext(e).

Lazzarato, M. (1996). Immaterial labour. In: Virno, P. and Hardt, M. eds. *Radical Thought in Italy: A potential politics* (Minnesota: University of Minnesota Press).

Lilkov, D. (2021). Regulating artificial intelligence in the EU: A risky game. *European View 20*(2): 166 – 174.

Lilly, A. M. (1999). Fascist aesthetics and formations of collective subjectivity in "Finnegans Wake." *James Joyce Quarterly*, 36(2): 107–125.

Lordon, F. (2014). *Willing slaves of capital* (London and New York: Verso).

MacIntyre, A. (1953). *Marxism: An interpretation* (London: SCM).

Maglieri, G. and Pasquale, F. A. (2022). From transparency to justification: Toward ex ante accountability for AI. *Brooklyn Law School Legal Studies Paper* No 712.

Marx, K. (1844). Estranged labour, in *Economic and Philosophical Manuscripts of 1844.*
https://www.marxists.org/archive/marx/works/1844/manuscripts/labour.htm

Marx, K. (1976). *Capital Volume 1* (London: NLR/Penguin).

Marx, G. T. (2016). *Windows into the soul: Surveillance and society in an age of high technology* (Chicago: The University of Chicago Press).

Meta Careers (2019). It's her self: Bringing your authentic self to work. https://www.metacareers.com/life/its-her-self-bringing-your-authentic-self-to-work/

Mirowski, P. (2014). *Never let a serious crisis go to waste: How neoliberalism survived the financial meltdown* (London: Verso Books).

Mittelstadt, B. (2017). From individual to group privacy in big data analytics. *Philosophy & Technology 30*(4): 475-494.

Moore, P. V. (2020a). *Data Subjects, Digital Surveillance, AI and the Future of Work* (European Parliament Science and Technology Office, Brussels).
https://www.europarl.europa.eu/thinktank/en/document/EPRS_STU(2020)656305

Moore, P. V. (2020b). The mirror for (artificial) intelligence: In whose reflection?, for Special Issue *Automation, AI, and Labour Protection*, Stefano, V. de (ed.), *Comparative Labor Law and Policy Journal 41*(1): 47 - 67.

Moore, P. V. (2019). *The quantified self in precarity: Work, technology and what counts* (London: Routledge).

Moore, P. V. (2018a). *The threat of physical and psychosocial violence and harassment in digitalized work* (Geneva: ACTRAV, International Labour Office).

Moore, P. V. (2018b). Tracking affective labour for agility in the quantified workplace. *Body & Society, 24*(3): 39–67.

Moore, P. V. (2010). *The International Political Economy of work and employability* (London: Palgrave Macmillan, International Political Economy Series).

Moore, P. V., Robinson, A. (2016). The quantified self: What counts in the neoliberal workplace. *New Media & Society 18*(11): 2774–2792.

Morgan, J. (2018). Species being in the twenty-first century. *Review of Political Economy*, *30*(3), 377-395.

Morris, R. (2019). The idea of Communism: Notes on the singular and the universal with reference to Africa and Asia or, what's Anthropology got to do with it?. Columbia Centre for Contemporary Political Thought. *Critique and Praxis 13*/13. https://blogs.law.columbia.edu/praxis1313/rosalind-morris-notes-on-the-singular-and-the-universal-with-reference-to-africa-and-asia-or-whats-anthropology-got-to-do-with-it/

O'Neil, C. (2016). *Weapons of math destruction* (USA: Crown).

Orwell, G. (1950). *1984* (Signet Classics: USA).

Pasquale, F. (2016). *The black box society: The secret algorithms that control money and information* (Harvard: Harvard University Press).

Powell, A. (2021). *Undoing optimisation: Civic action in smart cities* (London: Yale University Press).

Purcell, C., Brook, P. (2022). At least I'm my own boss! Explaining consent, coercion and resistance in platform work. *Work, Employment and Society*, *36*(3), 391–406.

Pybus, J., Cote, M., Blanke, T. (2015). Hacking the social life of Big Data. *Big Data & Society*, *2*(2), 1-10.

Read, J. (2022). *The production of subjectivity: Marx and Philosophy* (Brill).

Ruckenstein, Minna (2014) Visualized and interacted life: Personal analytics and engagements with data doubles. *Societies 4*(1): 68-84.

Santilli, P. (1973). Marx on species-being and social essence. *Studies in East European Thought 13* (1-2): 76-88.

Santosh, K. C., Wall, C. (2022). *AI, ethical issues and explainability: Applied biometrics* (Springer Nature).

Spinoza, B. de (1888). *The Ethics in Five Parts* (*Ethica: Ordine geometrico demonstrata, E-T in quinque Partes distinca, in quibus aquitur* (Van Nostrand, New York: G. P. Putnam's Sons).

Teo, T. (2021). Essay on fascist subjectivity. *The Psychology of Global Crises and Crisis Politics* (London: Palgrave Macmillan).

Todoli-Signes, A. (2021). Making algorithms safe for workers: occupational risks associated with work managed by artificial intelligence. *ETUI, Transfer: European Review of Labour and Research 27*(4): 433 – 452.

Trzaskowski, J. (2021). *Your privacy is important to us! restoring human dignity in data driven marketing* (Ex Tuto Publishing A/S).

Van Dijck, J (2014). Datafication, dataism and dataveillance: Big data between scientific paradigm and ideology. *Surveillance and Society 12*(2): 197 – 208.

Veale, M., Zuiderveen Borgesius, F. (2021). Demystifying the draft EU Artificial Intelligence act. *Computer Law Review International* https://osf.io/preprints/socarxiv/38p5f

Vieira, T., Moore, P. V., Donoghue, T. (2023). The machine that wore no clothes. *Unpublished working paper.*

Viljoen, S. (2021). A relational theory of data governance. *Yale Law Journal, 131*(2): 370.

Wachter, S., Mittelstadt, B. (2019). A right to reasonable inferences: Re-thinking data protection law in the age of big data and AI. *Columbia Business Law Review* (2): 494 – 620.

Wartenberg, T. E. (1982). "Species-Being" and "Human Nature" in Marx. *Human Studies*, *5*(2): 77–95.

Williams, B. A., Brooks, C. F., Shmargad, Y. (2018). How algorithms discriminate based on data they lack: Challenges, solutions and policy implications. *Journal of Information Policy 8*: 78 – 115.

Woodcock, J. (2021). The limits of algorithmic management: On platforms, data, and workers' struggle. *South Atlantic Quarterly, 120*(4): 703–713.

Worth, O. (2019). *Morbid symptoms: The global rise of the far-right* (London: Zed).