
Information Ethics in the Age of Digital Labour and the Surveillance-Industrial Complex

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Information Ethics in the Age of Digital Labour

Abstract

The rise of computing and the internet have brought about an ethical field of studies that some term information ethics, computer ethics, digital media ethics, or internet ethics. The aim of this contribution is to discuss information ethics' foundations in the context of the internet's political economy. The chapter first looks to ground the analysis in a comparison of two information ethics approaches, namely those outlined by Rafael Capurro and Luciano Floridi. It then develops, based on these foundations, analyses of the information ethical dimensions of two important areas of social media: one concerns the framing of social media by a surveillance-industrial complex in the context of Edward Snowden's revelations and the other deals with issues of digital labour processes and issues of class that arises in this context. The contribution asks ethical questions about these two phenomena that bring up issues of power, exploitation, and control in the information age. It asks if, and if so, how, the approaches of Capurro and Floridi can help us to understand ethico-political aspects of the surveillance-industrial complex and digital labour.

Information Ethics: Capurro and Floridi

For Rafael Capurro (2003), information ethics poses questions about the Enlightenment in the information age. It asks, "How can we ensure that the benefits of information technology are not only distributed equitably, but that they can also be used by the people to shape their own lives?" (p. 41). "Information ethics as a *descriptive theory* explores the power structures influencing attitudes towards information and traditions in different cultures and epochs. Information ethics as an *emancipatory theory* develops criticisms of moral attitudes and traditions in the information field at an individual and collective level" (p. 198). It explores and evaluates "the development of moral values in the information field, the creation of new power structures in the information field, information myths, hidden

contradictions and intentionalities in information theories and practices, the development of ethical conflicts in the information field” (p. 198).

Solving these tasks would require that information ethics both thinks about institutional design and cares about the self’s needs, such as friendship, respect, social relations, silence, laughter, etc. (Capurro, 2003). Capurro’s approach stresses the need for information ethics to pay attention to information technology’s ambiguities in society, such as the information gap, technological colonisation, cultural alienation, or oligarchic information control (2003). It also inquires into the tensions between freedom of communication/privacy, free online culture/copyright, the information rich and the information poor, information markets/digital democracy, the global and the local online community, oneness and unity/diversity and plurality online. It questions “structures of power and oppression” (p. 144).

Although he will not agree with my analysis because, based on his view of Heidegger’s position, he tends to see Hegel and Marx as representatives of a deterministic and totalitarian metaphysics that conceives of history as necessary progress, Capurro advances a concept of information ethics that in its stress on ambiguities of the information age is not unrelated to a Hegelian and Marxian dialectical logic that stresses the analysis of antagonisms (2003). Capurro’s work is based on a thorough knowledge of, and engagement with, classical, modern and contemporary philosophy. Kant’s philosophy has in this context been of particular relevance. Kant trusted that world peace could be achieved with the help of liberal democracy, world trade, and the political public (Capurro, 2003). Kant had the writing public in mind as the foundation for ethics and the Enlightenment. For Habermas, the communicating public is the foundation of ethics and politics. Capurro stresses that the internet, because of its own characteristics, cannot be a purely rational and enlightened space, but is one confronted by “semi-darkness” (Capurro, 2003, p. 83). The questions about freedom of the press and freedom of speech would, in the internet age, translate into questions of freedom of access. Capurro sees the United Nations as the best forum for discourses about internet ethics (Capurro, 2003). He thereby argues for an institutional discursive form of internet ethics. The moral values enshrined in the Universal Declaration of Human Rights are of central importance for information and internet ethics, specifically: human dignity, confidentiality, privacy, equality of opportunity, freedom of opinion and expression, participation in cultural life, and the protection of moral and material interests resulting from scientific, cultural, literary, and artistic production (2003). Capurro stands with the foregrounding of human rights in internet ethics in a Kantian tradition. This is expressed in his demand for a human right to freedom of communication on the internet. One certainly must see how such freedoms remain in asymmetric societies class-structured. Economic and political power limits freedom so that universal ethical and legal claims are practically undermined and remain unrealised.

Capurro (1981) first used the term information ethics in 1981 and also grounded it in his habilitation thesis *Hermeneutik der Fachinformation* in 1986. This was ten years before Luciano Floridi, who has also used the term information ethics (Floridi, 2013), published his first book, a book whose focus was not on ethics, but rather on epistemology. Similar to the tension between Manuel Castells and Jan van Dijk, the latter who invented the (non-

sensical) term the network society, there remains a tension between Capurro and Floridi concerning the grounding of information ethics. Floridi (2013, p. 23) says that it “seems that information ethics began to merge with computer ethics only in the nineties”. Capurro’s (1986) treatment of information ethics in his habilitation definitely merges aspects of information and computer ethics earlier on. Floridi does not seem terribly willing to engage with approaches alternative to his own definitions for the field in any significant detail.¹ At the same time one must say that Capurro’s habilitation is also not generally accessible because it was only published in German, which limits international academic discourse. Floridi (2013, p. 19) finds it “unfortunate” that there are different versions of computer, information and internet ethics and says that his approach is “a unified approach”. Floridi’s unifying approach is not universalist enough because it requires a quite particularistic approach that is implicitly grounded in actor network theory and post-humanist philosophy. It is, therefore, quite likely to attract criticism from other philosophers such as Capurro, who had already used the term information ethics before Floridi started doing so.

Floridi (2010c) argues that information and communication technologies (ICTs) have brought about a revolution that resulted in an “informational turn” (p. 11) that has been so profound that it has re-ontologised the world. The result would have been the emergence of a digitised infosphere, in which IT entities blur all boundaries and digitise all existence so that “*connected informational organisms (inforgs)*” come into existence (p. 12). A new form of ethical constructionism would be needed that fights a “struggle against entropy” (p. 17) and negotiates “a fruitful, symbiotic relationship between technology and nature” (p. 18). Inforgs are, for Floridi, not just human. Therefore information ethics is for him “an environmental approach, one which does not privilege the natural or untouched, but treats as authentic and genuine all forms of existence and behaviour, even those based on artificial, synthetic, hybrid, and engineered artefacts. The task is to formulate an ethical framework that can treat the infosphere as a new environment worth the moral attention and care of the human inforgs” (Floridi, 2013, p. 18). Humans would be confronted with information resources that they use for creating information products that are immersed into and affect an information environment as target (p. 20). Information ethics therefore would have to reflect on moral issues concerning information resources, products, and targets. Floridi adds that his initial model is too limited at a micro-level and needs to be complemented by macroethics (Floridi, 2013).

Floridi’s information ethics is non-, post- and trans-humanist; it wants to be an ethics that considers all beings as actors in an informational environment:

From an IE perspective, the ethical discourse now comes to concern information as such; that is, not just all persons, their cultivation, well-being, and social interactions, and not just animals, plants, and their proper natural life either, but also anything that may or will exist, like future generations; and anything that was, but is no more, like our ancestors. Unlike

1 There is for example only one brief clause mentioning Capurro in Floridi’s (2013, 308) book *The Ethics of Information*, whereas Capurro (2006, 2008) has published two major articles dedicated entirely to the discussion of Floridi’s work.

other non-standard ethics, IE is more impartial and universal—or one may say less ethically biased—because it brings to ultimate completion the process of enlarging the concept of what may count as a centre of moral claims, which now includes every instance of information, no matter whether physically implemented or not. (Floridi, 2013, p. 65)

Floridi's approach is pan-informational: he sees information everywhere, as a substance of the world. This becomes evident when he characterises the infosphere as “[m]aximally [...] a concept that, given an informational ontology, can also be used as synonymous with reality, or Being” (Floridi 2013, p. 6) or as “informational metaphysics” (p. 307). Entropy is a crucial concept in Floridi's information ethics. Given that this concept tends to be used in thermodynamics as measure of disorder and chaos and in Shannon's mathematical theory of communication as a measure of the uncertainty of information, Floridi (2013) admits that the use of this notion in ethics can easily be misleading. He defines metaphysical entropy as “Non-Being”, “absence or negation of any information” (p. 65), and “the decrease or decay of information leading to absence of form, pattern, differentiation, or content in the infosphere” (p. 67). Floridi formulates four information-ethical principles that apply to all actants and the totality of the infosphere:

- “entropy ought not to be caused in the infosphere (null law)”
- “entropy ought to be prevented in the infosphere”
- “entropy ought to be removed from the infosphere”
- “the flourishing of informational entities as well as the whole infosphere ought to be promoted by preserving, cultivating, and enriching their well-being” (Floridi, 2013, p. 71)

Capurro argues that given the existing information overload, ever more information is not necessarily desirable because humans cannot handle it and it fragments their communication. Floridi's information-ethical entropy-reduction and -destruction programme would therefore be mistaken. “But do we not have enough information in the information society? It seems that this imperative would make the situation even worse than it is!” (Capurro, 2003, p. 167). Capurro adds that Floridi's norms contradict “deleting viruses, SPAM and all kind of ‘non useful’ information” (Capurro, 2008, p. 170). Floridi's information ethics is also problematic from a political perspective: assume we live in Nazi Germany in the years 1933-1945, a society dominated by anti-Semitic, racist, fascist, imperialist ideology. This ideology has not ceased to exist after 1945. The principle of reducing metaphysical entropy implies that the presence of any ideology is good and that the more of it that is spread, the better. The real ethical imperative can however only be that Nazi ideology should be destroyed, i.e. informational entropy be increased, because it is the worst imaginable system of domination and exploitation. Floridi understands the infosphere and information ethics as expansive so that all entities are subject to moral judgments. In these terms one could define the Nazi regime as entropic because it sets out to annihilate Jews and political opponents—physically and thereby also their ideas. But what is the right answer to the Nazis? The only morally justified answer can be Adorno's “new categorical imperative”

that humans “arrange their thoughts and actions so that Auschwitz will not repeat itself, so that nothing similar will happen” (Adorno, 1973, p. 365).

In the situation of being inside Nazi Germany this then actually means that the ethical imperative must be to decrease homogeneity by increasing political entropy, i.e. by conducting anti-fascist attacks that aim to kill Hitler and other Nazi leaders and taking measures that aim to annihilate Nazi ideology. Destroying Nazism with violent and political means increases political entropy in order to enable a society that is not based on a project of extermination. Anti-fascist resistance is therefore in Floridi’s terms the increase of political entropy. It aims at a society that does not systematically reduce entropy. Floridi’s ethics cannot grasp these complexities. His ontology fails to provide an ethical imperative that can challenge Nazism and fascism. If any information is good, then also the ideologies of Nazism and fascism are good. Floridi argues that “because we have no reason against the intrinsic value of Being in all its manifestations, we should expand an environmental approach to all entities, including non-sentient beings. The injunction is to treat something as intrinsically valuable and hence worthy of moral respect by default, until ‘proven guilty’” (Floridi, 2013, p. 318). The assumption that humans are or can be on one ontological level with non-human entities was proven wrong by Auschwitz. A biologist and anti-Semitic ideology that describes groups of people as subhumans and parasites enabled Auschwitz. There are substantive historical reasons why we should refuse philosophies such as post-humanism, actor network theory, and Floridi’s philosophy that argue that humans and non-humans are ontological equivalents.

For Floridi, companies, machines, or parties (Floridi, 2013) are also moral agents, which in his view is an assumption that holds the advantage of being “non-anthropocentric” (Floridi 2013, p. 58). Floridi positively acknowledges the non-anthropocentrism, or what some call “anti-speciesism” of deep ecology (p. 133) and argues that his information ethics takes “this inclusive approach [...] further” (p. 133). Floridi does not mention that critics of deep ecology have characterised versions of it as an eco-fascist movement (Bookchin, 1987; Ditfurth, 1996). Putting non-human beings onto the same moral level with humans, as both deep ecology and Floridi do, decentres human morality and affords an undifferentiated moral obligation to all living beings irrespective of origin. It is important to see how such approaches to decentring human morality are linked to strategies of exploitation in capitalism that reify human life: both treat human bodies and minds like things. Nazi ideology is an extreme form of reification. Strategies of exploitation in capitalism reify human beings: they treat their bodies and minds like things. The Nazis ideologically justified killing Jews by comparing them to parasites, which put humans on the same ethical level with animals. Anti-humanism is one of the first logical steps to fascism. Practical and ethical anti-fascism argues for the specificity and difference of the human being in relation to non-humans. This does not imply that humans should treat nature recklessly, but that the ethics of nature and the ethics of society have different qualities and principles.

Capurro (2008) argues, against Floridi’s position, for a human-centred information ethics by stressing the difference between humans and things. Things-as-such would be morally worthless and humans “per se invaluable” (p. 168). The value of things, such as

their exchange-value measured in money or their moral value associated with emotional attachment, arises out “of our relationship to others” (p. 168). Only humans have the capacity to conduct economic evaluation (evaluating things) and moral evaluation (“evaluating ourselves” [p. 169]) and to relate both to each other. “As far as we know, we are the only living beings capable of mirroring the world as the common invaluable horizon that allows us to evaluate things” (169). Capurro (2008, p. 171) concludes his critique of Floridi by asking: “We have some 6 billion moral agents on earth. Why should we create millions (?) of artificial ones [to whom we assign ‘moral responsibility’]?” Capurro’s human-centred ethics is not anthropocentric or individualistic, but social-relational. It asks us to “relativise our ‘egocentric’ ambitions” and poses the ethical question: “What is good for our bodily being-in-the world with others in particular?” (Capurro 2006, p. 182).

Floridi (2013) conceives a business as an information process, in which the business provides, as actor, goods or services to customers. He stresses that “profit is clearly not part of the essence of a business” (p. 288) and that maximising profit is not a company’s ethical imperative. Defining an economic organisation by orientation on exchange, profit, or money is indeed a crude form of fetishism that naturalises capital accumulation. A general definition of the economy is that it is a system, in which humans produce use-values that satisfy human needs. An economic organisation is an entity specialising in the production of specific use-values in order to satisfy human needs. Raymond Williams points out in his *Keywords* that since the 15th century the English word “customer” has described “a buyer or purchaser” (Williams, 1983, p. 79). It is inevitably bound up with the modern forms of the market and capitalism. It is therefore inappropriate that Floridi uses the term customer when defining an economic organisation as “the provider of goods or services to customers” (Floridi, 2013, 280). This formulation implies that markets, money, exchange-value, and trade are inherent in all economies. The language often used in higher education systems that have been strongly commodified reveals the nature of this notion: students are often termed “customers” because they pay for (or rather go into debt, except if they have rich parents) access to education. The existence of online and offline gift economies, where people voluntarily give goods or services to others without the expectation of reciprocity or obtaining something in return, shows that trade is not an essential feature of the economy. A society of customers is a market and exchange society.

The three primary questions for information business ethics are for Floridi (2013, p. 284): “1) What is provided? 2) How is it provided? 3) What impact does it have?”. It is hard to see how the first two questions relate to ethics, whereas the third one can be related to ethics if one asks how the economy and economic organisations can have positive impacts that benefit all. The imperative for Floridi’s information business ethics is fostering “human flourishing and avoiding wastefulness”. He understands wastefulness as “*destruction, corruption, pollution, and depletion* of (parts of) reality” (p. 290). Ecological problems are related to the mode of economic production, but are not the economy’s only ethical dimension. It is difficult to frame exploitation—the main ethical social problem of all class societies—in terms of waste and entropy. It is worth highlighting that Floridi’s analysis does not problematise exploitation. His information ethics does not give importance to

the phenomena of class and exploitation and is, therefore, particularly unsuited for a critique of exploitation in the information age. For Marx, exploitation means that one class whose labour produces use-values is deprived and excluded from them by another class that takes private ownership of these use-values, for the purposes of facilitating exchange and accumulation (Marx, 1867). The producing class is deprived of wealth and the owning class increases its wealth. Exploitation is a question of distributive justice and ownership justice, not one of waste, order, and disorder. The ethical social imperative for a critical theory of the economy and society is therefore that one needs to “overthrow all relations in which man is a debased, enslaved, forsaken, despicable being” (Marx, 1844, p. 182).

Humans cannot exist without, and only exist in and through, social relations. Society is social-relational; it is based on human co-operation (Fuchs, 2008). There can be no society without relations, communication, and co-operation. But a society without competition, war, markets, egoism and exchange is perfectly possible (Fuchs, 2008). Exploitation and domination limit our capacities to fully organise society by giving particularistic advantages to one group or individual over others. The ethical imperative is therefore to question and undo exploitation and domination and to create conditions that benefit all, i.e. a classless society without exploitation and domination.

Marxist political economy of information and communication is based on an inherently ethical imperative: it “goes beyond technical issues of efficiency to engage with basic moral questions of justice, equity and the public good” that concern information and communication (Murdock & Golding, 2005, p. 61). The “moral dimension remains strong in Marxian political economy because it provides a powerful defence of democracy, equality, and the public sphere in the face of dominant private interests” (Mosco, 2009, p. 34). Critical political economy of information and communication therefore analyses “the power relations, that mutually constitute the production, distribution, and consumption of resources, including communication resources” (Mosco, 2009, p. 2).

Information Ethics in the Age of Digital Labour and Edward Snowden

I do not see myself as a representative of computer, information, digital media, or internet ethics, but am rather interested in a critical theory and critique of the political economy of information, communication, technology, the media, and the internet. Such an approach aims to theorise these phenomena’s political economy and their power structures, to empirically analyse human realities within such structures, to conduct ideology critique of reifications of information, and to inform social struggles for alternatives. Ethics is one of the dimensions of this approach, but not its exclusive one. It also requires social theory and empirical social research. In this section, I want to discuss two information-ethical problems: digital labour and internet surveillance.

Digital Labour

The production of information and information technology is embedded into an international division of information labour (Fuchs, 2014, 2015). There are new technologies, but capitalism, imperialism, class, and exploitation continue to form the heart of society and international relations and shape the modes of information production, distribution, and consumption that have become so important in the 21st century. Critical scholars introduced the notion of the new international division of labour (NIDL) in the 1980s in order to stress that developing countries had become cheap sources of manufacturing labour and to highlight the rise of transnational corporations (TNCs) (Fröbel, Heinrichs & Kreye 1981). “Digital labour” is not a term that only describes the production of digital content. It is a category that rather encompasses the whole mode of digital production that contains a network of agricultural, industrial and informational forms of work that enables the existence and usage of digital media. The international division of digital labour (IDDL) is the new international division of labour in the context of the production and productive use of digital media. The international division of digital labour is a complex network that involves global interconnected processes of exploitation, such as the exploitation of Congolese slave-miners who extract minerals that are used as the physical foundation for ICT components that are manufactured by millions of highly exploited Fordist wage-workers in factories such as Foxconn, low-paid software engineers in India, highly paid and highly stressed software engineers at Google and other Western software and internet corporations, or precarious freelancers in the world’s global cities who are using digital technologies to create and disseminate culture, poisoned eWaste workers who disassemble ICTs and thereby come in touch with toxic materials, etc. (Fuchs, 2014, 2015). Let us have a look at two forms of labour involved in the IDDL: mining of ICT-related minerals in the Congo and hardware assemblage in China.

Capitalism as the dominant mode of economic activity has not brought older modes of production to an end, but has rather subsumed them. Slavery and patriarchy continue to exist and to be modes of organisation for the super-exploitation of labour. In 2014, 35.8 million people lived in modern forms of slavery. Modern slavery includes slavery, debt bondage, forced marriage, sale and exploitation of children, forced labour, and human trafficking (Global Slavery Index 2014). Slaves in the Democratic Republic of Congo mine a specific portion of the minerals (such as cobalt, coltan, and tin) needed for creating electronics and computing equipment (Fuchs, 2014). In 2014, the DRC was ranked 186 out of 187 countries in human development; 87.8% lived in extreme poverty on less than US\$ 1.25 per day, and 38.8% of the population aged 15 or older was illiterate (Human Development Indicators, 2014). A combination of civil war and neo-imperialist exploitation of labour and the country’s resources (that do not benefit local people, but primarily Western companies) has created the paradox—typical for capitalism—that one of world’s richest countries in natural resources is socially the world’s poorest country. In 2014, the political situation in the DRC saw continued hostilities involving government forces, rebels, and fighters from Uganda and Rwanda. The country’s inhabitants experienced war crimes, crimes against humanity, forced recruitment of children as soldiers, mass rapes, and the killing, mutilation

and torture of civilians (Human Rights Watch 2014). According to estimations, more than 760 000 people in the DRC were slaves in 2014 (Human Rights Watch 2014). Following Nigeria, it is the country with the second largest absolute number of slaves.

Apple was, according to the Forbes 2000 list of the largest transnational companies, the world's 15th largest company in 2014 (Forbes, 2014). Its profits were US\$ 37 billion in 2013 and 39.5 billion in 2014 (Apple SEC Filings, 2014). In 2014, iPhones accounted for 56% of Apple's net sales, iPads for 17%, Macs for 13%; iTunes, software and services for 10% (Apple SEC Filings, 2014). According to calculations published by Chan, Pun and Selden 2013 (p. 107), the Chinese labour involved in manufacturing an iPhone makes up only 1.8% of the iPhone's price, while Apple's profit margins are 58.5% and Apple's suppliers, such as the Taiwanese company Hon Hai Precision that is also known as Foxconn, account for 14.3% of revenues. Applying this information shows that the iPhone 6 Plus does not cost US\$ 299 because of labour costs, but rather because Apple on average earns US\$ 175 profits, Foxconn US\$ 43 profits, and the workers assembling the phone in a Foxconn factory in total US\$ 5. The high costs are a consequence of a high profit rate and a high rate of exploitation that are achieved by organising digital labour within an international division. According to the CNN Global 500 2012 list,² Foxconn is the fifth largest corporate employer in the world. In 2011, Foxconn had enlarged its Chinese workforce to a million, a majority being young migrant workers coming from the countryside (SACOM, 2011). Foxconn assembles the iPad, iMac, iPhone, the Amazon Kindle, and various consoles (by Sony, Nintendo, Microsoft). When 17 Foxconn workers attempted to commit suicide between January and August 2010 (most of them succeeded), the topic of bad working conditions in the Chinese ICT assemblage industry became widely known. This circumstance was followed up with a number of academic works that showed that workers' everyday reality at Foxconn includes low wages, working long hours, frequent work shift changes, regular working time of over 10 hours per day, a lack of breaks, monotonous work, physical harm caused by chemicals such as benzene or solder paste, lack of protective gear and equipment, forced use of students from vocational schools as interns (in agreement with the school boards) that conduct regular assembly work that does not help their studies, prison-like accommodations with 6-22 workers per room, yellow unions that are managed by company officials and whom the workers do not trust, harsh management methods, a lack of breaks, prohibitions that workers move, talk or stretch their bodies, the requirements that workers stand during production, punishments, beatings and harassments by security guards and disgusting food (Chan, 2013; Chan, Pun & Selden 2013; Fuchs 2014; Pun & Chan 2012; Qiu 2012; Sandoval 2013).

Apple claims in its *Supplier Responsibility 2014 Progress Report* that it drove its "suppliers to achieve an average of 95 percent compliance with our maximum 60-hour work week".³ The and prides itself for this fact shows that imperialism's international division

2 http://money.cnn.com/magazines/fortune/global500/2012/full_list/, accessed on October 29, 2013.

3 https://www.apple.com/supplier-responsibility/pdf/Apple_SR_2014_Progress_Report.pdf, accessed on December 22, 2014.

of labour is not just exploitative, but also racist in character: Apple assumes that for people in China, 60 hours is an appropriate standard of working time. Apple's argument is based on the Western assumption that Asians have a strong work ethic and are therefore suited to work long hours for comparatively low wages. It undermines the universal assumptions enshrined in the ILO Convention that there is a maximum of hours that human labour should not exceed because otherwise life is reduced to labour-time.

Apple says that for its 2014 report it audited the working conditions of more than 1 million workers. It is however a fact that these audits are not conducted independently and that the results are also not reported independently. Apple doesn't rely on independent corporate watchdog organisations such as Students & Scholars against Corporate Misbehaviour (SACOM), but rather conducts studies that one can only consider to be biased. Workers who are studied by their own employers will certainly not report what they think is wrong because they are afraid to lose their job. Apple's report is written in a style and language that conveys the impression that suppliers and local agencies that behave immorally are the problem: "Our suppliers are required to uphold the rigorous standards of Apple's Supplier Code of Conduct, and every year we raise the bar on what we expect. [...] We audit all final assembly suppliers every year". That such behaviour is however driven by TNCs' demand to produce cheaply and quickly is never mentioned. Apple uses the ideological strategy that it emphasises positive things about itself and negative things about suppliers in order to distort attention from its own responsibility for the exploitation of Chinese workers. In 2014, SACOM published a new report on working conditions at Apple's supplier Pegatron in Jinagsu,⁴ where tens of millions of the iPhone 6 have been manufactured. Undercover scholars conducted the research.

Workers told SACOM researchers that they sometimes have to work very long hours till early morning, often 12 to 15 hours a day, and sometimes even up to 17 to 18 hours a day. In other words, the total amount of overtime hours can be up to 170 to 200 hours a month, which, in turn, means that workers have to work more than 360 hours a month. (SACOM, 2014, p. 2)

Further issues at Pegatron included an unsafe and unhealthy working environment, illegal charges for health checks, insufficient health information, precarious dispatch labour, exclusion from social insurance, difficulties to resign from the job, scolding, fines, repressive management, and lack of trade unions. The report concludes:

Pegatron and its buyer Apple have continuously engaged in poor labour practices and abuses of workers' rights. Even though the Apple Inc. has established its code of conducts since 2005, the working conditions in Apple's supply chain are still far from satisfactory. This report, along with the earlier investigative reports released by SACOM throughout the years, have continuously demonstrated that Apple and its suppliers in the Chinese mainland have never treated their workers with dignity. (SACOM, 2014, p. 21)

4 See also the 2013 investigation by China Labor Watch: <http://www.chinalaborwatch.org/report/68>. A comparable case is the iPhone 6 assemblage at Jabi in Wuxi: <http://www.chinalaborwatch.org/report/103>

A 2014 BBC undercover report unveiled that workers assembling iPhones 6 in Pegatron factories are so overworked that they fall asleep during work and in their breaks.⁵

An ideology is a claim that does not correspond to and tries to distort the representation of reality. SACOM's studies show that reality in the factories of Apple's Chinese suppliers is different than reported in the company's own reports. Apple tries to distort presentations of labour in its supply chain by ideology in order to forestall critique of capitalism. Why is the exploitation of digital labour, for which the Congo and the Foxconn cases are good examples, ethically problematic? Capitalistically produced digital media are not accessible for all people in the world and not to the same extent and with the same benefits. The benefits of the one, especially digital media companies that derive large monetary benefits from selling hardware, software, content, access, audiences, and users, stem from the misery of the labour of others. There is not just a power asymmetry immanent in the IDDL, but a fundamental injustice that creates conditions that deprives digital workers of their humanity, makes them work under conditions not adequate for any human being, and results in distributive injustice so that the benefits from digital media are asymmetrically distributed so that the class of digital capitalists enriches itself by depriving others. Let us go back to two fundamental questions that Capurro's information ethics ask: "How can we ensure that the benefits of information technology are not only distributed equitably, but that they can also be used by the people to shape their own lives?" (Capurro, 2003, p. 41) and "What is good for our bodily being-in-the world with others in particular?" (Capurro, 2006, p. 182). The problem of the capitalist mode of organising digital media, i.e. the international division of digital labour, is that it creates distributive injustice. It only enables some people to use these media to shape their own lives. It results in conditions of slavery and exploitation, in which humans cannot determine their own lives and cannot own the products their life-activities create. It constitutes a being-in-the-world with others, where one class appropriates the labour and products of digital workers. It thereby creates inverse interdependent welfare (Wright, 1997) for itself coupled with the deprivation of opportunities for others and their exclusion from this appropriated welfare.

Internet Surveillance in the Age of Edward Snowden

In June 2013, Edward Snowden revealed with the help of *The Guardian* the existence of large-scale internet and communications surveillance systems such as Prism, XKeyscore, and Tempora. According to the documents he leaked, the National Security Agency (NSA), through the Prism programme, obtained direct access to user data from seven online/ICT companies: AOL, Apple, Facebook, Google, Microsoft, Paltalk, Skype, and Yahoo!⁶ The Powerpoint slides that Edward Snowden leaked refer to data collection "directly from the

5 "Apple 'failing to protect Chinese factory workers.'" <http://www.bbc.com/news/business-30532463> *BBC Online*, December 18, 2014.

6 "NSA Prism program taps in to user data of Apple, Google and others." *The Guardian Online*. June 7, 2013. <http://www.theguardian.com/world/2013/jun/06/us-tech-giants-nsa-data>

servers of these U.S. Service Providers.”⁷ Snowden also revealed the existence of a surveillance system called XKeyScore that the NSA can use for reading e-mails, tracking web browsing and users’ browsing histories, monitoring social media activity, online searches, online chat, phone calls, and online contact networks, and follow the screens of individual computers. According to the leaked documents XKeyScore can search both meta-data and content data.⁸

The documents that Snowden leaked also showed that the Government Communications Headquarter (GCHQ), a British intelligence agency, monitored and collected communication phone and internet data from fibre optic cables and shared such data with the NSA.⁹ According to the leak, the GCHQ, for example, stores phone calls, e-mails, Facebook postings, and the history of users’ website access for up to 30 days and analyses these data.¹⁰ Further documents indicated that in co-ordination with the GCHQ, intelligence services in Germany (Bundesnachrichtendienst BND), France (*Direction Générale de la Sécurité Extérieure* DGSE), Spain (Centro Nacional de Inteligencia, CNI), and Sweden (Försvarets radioanstalt FRA) developed similar capacities.¹¹

Edward Snowden’s revelations about the existence of surveillance systems such as Prism, XKeyScore, and Tempora have shed new light on the extension and intensity of state institutions’ internet and social media surveillance. The concept of the military-industrial complex stresses the existence of collaborations between private corporations and the state’s institutions of internal and external defence in the security realm. C. Wright Mills argued in 1956 that there is a power elite that connects economic, political, and military power:

There is no longer, on the one hand, an economy, and, on the other hand, a political order containing a military establishment unimportant to politics and to money-making. There is a political economy linked, in a thousand ways, with military institutions and decisions. [...] there is an ever-increasing interlocking of economic, military, and political structures. (Mills, 1956, pp. 7-8)

Edward Snowden has confirmed that the military-industrial complex contains a surveillance-industrial complex (Hayes, 2012), into which social media are entangled: Facebook and Google each have more than 1 billion users and have likely amassed the largest collection of personal data in the world. They and other private social media companies are first and

7 NSA Prism program, 2013.

8 “XKeyscore: NSA tool collects ‘nearly everything a user does on the internet.’” *The Guardian Online*. July 31, 2013. <http://www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data>

9 “GCHQ taps fibre-optic cables for secret access to world’s communications.” *The Guardian Online*. June 21, 2013. <http://www.theguardian.com/uk/2013/jun/21/gchq-cables-secret-world-communications-nsa?uni=Article:in%20body%20link>

10 GCHQ, 2013.

11 “GCHQ and European spy agencies worked together on mass surveillance.” *The Guardian Online*. November 1, 2013. <http://www.theguardian.com/uk-news/2013/nov/01/gchq-europe-spy-agencies-mass-surveillance-snowden>

foremost advertising companies that appropriate and commodify data on users' interests, communications, locations, online behaviour and social networks. They make profit out of data that users' online activities generate. They continuously monitor usage behaviour for this economic purpose. Since 9/11 there has been a massive intensification and extension of surveillance that is based on the naïve technological-deterministic surveillance ideology that monitoring technologies, big data analysis and predictive algorithms can prevent terrorism. The reality of the murder of a soldier that took place in the South-East London district of Woolwich in May 2013 and the Charlie Hebdo attacks in Paris in January 2015 shows that terrorists can use low-tech tools such as machetes and conventional guns for targeted killings. High-tech surveillance will never be able to stop terrorism because most terrorists are smart enough not to announce their intentions on the internet. It is precisely this surveillance ideology that has created intelligence agencies' interest in the big data held by social media corporations. Evidence has shown that social media surveillance not just targets terrorists, but has also been directed at protestors and civil society activists.¹² State institutions and private corporations have long collaborated in intelligence, but the access to social media has taken the surveillance-industrial complex to a new dimension: it is now possible to obtain detailed access to a multitude of citizens' activities in converging social roles conducted in converging social spaces.

The profits made by social media corporations are not the only economic dimension of the contemporary surveillance-industrial complex: The NSA has subcontracted and outsourced surveillance tasks to approximately 2000 private security companies that make profits by spying on citizens.¹³ Booz Allen Hamilton, the private security company that Edward Snowden worked for, is just one of these firms that follow the strategy of accumulation-by-surveillance. According to financial data,¹⁴ it had 24 500 employees in 2012 and its profits increased from US\$ 25 million in 2010 to 84 million in 2011, 239 million in 2012, 219 million in 2013, and 232 million in 2014. Surveillance is big business, both for online companies and those conducting the online spying for intelligence agencies.

Users create data on the internet that is either private, semi-public, or public. In the social media surveillance-industrial complex, companies commodify and privatise user data as private property and secret services such as the NSA driven by a techno-determinist ideology obtain access to the same data for trying to catch terrorists that may never use these technologies for planning attacks. For organising surveillance, the state makes use of private security companies that derive profits from organising the monitoring process.

User data is in the surveillance-industrial complex first externalised and made public or semi-public on the internet in order to enable users' communication processes, then privatised as private property by internet platforms in order to accumulate capital, and finally particularised by secret services who bring massive amounts of data under their

12 "Spying on Occupy activists." *The Progressive Online*. June 2013. <http://progressive.org/spying-on-occupy-activists>

13 "A hidden world, growing beyond control." *Washington Post Online*. <http://projects.washingtonpost.com/top-secret-america/articles/a-hidden-world-growing-beyond-control/>

14 SEC Filings, <http://investors.boozallen.com/sec.cfm>.

control, data that is made accessible and analysed worldwide with the help of profit-making security companies. Why is the surveillance-industrial complex problematic from an ethical point of view? Let us again have a look at the foundational questions of Capurro's information ethics. "How can we ensure that the benefits of information technology are not only distributed equitably, but that they can also be used by the people to shape their own lives?" (Capurro, 2003, p. 41). "What is good for our bodily being-in-the world with others in particular?" (Capurro, 2006, p. 182). The surveillance-industrial-complex contains fundamental power asymmetries: the involved nation states argue that they have to monitor the communication of all citizens worldwide beyond nation states, but at the same time they want to hinder citizens monitoring state power, as the repression against WikiLeaks, Chelsea Manning, and Edward Snowden shows.

The surveillance-industrial-complex is also asymmetrical in terms of knowledge because it wants to deceive the world by not making transparent the existence of global surveillance systems. This is a strategy frequently found in surveillance that is hard to criticise because it operates invisibly and covertly. Unknown powers can hardly be questioned. The world should be grateful to Edward Snowden and award him and Julian Assange the Nobel Peace Prize for having made many unknowns known so that global society has become better enabled to criticise the existing power elites that operated behind their backs. Surveillance, as the collection of information about people in order to enforce power structures within a society is not automatically a bad thing. If a government or civic watchdog for example monitors financial flows and corporate power in order to uncover and overcome corporate crime and corporate tax evasion in order to increase the public tax revenues, then the use of the surveillance power strengthens the public good. At a macro-level this form of surveillance therefore benefits society at large. Within a society that is based on asymmetric power structures, not all forms of surveillance are morally problematic. The surveillance-industrial complex that Snowden exposed is morally problematic because it is based on the economic exploitation of digital labour, the deception of the public, a power asymmetry that tries to repressively block watchdogs' monitoring of state and corporate power, and surveillance ideologies that create the false impression that more surveillance results in more security and solves political and social problems.

The information technologies of the surveillance-industrial-complex disempower citizens who cannot shape their own conditions of information and it creates multiple power asymmetries that question the freedoms of information, thought, opinion, and communication that liberal societies claim as their fundamental moral values. The surveillance-industrial complex shows that a negative dialectic of the Enlightenment is at play in contemporary society: it constantly undermines the very liberal values of the Enlightenment, such as the freedoms of thought, speech, press and assembly as well as the security of the person and of their personal property. Prism shows how in supposedly liberal democracies dangerous forms of political-economic power negate Enlightenment values (Fuchs, 2015).

Surveillance ideologies—such as "if you got nothing to hide, then you got nothing to fear", "for security we need to compromise some privacy", "surveillance will stop crime and terrorism"—are mistaken for many reasons:

- Terrorists are not so silly as to communicate online what they are doing or intend to do.
- There is no technological fix to political and socio-economic problems.
- Law and order politics fosters fascist potentials in society.
- Categorical suspicion turns the presumption of innocence (“innocent until proven guilty”) into a presumption of guilt (“terrorist until proven innocent”).
- People who join fundamentalist groups often experience precarity, unemployment, lack of good educational opportunities, and racism. Welfare state politics, not politics of control, are the best means for countering fundamentalism.

Times of crisis are times of ideological scapegoating in order to distract attention from causes of social problems. In 2008, a major crisis of capitalism started. It also translated into a crisis of many states and societies. The emergence of heavy ideological scapegoating is therefore no surprise. Contemporary scapegoats in the UK context include Romanian and Bulgarian workers, the European Union, benefits recipients, the unemployed, the poor, black youth, international students, immigrants, Muslims, Jews, South Europeans, etc. Ideology deflects attention from social problems, inequality, precarious labour, and unemployment. It deflects attention from the problems of capitalism.

Moral panics that call for more surveillance and scapegoat certain groups can amplify and result in more terrorism and crime: if groups or individuals feel unfairly discriminated (e.g. by racism, classism, sexism, scapegoating, etc.), they may react to this circumstance with an intensification of hatred against those whom they perceive hate and discriminate against them. If certain groups or individuals are labelled as terrorists or criminals or denied certain possibilities (such as entering a certain country, area or building), there is the risk that an intensification or creation of hate can set in, which can result in the creation or intensification of the very phenomenon (crime, terror, etc.) that the algorithm, surveillance technology, ideology, law and order policy, etc. wanted to prevent in the first instance. The European protests and rejections of austerity, neoliberalism and capitalism are, in my view, the only reasonable voices in the crisis discourse. Slavoj Žižek (2015) pinpoints this circumstance by saying that a “renewed Left” is “the only way to defeat fundamentalism, to sweep the ground under its feet”. Syriza’s electoral victory in Greece is an important beacon of hope for the Left in Europe, a hope for a world beyond ideology, right wing populism, and neoliberalism.

Conclusion

A critical theory and critical political economy of information, communication, technology, the media, and the internet needs to be a theoretical, empirical, ethical and political inquiry into the information society’s power structures. It must also uncover, question, and help to overcome the inequality, power asymmetries, exploitation, ideologies, and forms of domination that emerge in the context of information and information technologies. The question therefore arises of how information ethics should best be conceived. I have

analysed in this contribution the relationship between two versions of information ethics, the ones formulated by Rafael Capurro and Luciano Floridi. Floridi's approach is highly problematic because it decentres the human and thereby risks relativising the very foundations of ethics. He does not engage with the critiques of deep ecology, post-humanism, and actor network theory that face the same problems as his version of information ethics. Floridi (2013, p. 308) argues about a specific claim that once was made against him is: "I still recall one conference in the nineties when a famous computer ethicist compared me to a sort of Nazi, who wished to reduce humans to numbers, pointing out that the Nazis used to tattoo six-digit identity tags onto the left arms of the prisoners in their Lager. This is rhetorical nonsense". Although this is certainly an overdrawn claim, Floridi simply dismisses it and does not ask himself if there may be certain problematic assumptions at the heart of his philosophy that make some people feel politically uncomfortable and make them think that it trivialises the horrors of Nazism.

Floridi overlooks that biologism, as an ideology that equates humans and non-humans by arguing that certain humans are like parasites or other biological organisms, or by projecting biological mechanisms into society, is one of the important logical foundations of Nazism. It makes it logically possible to treat humans like things and to ideologically argue that they do not deserve to exist. Floridi certainly can reject this line of argument because he argues that all existence is informational and is valuable and should not be destroyed. This however also implies that not just computer viruses, but also the human immunodeficiency virus and other virus illnesses that can threaten human lives should be preserved, which means the death of humans. Such assumptions in some versions of deep ecology threaten human lives and have resulted in a form of eco-fascism. Floridi does not engage with such approaches and their problems. The point is that an ontological equalisation of humans and non-humans has historically been the foundation of repression and that ontological equalisations as right-wing ideology continues to exist for example in the ideology of some animal rights activists and the deep ecology movement. The social-ecological philosopher Murray Bookchin warned in this context

Deep ecology contains no history of the emergence of society out of nature [...] 'Biocentric democracy,' I assume, should call for nothing less than a hands-off policy on the AIDS virus and perhaps equally lethal pathogens that appear in the human species. [...] Deep ecology, with its Malthusian thrust, its various centricities, its mystifying Eco-la-la, and its disorienting eclecticism degrades this enterprise into a crude biologism that deflects us from the social problems that underpin the ecological ones and the project of social reconstruction that alone can spare the biosphere from virtual destruction. (Bookchin, 1987)

Floridi's information ethics faces the danger of reproducing some of the problems of deep ecology.

Rafael Capurro has, in contrast to Floridi, grounded a form of information ethics that foregrounds human social relations as constitutive for the ethical understanding of information technologies and society. One can well disagree with Capurro on how to assess Heidegger, Kant, Vattimo, Marx, Hegel, etc., but in terms of the bottom line it is clear that his ethics cares about the deconstruction of asymmetric power structures and ideologies,

which is a good foundation for constructive agreement and disagreement with political economy approaches. Floridi's pan-informational ethics foregrounds the reduction of entropy and the centrality of human and non-human actors that are conceived of as having in common the simple quality that they are merely informational. It also stresses the struggle against all beings' entropy. It is hard find this approach fruitful if one wants to develop a critical theory and critical political economy of information, the information society, and information technology.

Information ethics is an important philosophical undertaking that we require for a better understanding of the 21st century. We require however, not just a general understanding, but specifically a critical understanding of the information society. Rafael Capurro's works are an important and indispensable contribution towards this philosophical task.

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