

The Ethics of the Digital Commons

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ABSTRACT

This paper asks: Why is it morally good to foster the digital commons? How can we ethically justify the importance of the digital commons? An answer is given based on Aristotelian ethics. Because Alasdair MacIntyre is the most influential Aristotelian moral philosopher today, the paper engages with foundations of MacIntyre's works and gives special attention to his concept of the common good and his analysis of how structures of domination damage the common good. It is argued that for advancing a philosophy of the (digital) commons, MacIntyre's early and later works, in which he has been influenced by Karl Marx, are of particular importance. The approach taken in this paper combines Aristotle, Marx, and MacIntyre.

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The rise of computing and the internet in society has come along with new forms of commodities and commons. There is a range of digital commodities: Apple sells hardware such as iPhones, iPads, or Macintosh desktop computers. Internet service providers sell access to digital networks for mobile phones, tablets, laptops, and desktop computers. Microsoft sells licenses for the use of operating system software and application software. Google and Facebook sell targeted online advertisements. Spotify, Netflix, and Amazon Prime sell subscriptions to collections of digital content. There is also a range of digital commons: Community centers, public libraries, and other public institutions often provide free access to computers and the internet. Community networks such as Freifunk provide free access to computer networks that are operated and owned as a common resource in local communities. Free software (such as Linux, GNU, or Mozilla) is software that can be run, studied, distributed, and improved without restrictions. Wikipedia is a freely accessible, co-operatively edited, nonprofit online encyclopedia. It is distributed based on a Creative Commons license that allows re-use and re-mixing of Wikipedia's content. Creative Commons is a license that allows access to and the re-use of digital contents (such as images, texts, videos, music, etc.) without payment. Nonprofit open-access journals and books make texts available in digital online formats (and in the case of books often as affordable paperbacks) without charging users and authors and without making monetary profits.

Digitization fosters both new forms of commodification and co-operative production, distribution and ownership, which poses the ethical question of how we should best assess these diverging principles that operate in the online economy.

This paper asks: Why is it morally good to foster the digital commons? It examines the ethical foundations of the commons and applies them to the realm of the digital

commons. The focus of this article ~~project~~ is on Aristotelian ethics in general and Alasdair MacIntyre's version of Aristotelian ethics in particular. It explores how this approach can be interpreted for justifying the moral need for digital commons. It outlines the foundations of an Aristotelian-Hegelian-Marxian digital ethics.

Alasdair MacIntyre and the digital commons

Although Yochai Benkler does not, in general, give much attention to ethics and philosophy in his books on the commons, an article he wrote together with Helen Nissenbaum discusses "Commons-Based Peer Production and Virtue" (Benkler & Nissenbaum, 2006). Benkler and Nissenbaum argue that "commons-based peer production is an instance of an activity that not only enables the expression of virtuous character but serves as a training ground for virtue" and "holds the potential to add to the stock of opportunities for pro-social engagement" (2006, p. 414). They use virtue ethics for discerning four clusters of virtues that motivate commons-based peer production. The first two clusters focus on the development of the commoners' self (self-regarding virtues), the third and the fourth on the development of others (social virtues):

- Autonomy
- Creative production
- Benevolence, charity, generosity, altruism
- Sociability, camaraderie, friendship, co-operation, civic virtue

(Benkler & Nissenbaum, 2006, pp. 405–408).

In the discussion of the second dimension, creative production, Benkler and Nissenbaum refer to Alasdair MacIntyre's version of virtue ethics: "Peer production offers the possibility of engagement in what MacIntyre terms a 'practice'" (2006, p. 406). They then cite MacIntyre's definition of a practice as "any coherent and complex form of socially established human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially derivative of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended" (2007, p. 187). However, Benkler and Nissenbaum do not further discuss the implications of this definition. A good is "what benefits human beings as such and [...] what benefits human beings in particular roles within particular contexts of practice." (MacIntyre, 1999, p. 65) There are therefore individual and social goods. MacIntyre (2007, p. 291) mentions prestige, status, and money as examples of external goods. Internal goods arise directly from the experience of a practice itself (p. 292). MacIntyre relates the virtue concept to practices' internal goods: "A virtue is an acquired human quality the possession and exercise of which tends to enable us to achieve those goods which are internal to practices and the lack of which effectively prevents us from achieving any such goods" (p. 222). For Aristotle (2002, book II), a virtue is an active condition that constitutes a mean between two extremes – "a mean condition between two vices, one resulting from excess and the other from deficiency" (2002, § 1107a). So, a virtue is a means of moderation and mediation. Adorno (2001) criticizes that Aristotle's ethics is conservative (see also Whyman, 2017): For Aristotle, mediation is "only something existing between the extremes" (Adorno, 2001, p. 47). This concept of mediation lacks the dialectic, in which mediation is "accomplished through the extremes themselves" (p. 47) and the extremes are

sublated (aufgehoben, sublation = simultaneous substitution and elimination). So, for example, class struggle aims at sublating the conflict between capital and labor that is constituted by two opposite interests. A “mediation” of this conflict is achieved by mechanisms such as wage negotiations, strikes, lay-offs, rationalization, outsourcing, etc. Within capitalism, such mediation only settles the conflict temporarily closer to the interest of capital or labor and cannot overcome the extreme polar opposite of interests that is constitutive for capitalism itself. Sublation (Aufhebung) works through the extremes by constituting a new totality that is an emerging difference that contains the new and transformed parts of the old, eliminates parts of the old, and makes a qualitative difference.

The problem of defining virtues as individual practices is that one can obtain internal excellence of a practice to perfect ways of achieving external goals that harm society. An example is someone who acquires outstanding free/open-source software programming skills, uses them for building bots that tyrannize specific groups of internet users, and encourages others to re-use and further develop the evil code to create an army of nasty bots. Virtues, therefore, need to be situated in the context of the political and critical dimension of the quest and struggle for a good life (εὐδαιμονία, eudaimonia) for all.

Creative production is not, as Benkler and Nissenbaum claim, a virtue in itself. It should not be seen independent from its content and societal context. MacIntyre (2007) takes this point into account by arguing that virtues do not simply focus on the establishment of the good life for an individual, but a community. Neo-Aristotelians ask: “What is it that we presuppose? [...] the NeoAristotelian’s history is a history both of her and of those groups with whom she shares common goods and within which she pursues her individual good” (MacIntyre, 2016, p. 61). But such a version of the communitarian approach is itself limited: The Nazis had the virtue of perfecting their methods of annihilating their constructed enemies (such as Jews), which was perceived as creating excellence in militarism and a good life for the community of Nazis. The only community at which virtues can be oriented in order not be repressive is the undivided community of humans. Practices can only be virtuous if they aim at creating the good life for all and to reduce and minimize suffering. Callinicos remarks that MacIntyre has a “principled preference for the local and particular” and “has lost interest in the search for a global alternative (literally and metaphorically) to capitalism” (2011, p. 77). MacIntyre (2011) answers to Callinicos that revolutions need to start from organizations such as “grass-roots organizations, trade unions, cooperatives,” schools, transport systems, etc. that help remaking everyday life and “serve the common good” (p. 320). “For those who engage in such making and remaking will encounter that resistance to any breach of those [dominant political] norms” is what “makes revolutionaries,” a resistance for which “local organizations need “to find allies elsewhere, nationally and internationally, and often need to deal with agencies of the state or international agencies, sometimes as obstacles, sometimes as providing resources” (p. 320). Benkler and Nissenbaum argue, based on MacIntyre, that humans face structural constraints, which in the context of commons-based peer production means that “incumbent firms” (Benkler & Nissenbaum, 2006, p. 418) such as Microsoft tend to resist and oppose commons-based peer production. This argumentation implies that large corporations oppose the four clusters of virtues. But there is a dialectical complexity of the subsumption of aspects of society under capital: Capital tries to

subsume ever newer social systems in order to create new spheres of capital accumulation and to circumvent crisis tendencies and forestall resistance. All of the virtuous practices discussed by Benkler and Nissenbaum are not automatically resisting the subsumption of the digital commons under capital.

Someone involved in a peer production project can practice the virtues of autonomy, creative production, benevolence, charity, generosity, altruism, sociability, camaraderie, friendship, and co-operation by co-producing common resources, but can be subject to the exploitation of his or her labor for capital accumulation or can be the subject of such capital accumulation processes. Creativity, participation, sharing, openness, and co-operation have become new ideologies of digital capitalism: Digital corporations such as Facebook, Google, for-profit open access publishers, etc., practice the communism of capital: They advance the production of particularistic types of commons that are subsumed under the logic of capital. Facebook and Google accumulate capital through the free labor of users, who create, share and participate in the production of data and content on platforms that are open for anyone to use as a gift. An ever-larger number of companies crowdsources product development, improvement and marketing to the free labor of the online crowd of brand consumers. Corporate open-access publishers accumulate capital by making content available as digital commons that is only released if the producers pay large sums of money as processing charges that not just finance end-production, but are also the source of corporate profits.

Benkler and Nissenbaum's four clusters of virtues of the commons are focused on individual and social virtues. They lack a third dimension: The dimension of collective political action (political virtues) that aims at creating a society of the commons and advancing struggles against the processes of commodification and bureaucratization that subsume the commons under the logics of capital and domination. In order to advance a critical virtue ethics of the commons one needs to add the social struggle for a society of the commons as a fourth dimension of virtues.

Such a critical dimension of virtues can, however, only be developed based on the concepts of essence and human nature. The most well-known version of MacIntyre's ethics is the phase, where he wrote *After Virtue*, in which he did not engage with the concept of human nature. However, in the earlier and later phases of his philosophical development, he was more open to Karl Marx's critical theory that operates with the distinction between human essence and society's existence.

Human essence

Burns (2011) distinguishes three subsequent stages in MacIntyre's works that he terms "Marx without Aristotle," "Aristotle without Marx," and "Aristotle and Marx." When MacIntyre (1953) published his first book *Marxism: An Interpretation* in 1953, he was "both a Christian and a Marxist" (MacIntyre, 2009, p. 419). In 1968, when the book's second edition was released, he was neither a Christian nor a Marxist (ibid.). "During the years 1977 through 1984 MacIntyre transitioned to an Aristotelian worldview, returned to the Christian faith and turned from Aristotle to Thomas Aquinas" (Lutz, 2015). In his major work *After Virtue*, MacIntyre wrote in 1981 that Marxism was "exhausted as a political tradition" and was politically too optimistic (MacIntyre, 2007, p. 304). As part of his turn away from Marxism, MacIntyre gave up

the concept of human nature (see MacIntyre, 2002, pp. 259, 261; 2007, p. 190). He later changed his position on that question and “became a Thomist after writing *After Virtue*” because “I became convinced that Aquinas was in some respects a better Aristotelian than Aristotle” (MacIntyre, 2007, p. xi). In his late works, MacIntyre has returned to Marx and advances a “Thomistic Aristotelianism” that is “informed by Marx’s insights” to construct “a contemporary politics and ethics” (MacIntyre, 2016, p. xi).

Aristotle (1999, 1933) spoke of τὸ τί ἦν εἶναι (to ti ên einai) and τὸ τί ἐστὶ (to ti esti), which literally means “what it is in order to be” and “what it is.” These phrases have either been translated as “essence” (e.g. in Aristotle, 1933) or as “what it is for something to be” (Aristotle, 1999). The essence of an entity consists of “those characteristics that make it the kind of thing it is (or the very thing it is) and without which it could not exist or be what it is” (Meikle, 1985, p. 177). Aristotle (1999, §1029b) defines essence as that “what is said of” a thing “in its own right” (Aristotle, 1999, §1029b [translated as “that which it is said to be per se” in, Aristotle 1933, 1029b]). Essence means that something is a “primary thing” that is “not articulated by attributing one thing to another” (Aristotle, 1999, §1030a; [translated as “do not involve the predication of one thing of another” in, Aristotle 1933, §1029b]). The essence of a thing is “the substance which is peculiar to it and belongs to nothing else,” whereas “the universal is common; for by universal we mean that which by nature pertains to several things” (Aristotle, 1933, §1038b; [translation in, Aristotle 1999, §1030a: “For in the first place, the thinghood of each thing is what each is on its own, which does not belong to it by virtue of anything else, while the universal is a common property, since what is meant universally is what is of such a nature as to belong to more than one thing”]). Meikle (1985) distinguishes Aristotelian essentialism from the worldview of atomism. Ernst Bloch (1963, 1972) characterizes Aristotle’s concept of matter as a dynamic form of being-in-possibility (δυνάμει ὄν, δυνάμει ὄν) and objective possibility. He opposes this concept of matter to mechanistic materialism and traces it in the works of Avicenna, Averroes, Giordano Bruno, Spinoza, Schelling, Hegel, and Marx.

Justifying that the good life means a commons-based society requires reasonable assumptions about the nature of humans and society. MacIntyre argues in his early Marxist writings – especially the 1958/59 essay *Notes from the Moral Wilderness* (MacIntyre, 2009, pp. 45–68) that for Marxists the “concept of human nature [...] has to be at the centre of any discussion of moral theory” (MacIntyre, 2009, p. 63). For MacIntyre, morality has to do with human desires. Capitalism and class societies would distort desires so that there is a “rift between morality and desire” (p. 61). MacIntyre here applies the Hegelian dialectical logic of essence and existence. Modern society would have created conditions where “human possibility can be realized in a quite new way” (p. 56). But these potentials are artificially suppressed so that they do not benefit humanity in common, but rather predominantly the ruling class. “Each age reveals a development of human potentiality which is specific to that form of social life and which is specifically limited by the class structure of that society” (p. 64). Each “new form of exploitation [...] brings new frustrations of human possibility” (p. 125). “The paradox of bourgeois society is that it at one at the same time contains both the promise of greatly enlarged freedom and the denial of that freedom” (p. 126). Human nature “is violated by exploitation and its accompanying evils” (p. 66). Only class struggle is able to

realize “a common shared humanity” (p. 64) and “the deeper desire to share what is common in humanity” and “to rediscover common desire.” (p. 65) MacIntyre argues that class society means alienation from common human desires for solidarity. For him, human essence has to do with the collective human desire for a good life for all. As part of his return to Marx during his late period, MacIntyre (2016, chapter 2) argues in his book *Ethics in the Conflicts of Modernity* that Marx employs key Aristotelian concepts: “essence, potentiality, goal-directedness” (MacIntyre, 2016, p. 94). “For Marx, as for Aristotle, human agents can be understood only as goal-directed, and we can distinguish between those goals the pursuit of which will develop their human potentiality and those goals the pursuit of which will frustrate their development” (p. 94).

What is the role of language and communication in human nature? MacIntyre (2007, chapter 15) argues in *After Virtue* that the unity of human life can only be obtained through conversations that create social relations. The human being is a “story-telling animal” (p. 250; see also the discussion in Williams, 2009). Conversations construct dramatic narratives that make human life unpredictable. At the same time, human life is guided by a telos – “a variety of ends or goals” (p. 250). Because of human life’s communicative character, virtue is for MacIntyre not purely internal to practices, but supports the “quest for the good” and “increasing knowledge of the good” (p. 254). MacIntyre sees the good as the search “for the good life for man” (p. 254). This definition is unsatisfactory because the goal of what someone or a group understands as a good life can, for example, include the enslavement of others or genocide. Virtue ethics should not abstract from society as totality and not focus on particular communities. MacIntyre argues that the good life varies historically and from group to group (p. 255). Therefore, virtues oriented on the social are for MacIntyre limited to particular local communities. “[W]e all approach our own circumstances as bearers of a particular social identity. [...] I belong to this clan, that tribe, this nation. Hence what is good for me has to be the good for one who inhabits these roles” (p. 255). The stress of “moral particularity” disregards what humans have in common and faces the danger of turning into moral relativism and moral particularism. Avoiding moral relativism requires the concept of human nature/essence.

MacIntyre in *After Virtue* speaks of the “narrative understanding of the unity of human life” (2007, p. 265). This is just another formulation for saying that humans are communicative, social beings. MacIntyre does not draw the conclusion that communication and community are part of the human essence because in *After Virtue* he rejects the concept of human nature. His account thereby is incompletely Aristotelian. MacIntyre’s approach can be turned into a full Aristotelianism by adding the notion of human essence: Humans are in essence producing, communicative, social beings. Aristotle describes humans as ζῷον λόγος ἔχων (zōon logon echon). Arendt (1958, p. 27) writes that it is inadequate to translate this category as a rational animal. In Greek, λόγος (logos) means both rationality/reason and speech/utterance. This double meaning precisely describes human essence: The human is a rational/teleological, communicative being. Language and work as forms of production are a means for reaching goals. In *Politics*, Aristotle writes: λόγον δὲ μόνον ἄνθρωπος ἔχει τῶν ζῴων – “man alone among the animals has speech” (Aristotle, 2013, §1253a). MacIntyre (2016, p. 26) argues that “the power of language use” distinguishes humans from animals. Language would have four

crucial features: It enables reflection and justifications, enhances the communication of intentions and responses, makes envisioning alternative futures possible, and allows narrating stories (pp. 26–27). Language enables humans to pose ethical questions about what is good (p. 225).

Language has syntactic (form, rules), semantic (meaning, content) and pragmatic (effect, purposeful use in social contexts) aspects. MacIntyre, in his book *Dependent Rational Animals*, discusses the example of bottlenose dolphins (1999, pp. 50–51). These dolphins are highly developed animals that perform perceptive learning and communicate intentionally with each other. They form social bonds via a range of whistling sounds. MacIntyre uses the example of the dolphin to show that there are common biological features of highly developed animals and humans. Certain animals (dolphins, dogs, gorillas, chimpanzees, elephants, etc.) make use of prelinguistic means for achieving goals. Humans in contrast to animals are able to use language in complex manners to “express the judgement about which the agent is reflecting” (p. 54), which allows them to reflect on and realize alternative actions (p. 96). MacIntyre calls this capacity practical rationality (p. 54). Humans are able to put language to reflective use (p. 58). Through communicative social relations they learn to evaluate, modify, and reject their judgments (p. 83) and to reflectively organize desires and the quest for wants and needs in order to achieve a variety of goods (p. 96). Humans are therefore also moral beings that live through communication: “As a practical reasoner, I have to engage in conversation with others, conversation about what it would be best for me or them or us to do here and now, or next week, or next year” (pp. 110–111). For achieving the common good, humans have to not just communicate, but also need to co-operate (p. 114). So, humans strive to achieve individual and common goods by reflective and anticipatory judgment, learning through communicating judgments, practically enacting and modifying their judgments in everyday life, and working together with others. MacIntyre outlines common features of humans, but avoids speaking of “human essence.” MacIntyre outlines a logic of essence but does not call it by this name. There are parallels of MacIntyre to Hegel, Marx, and Marcuse’s concepts of essence (*Wesen* in German), which is why we should have a closer look at these thinker’s works.

The German word *Wesen* has two meanings: It means a) a creature or being; and b) in a philosophical sense the particular features of a phenomenon that make it different from other phenomena and constitute the grounding and inner characteristics of something without which it could not exist (Duden, 2019). Therefore, the two key English translations of *Wesen* are a) creature/being and b) essence (Langenscheidt, 2019). Especially Hegel advanced the philosophical notion of *Wesen* by creating a dialectical logic of essence. For Hegel (1830/1991, §§115–130), essence is the ground of existence. He speaks of a dialectic of essence (*Wesen*) and appearance (*Erscheinung*), which means that the essence of something that exists is not always immediately apparent. “The immediate being of things is [...] a sort of rind or curtain behind which the essence is concealed” (Hegel, 1830/1991, Addition to §112). Actuality (*Wirklichkeit*) is for Hegel the dialectical sublation and unity of the contradiction between essence and appearance. “Actuality is the unity, become immediate, of essence and existence” (Hegel, 1830/1991, §142). Actuality is a reasonable being, being not as it is immediately, but the way it can and should be so that it accords to the potentials

inherent in its essence.

Herbert Marcuse (1936/2009) argues that Marx was heavily influenced by Hegel's dialectical logic of essence. Marx "works with two different sets of concepts, [...] One set describes the economic process in its immediate appearance. [...] the second group of concepts, which has been derived from the totality of the social dynamic, is intended to grasp the essence and the true content of the manifestations which the first group describes as they appear. The dialectical concepts transcend given social reality in the direction of another historical structure which is present as a tendency in the given reality" (Marcuse, 1936/2009, pp. 62–63). Marx dialectically relates the two meanings of *Wesen* in his critical analysis of society and capitalism. On the one hand, Marx speaks of humans as species-being (*Gattungswesen*), by which he means that humans are producing, co-operative, social and societal beings. "[P]roduction is his active species-being" (Marx, 1844d, p. 277). The human species-being's "species-powers" lie in "the co-operative action of all [hu]mankind" (Marx, 1844d, p. 333). The human being is "a societal animal" ("*gesellschaftliches Tier*," translation from German, Marx, 1857/58, p. 84).

For Marx, socialness is the essence of human beings. He argues that in capitalism and class society, human socialness is crippled and incomplete. He expresses this circumstance with the notion of alienation/estrangement (*Entfremdung*). Marx argues that human beings' "social activity" has the potential to create "the true community" of humanity, [...] but as long as man does not recognize himself as man, and therefore has not organized the world in a human way, this community appears in the form of estrangement, because its subject, man, is a being estranged from himself" (Marx, 1844b, p. 217). In Marx's original German manuscript, the phrase "true community" is "*das wahre Gemeinwesen der Menschen*" (Marx, 1844a, p. 451). The passage can best be translated as "the true commonwealth of humanity." But *Gemeinwesen* also has the word *Wesen* in it. The etymology of the word goes back to the combination of the two German words *gemein* (common) and *Wesen* (essence)¹. For Marx, the use of the term *Gemeinwesen* refers to the common as communist existence of humans and the commons as essence of humanity and society. So what Marx hints at in this and other passages is that class society alienates humans from the potential of the common control of society, a commons-based society.

In a passage in the Economic and Philosophic Manuscripts, Marx directly refers to communism as the actuality of society that realizes the essence of the human being and society. Marx writes that communism is "the positive transcendence of private property as human self-estrangement" and therefore "the real appropriation of the human essence [*wirkliche Aneignung des menschlichen Wesens*" in the German original – Marx (1844e, p. 536)] by and for man;" communism therefore is "the complete return of man to himself as a social (i. e., human) being," "equals humanism" and is "the true resolution of the strife between existence and essence, between objectification and self-confirmation, between freedom and necessity, between the individual and the species" (1844d, p. 296). In this passage, Marx dialectically links the notion of *Wesen* as being and essence. Marx sees the

¹ See: Deutsches Wörterbuch von Jacob Grimm und Wilhelm Grimm, <http://woerterbuchnetz.de> (accessed on September 9, 2019): entry for "*Gemeinwesen*."

commons as human essence, from which human beings are alienated in class societies. Communism sublates this antagonism between human essence and existence.

MacIntyre (2016) does not determine what the common aspects of the four dimensions of linguistic capacities that he identifies are, although he hints at the fact that language and communication “make possible kinds of cooperation and forms of association that are distinctively human” (p. 26) and “enable us to associate cooperatively with others in ways not open to nonhuman animals” (p. 29): Humans produce social relations and produce in social relations. And they do so purposefully; namely, to with the capacity of trying to advance human flourishing. Class relations and dominations, however, influence the perception of which human individuals and groups should flourish and which ones should be harmed as well as corresponding practices.

For Aristotle, human life in society has a telos. Influenced by Aristotle and Marx, Georg Lukács argues that the human being is a teleological being because the human as “conscious creator” produces with a purpose, orientation and goal (1978, p. 5). Lukács sees teleological positing as the essence of the human being and society. Human beings are in essence teleological: They work and communicate to reach defined goals. Aristotle argues that “one who makes something always makes it for the sake of something” (2002, §1139b). Lukács' combination of Aristotle and Marx shows that without production and communication there can be no human existence. Communication is the production of social relations and sociality. Work and communication are two aspects of production: Humans produce meanings and sociality through communication. They produce use-values that satisfy human wants, needs, and desires through work. Work has a communicative character and communication work character. Work and communication are two dialectically encroaching dimensions of the practical, anticipatory, and reflective rationality of human beings. Production in society is social and therefore communicative. Communication is productive: It creates shared understandings and sociality. Communication and work are common features of all humans and all societies. To attain desires and satisfy needs, we need to engage in production and communication so that immediate desires are suppressed and rationally transformed into work processes that allows attaining identified ends having to do with ways of how we can achieve wants, needs, and desires. Production and communication require “intellect fused with desire” and “desire fused with thinking” (Aristotle, 2002, §1139b). Humans can “stand back from our desires and other motives” (MacIntyre, 2016, p. 44) to reflect and rationally act so that we achieve larger goals or what MacIntyre (2016, p. 53) characterizes as the “final end” and the “ultimate human end,” the human flourishing and good life that Aristotle characterizes as eudaimonia. This means that humans have an essential quest for human flourishing and being able to lead a good life. If humans, in essence, desire the good life and are rational, communicating, producing, social and societal animals who cannot achieve goals alone but only together with others; then, the question arises how humans can advance the common good in society.

The common good

MacIntyre (1997) argues that the common good can be defined either as the end of community members' “shared activities” (p. 239), or as the sum of individual goods in

an association (pp. 239–240), or as activities in a polis, where individual and common goods are inseparable (p. 241). For MacIntyre, both the first (communitarian) and the second (liberal) concept fail because in the modern state, liberal individualist and minimalist concepts and elements of the common good come into conflict with the social good that is based on a communitarian concept of the common good. MacIntyre recommends “small-scale local community politics” (p. 248) that enables “a community of enquiry and learning” (p. 251). MacIntyre does not take into account that the common good understood as a “community in which each individual’s achievement of her or his own good is inseparable both from achieving the shared goods of practices from contributing to the common good of the community as a whole” (pp. 240–241) relates not just to local community practices, but also to practices that concern humanity as a whole, i.e. practices that either affect all humans or that are common to all humans. The common good certainly needs to take into account politics (the polis as a political community) and culture (common learning). Another important dimension is the common in the economy (common production, common ownership, common access).

MacIntyre (2016) gives a range of examples for work toward the common good at the local level. “The common good of those at work together are achieved in producing goods and services that contribute to the life of the community and in becoming excellent at producing them” (MacIntyre, 2016, p. 170). Family members “pursue their goods as family members by enabling the other through their affection and understanding to achieve her or his goods. Parents pursue their goods as family members by fostering the development of the powers and virtues of their children, so that those children may emerge from adolescence as independent rational agents” (p. 169). In schools, teachers “achieve their own good qua teachers and contribute to that common good by making the good of their students their overriding good, while their students contribute to the shared education of their class by their class participation, so achieving their own good.”

Humans are rational, ethical, communicating, producing, social and societal beings who behave purposefully to try to achieve a good life. Aristotle saw that there is an inherent connection of the commons, communication and community.

Communication creates common meanings and definitions within a community. In modern class societies, the common good is subordinated under the logics of capital and bureaucracy. As a result, particularistic interests rule so that inequalities and asymmetric distributions of power are a reality. The good life is not an actual common feature of all humans living in capitalism and class societies, where it is only a feature that some enjoy at the expense of others: Some are forced by economic, political or ideological structures to lead damaged, alienated lives. The commons are part of the human essence because the common features of all humans constitute human essence. The desire for a good life is a common feature of all humans. But given that humans are social beings living in society, the good life cannot be achieved individually, but only collectively, socially and politically. I can only lead a good life if all are enabled to lead good lives. A good society is a society that corresponds to human essence, i.e. a society of the commons, in which humans control the economic, the political and the cultural system, goods and structures that together form a society in common so that everyone is empowered to lead a good life. A good society is a society of the commons. Alienation, in contrast, means that

humans are not in control of economic, political and cultural structures that shape life in society.

Aristotle distinguishes between distributive, corrective, reciprocal and universal justice (that advances the common good) (McCarthy, 1990, chapter 2). Justice and injustice are for Aristotle matters of proportionality and disproportionality. An “unjust person has more, while the one to whom injustice is done has less of something good” (Aristotle, 2002, §1131b). Injustice means that someone has “an excess for oneself of what is simply beneficial and a deficiency of what is harmful” (§1134a). So Aristotle argues that injustice means that a certain individual, group or class has a kind of surplus control of a good over others. He anticipates Marx concept of surplus-value, but defines the excess he speaks of as a more general form of injustice that arises from the asymmetric distribution of power that benefits the few at the expense of the many. Marx stresses that Aristotle was the first thinker who analyzed the commodity’s value-form (1867, pp. 73–74). According to Marx, Aristotle was a genius because he saw that the value of commodities is a relation of equality. But given that Aristotle did not live in a capitalist society, he was not able to see that this equality is the effect of the objectification of specific quanta of labor in the commodity.

Aristotle (2002) not just opposes injustice to justice, but also to friendship and love, which are social relations where humans benefit and do good things for others without instrumental interests. The common arises from friendship and community: In “every sort of community there seems to be something just, and also friendship. [...] To whatever extent that they share something in common, to that extent is there a friendship, since that too is the extent to which there is something just. And the proverb ‘the things of friends are common’ is right, since friendship consist in community. All things are common to brothers and comrades” (§1159b). The political community aims at an advantage “that extends to all of life” (§1160a). Aristotle (2013, §1279a) terms a community where “the multitude governs with a view to the common advantage” polity.

Marx is an Aristotelian in respect to the good life as the realization of human potentiality. Aristotle (1999, §1048a) sees potentiality as being “capable of something” and being “capable of causing motion.” Potency is also the source of dialectic because whatever is potential “is itself capable of opposite effects” (Aristotle, 1999, §1051a). In communism, the full potentials of human beings and society are actualized. Marx defines communism as a just society based on the commons, friendships and love in Aristotle’s understanding. One of Marx’s achievements was that he uncovered how class societies in general and capitalism in particular structurally institutionalize the exploitation of labor and the injustices Aristotle spoke of. In essence, humans are co-operative, social, societal beings, who strive for solidarity and a good life. A particular societal condition enables or hinders the realization of society’s and human potentials. Such potentials develop historically. If class structures and domination cause society’s essence and existence to diverge, then humans ought to organize collectively and struggle against alienation in order to realize a good society. Marx calls the good society “communism.” His approach is teleological because humans have the potential to struggle for a good society. If they do so, then their social action becomes teleological – it becomes praxis, political action for the good society. Marx’s

Aristotelianism becomes evident when he argues that “our species-being [...] is not actualised as *energeia* in the context of private property” (Groff, 2015, p. 316). In his political-economic works, Marx analyses the alienation of the human being from the essence of its species-being as abstract labor’s creation of surplus-value, i.e. the exploitation of labor in class relations. The “proposition that man’s species-nature is estranged from him means that one man is estranged from the other, as each of them is from man’s essential nature” (Marx, 1844d, p. 277). The German term for species-being is *Gattungswesen* (Marx, 1844e, p. 518), a combination of species (*Gattung*) and the dual meaning of *Wesen* as essence/being. So, by species-being, Marx means human essence or what all human beings have in common.

Capitalism and class constitute the alienation of the human from its social essence. The commons are goods that all humans require to live a good life. The good life of the individual is only possible in a good society that enables the good life for all. Achieving a good society that benefits all requires the collective organization of the common good. It requires inclusive, co-operative communication. If structures of domination damage certain groups so that they are compelled to live alienated lives, then the common good is not realized. The good society is then only a good society for some – it is a class society. Establishing a good life, therefore, requires struggles and practices that are guided by “the categorical imperative to overthrow all relations in which man is a debased, enslaved, forsaken, despicable being” (Marx, 1844c, p. 182). Without being able to live a good life in a society of the commons, humans are not fully developed humans – their existence does not correspond to their essence because they are denied those common goods that humans and society require to flourish and thereby realize their potentials.

MacIntyre argues in his later works that capitalism damages human life in multiple respects. Financial and educational inequalities would result in political inequalities (MacIntyre, 2016, p. 127). Capitalism alienates human life in manifold respects. As a consequence, the institutions of the market, the state and morality shape human wants so that what individuals “want is what the dominant social institutions have influenced them to want” (MacIntyre, 2016, p. 167). MacIntyre (1999, p. 156) argues that we can only achieve the common good if our “social relationships of giving and receiving” are governed by “social and political forms” that advance the common good. He argues that three conditions must be fulfilled: 1) institutionalized forms of deliberation are needed so that “shared rational deliberation” allows taking common decisions; 2) justice needs to be enabled so that each is working and giving “according to her or his ability” and each receives “so far as is possible, according to her or his needs” (1 p. 30), which would have to especially take into account “those who are most dependent and in most need of receiving – children, the old, the disabled” (p. 130); 3) everyone should “have a voice” in the community (p. 130).

Taken together, such a society of the commons advances the political commons (participatory democracy), the economic commons (wealth and self-fulfillment for all), and the cultural commons (voice and recognition of all). It requires to overcome political alienation (domination), economic alienation (exploitation), and cultural alienation (ideology). MacIntyre (2016) argues that achieving the common good in communities such as families, workplaces, schools, or a political system depends on the availability of resources such as money, power, wealth, education/skills, and public goods provided by the government (the education system, law, order, health

care, transport, communications, etc.). Capitalism is not just an economic system, but a type of society, in which the accumulation of money, power, and reputation results in structures that benefit certain groups at the expense of others: “The exploitative structures of both free market and state capitalism make it often difficult and sometimes impossible to achieve the goods of the workplace through excellent work. The political structures of modern states that exclude most citizens from participation in extended and informed deliberation on issues of crucial importance to their lives make it often difficult and sometimes impossible to achieve the goods of the local community. The influence of Morality in normative and evaluative thinking makes it often difficult and sometimes impossible for the claims of the virtues to be understood, let alone acknowledge in our common lives” (pp. 237–238). Given that humans are storytelling animals, they can learn “to live against the cultural grain” and “to act as economic, political, and moral antagonists of the dominant order” from “the stories of those who in various very different modern social contexts have discovered what had to be done, if essential human goods were to be achieved, and what the virtues therefore required of them, so making themselves into critics and antagonists of the established order” (MacIntyre, 2016, p. 238). Resistance and social struggle require the communication of stories about how domination damages human life and how resistance is possible.

The digital commons and morality

The outcome of the discussion in this project is that only a society that fosters the common good for all is a society appropriate to human beings, a morally and politically just society. If ethics is consciousness and action-oriented on the social struggle for a free society, then ethics aims at the point at which the “struggle for liberation changes dialectically into freedom” (Lukács, 1971, p. 42). In such struggles, individuals overcome the isolation, separation, alienation and partiality of their existence imposed by domination. They organize as political collectives that strive for freedom. “Praxis becomes the form of action appropriate to the isolated individual, it becomes his ethics” (Lukács, 1971, p. 19).

Computers and computer networks enable new ways of organizing information, communication, and co-operation. Given that computing has become a central resource in modern society, the use of computers for organizing cognition, communication, and co-operation has become part of human needs. Humans have certain cognitive needs (such as being loved and recognized), communicative needs (such as friendships and community) and co-operative needs (such as working together with others in order to achieve common goals) in all types of society. In a digital and information society, computers are a vital means for realizing such needs. But given that computers are always used in societal contexts, computer use as such does not necessarily foster the good life, but can also contribute to damaging human lives. When it was shown in the Cambridge Analytica scandal that Facebook and other social media have been used for targeting users with fake news to try to manipulate elections, it became evident how a specific organization-societal context of online platforms – namely the combination of digital capitalism, authoritarian politics and neoliberalism – threatens the common political good of democracy. Advancing the good life for all with the help of computers requires a particular organization and design of computing resources and society.

Combining insights from Aristotle, Karl Marx, and Alasdair MacIntyre helps us to argue why advancing the digital commons is morally important. Humans are in essence moral, rationally producing, communicating, social and societal beings, who can only achieve their goals in relation to other humans. We can only achieve individual goals together with others. If achieving individual goals damages the life of others by exploiting or dominating them, then the common good is damaged because society will entail groups of humans who are compelled to lead damaged lives. A good society enables the good life for all. It is a commons-based society. In what contexts do computers help to advance the good life or damaged lives? This question can be answered in respect to the use of computers at the level of society, i.e., applications of computing resources that affect all members of society. The important criterion for assessing computing ethically is if, how and to which degree computers are used for advancing a good economic, political and culture life for all or are used for damaging economic, political, and cultural lives.

The economy has to do with questions of production and ownership. As economic beings, humans strive for a life that guarantees the satisfaction of their needs and allows self-fulfilling work. If computer resources that are vital for the life of all are commodities, then the lives of humans are negatively impeded in two ways: 1) many commodities are produced by human labor that is exploited in class relations so that ownership is transferred from the immediate producers to private property holders, who obtain benefits at the expense of workers; 2) goods and services that are exchanged as commodities will inevitably exclude those who cannot afford them from access. Given that exchange is always an unequal exchange, commodity-producing societies advance distributive injustice. Wikipedia as digital commons is preferable to a for-profit online encyclopedia that sells access to articles in two respects: 1) a for-profit encyclopedia will tend to rely on the exploitation of the human labor of digital workers who write or contribute to encyclopedia articles in order to create profits; 2) charging access to encyclopedic resources will exclude humans from access. Exploitation of digital labor and denial of access to key digital resources damage the lives of humans economically. The digital commons are in contrast to digital capital inclusive and not class-based.

An increasing number of for-profit companies rely on pseudo-commons to produce digital capital. They provide free access to certain digital resources, crowdsource human labor so that it is performed online and unpaid, and accumulate capital in ways that prevent humans from experiencing their exploitation in an immediate manner. The digital commons thereby become subsumed under digital capitalism (see Birkinbine, 2020). Advancing the digital commons, therefore, not just needs to entail advancing and supporting projects that foster the digital commons, but also to struggle against digital capital that disguises itself as digital commons. Advancing the digital commons in a capitalist society as transcendent projects that prefigure an alternative mode of society faces the problem that humans in capitalism depend on wages to survive. The digital commons challenge digital capital and along with it to a certain degree also forms of wage-labor subsumed under digital capital. Advancing the digital commons as a class struggle project, therefore, requires mechanisms that guarantee that humans obtain income to survive and at the same time are empowered to act as digital communards. Mechanisms that tackle this problem include public/commons-partnerships, collective funding mechanisms, participatory

budgeting, the taxation of corporations to fund alternative media projects, or basic income.

Using computing resources for fostering the political good requires the support of projects that aim at using digital resources for advancing participatory democracy. Participatory democracy aims at forms of empowerment that include all to a meaningful degree in political decision-making and foster a public sphere, where inclusive, sustained political debate is possible and is not limited by hierarchies that are based on the unequal control of wealth, power, skills, and reputation. As cultural beings, humans strive for recognition. In the realm of online culture, Twitter is an example of a platform that humans use to make meaning of contemporary societies. But voice, visibility, reputation, and recognition are unequally distributed on Twitter: Whereas the average Twitter-user has 707 followers,² the singers Katy Perry and Justin Bieber were in July 2018 with 110 million followers the two users with the largest amount of followers. Celebrities and corporations have a much higher online visibility, attention, voice, reputation and recognition and therefore also more definition power on the internet than everyday users. The asymmetric distribution of voice and visibility damages human lives because it denies humans the capacities for recognition and influencing collective meaning-making processes in society. The result are cultural hierarchies, in which influencers have much more power to be heard and shape worldviews than everyday people.

Digital media that help fostering the cultural good help all humans to make their voices heard, to achieve common understandings, and to achieve recognition. Humans all strive for recognition, but have different worldviews, identities, and lifestyles. A common culture is not a unitary culture, but one that constructs the unity in the diversity of worldviews, ways of life and identities that are needed for respect and understanding. A common culture avoids both the extremes of cultural imperialism (unity without diversity) and cultural relativism (diversity without unity).

This paper proposes a typology that is structured along with the three realms of society (economy, politics, culture), which allows distinguishing between three types of commons and three types of digital commons. The commons are the Aristotelian-Marxian vision of a good society. They form the essence of society, which means that the digital commons are part of digital society's essence. This project discussed earlier that for Hegel and Marx, the essence is often hidden behind false appearances and that actuality means the correspondence of essence and appearance. An Aristotelian-Hegelian-Marxian perspective on the digital commons, therefore, needs to distinguish between the essence of digital society and the false appearance and existence of digital society as a digital class society and digital capitalism. Class society is the false condition of society-in-general. Digital class society is the false condition of digital society. An Aristotelian-Hegelian-Marxian ethics of the commons need to not just have a vision of a good digital society, but is also a critique of digital capitalism and digital alienation. In digital capitalism, critical ethical praxis takes on three forms:

- **Critical digital theory:** In the realm of academia, research and intellectual life, Aristotelian-Hegelian-Marxian ethics challenges theories and approaches

² <https://www.brandwatch.com/blog/44-twitter-stats/>, accessed on July 1, 2018.

that fetishize and justify digital exploitation and digital domination and that fetishize instrumental reason, quantification, and calculation (Fuchs, 2017a). It generates systematic knowledge that wants to inform and empower class struggles against digital alienation and for a commons-based digital society, where all humans benefit from digital technologies.

- **Critical digital education:** In the realm of education, Aristotelian-Hegelian-Marxian ethics challenges the pure focus on teaching quantitative skills (STEM: science, technology, engineering, mathematics) that aim at turning education into an instrument of digital capital's innovation and capital accumulation strategies and envisions all young learners as future entrepreneurs. It also challenges the metrification of education itself. In contrast, such an ethics fosters critical education that empowers humans' critical reason so that they are able to reflect on the complexities and causes of digital society's problems and understand the roots of digital capitalism's contradictions.
- **Digital class struggles:** In the realm of politics, Aristotelian-Hegelian-Marxian ethics empowers humans to challenge digital alienation and to support and engage in class struggles that aim at establishing a fair, just and good digital society of the commons, where all benefit. Class struggles are struggles for the control of economic resources, working conditions, economic decisions. In digital capitalism, class struggles have two digital aspects: a) workers in the digital industry face precarity and exploitation and organize collectively in order to struggle against exploitation; b) class struggles in general use digital means of communication for their organization and for public communication.

Critical digital praxis challenges digital alienation. Establishing alternatives to domination and exploitation in the age of digital capitalism requires a theory that unmask ideology and opens up visions for a society of the digital commons, educational efforts that empower humans to critically understand and challenge digital alienation, and social struggles that establish alternative digital media and whose aim is a society that benefits all. These three levels of praxis are intertwined.

Conclusion

A contemporary Aristotelian-Hegelian-Marxist digital media ethics is based on the insight that fostering the digital commons is a way for advancing the common good and a good life for all humans. Virtuous commoners challenge, criticize, struggle against and aim to abolish digital resources that advance exploitation (economic alienation), authoritarianism (political alienation) and ideology (cultural alienation).

Their goal is to advance digital commons in a society of the commons so that economic, political, and cultural power are distributed in ways that benefit all. Communication requires community and the commons. A fully communicative society – a communication society that corresponds to human essence – is a community of commoners, a commons-based society, where the common good helps advancing individual goods and humans in pursuing individual goods help advancing the common good. The ethics of digital commons are not independent of the ethics of the commons. In order to advance the digital commons, we need to advance toward a society of the commons in general that forms the context for the digital commons. Struggles for advancing the digital commons have to struggle for

a commons-based society.

James M. Moor (1998/2000) asks what Aristotle would do if he were alive today and a computing professional. Aristotle would not just be an active contributor and supporter of Wikipedia and other digital commons-projects, he would program free software and create digital commons that are used in collective political struggles against digital capitalism and digital domination because he would view such structures as forms of oppression that limit human potentials, damage the good life and human flourishing. If Aristotle was alive today, he would be a digital commonist.

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