Cyber-Ethics: Bodies or Bytes?

by

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Abstract

Information ethics requires (1) an ethical theory that recognizes the importance of the body, and (2) a materialist theory of information. Alasdair MacIntyre’s ethics of acknowledged dependence is an example of the former. It holds that the virtues we need to achieve both personal and common moral goods recognize networks of dependence based upon bodily vulnerability and disability. Pierre Lévy’s theory of collective intelligence is an example of a view that disregards both requirements. Based upon a secular appropriation of the angelology of the tenth to twelfth centuries, it holds that in cyberspace, social relations are dematerialized, and that information is an incorporeal substance flowing between disembodied minds. The new anthropological space of disembodied social agents that Lévy holds to be ushered in by new electronic information technologies requires a radical rethinking of ethics. But on close inspection, his information ethics turns out to be stripped of any serious moral dimension. To address serious moral issues, information ethics cannot abstract from our bodily, animal nature. Several recent studies recognize that information is an effect of social relations between embodied subjects. They provide the materialist information theory required for a meaningful information ethics.

In Rafael Capurro’s keynote address, he reminds us that for Emmanuel Lévinas, the face to face relation is the foundation of ethics. Modes of mediation, concludes Capurro, intervening as they do between persons, raise basic moral and ethical issues. Since electronic information technologies are modes of mediation par excellence, they present paradigm cases for ethical thought.

This paper pursues Capurro’s theme of the relationship between persons, its mediation by electronic information technologies, and ethics. If taken without any qualification, Lévinas’s dictum would seem to imply, as Capurro notes, that when human relations take the form of the interface, not presence, or face to face, they become morally bankrupt, or at least morally degraded, by a measure ethical reflection on information technologies would be obliged to determine. But a strict dependence on face to face presence for the exercise of moral virtue towards others has the objectionable consequence that my relations with those I never directly see, whom I never touch, and with whom I never directly speak,1 carry no ethical obligations. But surely, it is argued, communication technologies, whether smoke signals, carrier pigeons, the book, the telegraph, the telephone, and especially the electronic information technologies of the

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1. The adjective “directly” recognizes, of course, the distinction between speaking with and seeing those who are and those who are not in our immediate presence (and the adjective “immediate” here signals just how slippery the slope has become upon which we now find ourselves). Recent reflections on extensions of our bodies through cyberspace suggest that even touch will soon require the same modifier; see chapter 3 of de Kerekhove, D. (1997), Connected intelligence: The arrival of the web society, Toronto: Somerville House.
twenty-first century, mediate not only by intervening between persons, but also by creating bonds between us that would otherwise not exist. Insofar as we are thereby made aware of more persons than we could ever meet face to face, and of the consequences of our actions upon them, the range and complexities of our ethical obligations to others expand and deepen, rather than diminish. Capurro, it would seem, has it right: one of the main jobs of information ethics is to explore the differences between modes of mediation, between the kinds of human relations that emerge from them, and between the ethical and moral dimensions of those relations.

My approach is less hospitable to differences between modes of mediation, and more emphatically materialist. Taking Alasdair MacIntyre’s notion of acknowledged dependence as my point of departure, I will explore what seems to me a move in Lévinas’s direction, that ethics concerns the body. Perhaps not face to face presence, but certainly the body. MacIntyre places our dependence on each other, a dependence based upon our bodily and animal nature, at the foundation of ethics. His question is, “what difference to moral philosophy would it make, if we were to treat the facts of vulnerability and affliction and the related facts of dependence as central to the human condition?” Why is this view, which insists on the importance of the body to morality, important to the ethics of electronic information in the twenty-first century? Because today there are many technological versions of a very old view, that since being human consists in spirit, reason, mind, consciousness, intentionality, or some other non-corporeal characteristic, then, as far as ethics and morality is concerned, the body is but an accidental feature of the human condition. Many contemporary versions of this view with claims to the attention of this conference are driven by concepts of information as abstract, self-sufficient, immaterial stuff, described so well by Geoffrey Nunberg as “a kind of intentional substance that is present in the world,” and surfacing in a spectrum of views, from humans as information processors, a view developed in the 1940s by research in cognitive psychology and artificial intelligence, to extreme forms such as Hans Moravec’s futuristic celebrations of downloaded human brains. My contrast to MacIntyre is not taken from this series of examples, but from Pierre Lévy, a contemporary theorist of cyberspace, who locates the ethics of twenty-first century information technologies in an angelic, incorporeal space. The moral failings, by MacIntyre’s lights, of Lévy’s vision and those like it remind us, I suggest, of the moral dangers inherent in information studies that harbor similar, incorporeal conceptions of knowledge, meaning, and information. In short, I argue that cyber-ethics has to do with bodies, not bytes.

3. Ibid., p. 4.
Acknowledged Dependence: Ethics Embodied

Taking the body seriously has always been, MacIntyre points out, quite marginal to the history of Western moral philosophy. Although our animal nature is obvious enough, we commonly ignore it, thinking of ourselves as “Lockean persons or Cartesian minds or even as Platonic souls”. Our bodies, however, create networks of dependence between us. “It is most often to others,” MacIntyre reminds us, “that we owe our survival, let alone our flourishing, as we encounter bodily illness and injury, inadequate nutrition, mental defect and disturbance, and human aggression and neglect”. To his brief list we could add the most virulent plague in the history of our planet, visited in the form of the AIDS epidemic upon Africa, a continent that now suffers life expectancy rates not seen since medieval times. And we could add the afflictions of the highest proportion of prisoners per capita among nations, in the world’s richest country, one which incarcerates 25% of the planet’s prison population while tolerating over 30,000 deaths per year from gunshot wounds and the expenditures of billions of dollars of public funds on symbolic missile defense systems whose futility needs no further demonstration. Further from home, we might also consider Europe’s most toxic zone, Baia Mare in Romania, where “people’s teeth are falling out, there are lumps and blotches all over their bodies; their kidneys, livers, and nerves are damaged”, where the smoke from the lead factory on the outskirts of town is so dense that people routinely pass out and earlier this year a seven-year old boy dropped dead, and where the birds flying over the local cyanide pond fall lifeless from the sky. In these and the many other examples of injury, illness, disease, torture, and murder that could with sufficient time, effort, and fortitude be enumerated, the networks of dependency have broken down. And in all of these cases, the gravity and urgency of the moral issues raised derive from the pain inflicted upon the bodies of the innocent.

MacIntyre’s Thomistic reading of Aristotle’s ethics aims at identifying the virtues required for creating and sustaining the social structure we need to survive, but not just to survive, rather also to flourish as rational, independent practical reasoners, that is, as moral agents who are capable of guiding their actions according to the goals of personal and common goods. MacIntyre calls this social structure “a network of relationships of giving and receiving”. Without it, we could not only not survive, but would also lack the means to flourish as human beings. As MacIntyre puts it, “they are those relationships without which I and others could not become able to achieve and be sustained in achieving our goods. They are constitutive means to the end of our flourishing.” Since the flourishing he refers to is not the pursuit of self-interest but instead the development of moral faculties qua human being, it follows that “the goods of networks of giving and receiving” are common goods; they “are goods that can be mine

7. MacIntyre, op. cit., p. 83.
8. Ibid., p. 1.
12. Ibid., p. 102.
only insofar as they are also those of others.” But the networks that allow us to give to those in need, and receive when we find ourselves in need, are the social relations we need to sustain us in our necessary, mutual dependence. And our dependence is grounded in the body, in its vulnerability to disease, disfigurement, disability, hunger, old age, pain, and violence — upon, that is, the most grave and fundamental perils of human flourishing. To become a moral agent is to acquire the virtues required to help create and sustain the networks of dependence, those of giving and receiving. Since the virtues are not passions, because they are informed by rational judgment, to acquire them means that to accept our mutual dependence is an exercise of reason and not simply a momentary episode of a sentiment, such as pity. The virtues we need, therefore, are those informed by a rational knowledge of bodily disability and vulnerability, and the animal nature of our human condition. MacIntyre calls them the virtues of acknowledged dependence.

This short summary of MacIntyre’s connection between ethics and the body hardly does justice to its subtleties and careful argumentation. It might, therefore, be helpful to briefly note the chief virtue among those of acknowledged dependence, Acquinas’s notion of misericordia. In order to be sustained and to flourish as human beings in networks of giving and receiving, we need to receive goods not merely by virtue of our relationship to family, friends, and community. What we need, MacIntyre points out, is “that the attention given to our urgent and extreme needs, the needs characteristic of disablement, will be proportional to the need and not to the relationship.”

We depend, therefore, on those whose virtue is informed by the rational judgment that it is “the kind and scale of the need that dictates what has to be done, not whose need it is.” Such a virtue, which for Acquinas is one of the effects of charity, is misericordia. To exercise it is to extend the network of giving and receiving beyond the direct bonds of community, based on the recognition that “urgent necessity on the part of another in itself provides a stronger reason for action than even claims based upon the closest of familial ties.”

Misericordia, by including anyone who is “afflicted by some considerable evil,” supports the most general of common goods by sustaining the community of rational, moral agents. Due to its scope, which extends the networks of giving and receiving to anyone in need, solely on the basis of that need, misericordia is, as MacIntyre points out, “itself crucial for community life.”

Given that the gravest of the considerable evils that afflict us arise from our animal nature and pertain to the body, misericordia is chief among the virtues of acknowledged dependence.

The Disembodied Ethics of Angels

Pierre Lévy, who believes that cyberspace ushers in a new “anthropological space” — the knowledge space — by which he means a new set of social relations of great evolutionary significance, and a new stage of “hominization”, by which he means a leap in human evolution comparable to the advance from the Paleolithic to the Neolithic ages, has a very different

13. Ibid., p. 119.
15. Ibid.
16. Ibid., p. 125.
17. Ibid., p. 124.
18. Ibid.
conception of the basis of the social networks in the new, *virtual* world on the brink of which he believes we now find ourselves precariously poised.\(^{19}\)

Cyberspace, Lévy’s new anthropological space, is a network of social relations configured by the attributes of *collective intelligence*. Chief among them, and central to the contrast between his ethics and MacIntyre’s, is the *disembodiment* that characterizes collective intelligence in all of its manifestations — politics, economics, aesthetics, epistemology — including its ethics. The route towards a true appreciation of disembodiment in Lévy’s thought leads, I suggest, through none of these, but instead through what he calls “the atheology of collective intelligence” in the subtitle to a chapter called “The Choreography of Angelic Bodies”.

Collective intelligence is an atheology because it sets itself in opposition to theology, specifically to the Farabian angelology of the tenth to twelfth centuries, a Persian and Jewish neo-Platonic, theological interpretation of Aristotle, which accounts for the generation of the world from the mind of God through a succession of separate intelligences, or angels. In this tradition, God appears as a pure intelligence involved in the eternal exercise of self-reflexive contemplation of the knowledge of its own existence as *sui generis*. Emanating from God’s eternal, divine act is the First Separate Intelligence, or the First Cherub, from whose contemplation of God as its cause emanates the Second Separate Intelligence, or the Second Cherub, and so on through a hierarchy of degrees of divinity, finally emanating in the Tenth Separate Intelligence, or the Tenth Cherub, also known as the agent intellect, or simply, the Angel. The Angel, Lévy explains, “intercedes directly with humanity,”\(^ {20}\) connecting humans to God by directing them to all the ideas it perceives and contemplates.\(^ {21}\) The Angel is our angel, because from it emanates “not the rarefied body of a heaven but the distribution, explosion, and opacity of sublunar matter, the coarse substance of our base world”\(^ {22}\), and because through “the Angel’s contemplation of itself as a product of the Ninth Intelligence emanates not the motive form of a sphere, a celestial angel, but the multitude of human souls whose thick sensual imagination moves the material bodies.”\(^ {23}\) Due to its angelic cause, the essence of human nature is nonsubstantial, incorporeal, and disembodied. Since all intelligence possessed by humans emanates from the Angel, or the agent intellect, we can act only when illuminated by it. Thus our greatest happiness is our “unity with the agent intellect, the ability to fully and completely capture the angelic emission”.\(^ {24}\) And we are “actively intelligent only because of the agent intellect, shared by all humanity, which is a kind of ‘collective consciousness’”.\(^ {25}\)

Lévy’s atheological appropriation of the Farabian tradition consists in replacing the *transcendent* collective consciousness of the medieval angelology with an *immanent* collective

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20. Ibid., p. 95.
21. Ibid., p. 92.
22. Ibid.
23. Ibid., p. 95.
24. Ibid., p. 96.
25. Ibid.
intelligence realized through electronic information and communication technologies (ICTs).
“From this point on,” he says, “we will have no further need of theological discourse but some
mechanism, some way of closely combining technological, semiotic, and socio-organizational
elements.” The mechanism sought, by means of which “the eternal divinity . . . is morphosed
into a desirable possibility lying on the horizon of humanity’s future,” translates “the angelic or
celestial world” into “the region of virtual worlds through which human beings form collective
intelligences.” The agent intellect is no longer the Angel, emanating from God and connecting
us to one another by virtue of connecting each of us to God, but instead an immanent,
technologically realized collective intelligence. An autopoietic emanation from the virtual
worlds we create and inhabit in cyberspace, collective intelligence is a space of “immanent
heavens”, providing cinemaps, or “dynamic descriptions of the world below”, which “enable
intelligences to communicate with one another and assist individuals and groups in navigating
collective knowledge.” The collective, virtual world of cyberspace, a technological version of
the agent intellect, illuminates human intelligences analogous to the illumination emanating from
the agent intellect of the Farabian tradition. “Rather than directing upon mankind the intellectual
light that descends from God via the heavens and superior angels”, writes Lévy, “the virtual
world that serves as agent intellect reflects the brightness that emanates from human
communities. Angelic regions of a new kind, virtual worlds will thus emanate collective
intellects and depend for their existence on the human communities from which they arise.”
The Farabian theology’s light shone upon mankind from the top down; the light of Lévy’s
atheology shines from the bottom up, and then reflects back down to its source, because the
“light of virtual worlds will continue to illuminate and enrich human intelligence”.

Since Lévy’s vision is informed by conceptions of intelligence as acorporeal and purely
spiritual, it comes as no surprise to learn that the attribute of disembodiment survives his
atheological appropriation of medieval angelology. In cyberspace, human relations are
acorporeal: “I . . . encounter the human other, no longer as flesh and blood, . . . but as an angel,
an active intelligence”. For this reason, the actions of my angel, a “digital messenger” that
exists in “a space of communication, of calls and responses”, do not require even that my body
be awake, since even when I sleep, “my angel continues to act in the virtual world”.
When I enter cyberspace, I leave behind the material world and the human relations dependent on the

26. Ibid., p. 97.
27. Ibid.
28. Ibid., p. 98.
29. Ibid., pp. 99-100.
30. Ibid., p. 100.
31. Lévy is quick to point out that by linking imagination and perception to reason, the Farabian
    tradition should not be taken to imply dependence upon any corporeal sensory apparatus, even in
    the case of the perception of embodied, human prophets: “Perception for them always implied a
    concurrent act of reason, a fully spiritual perception that was in no way dependent on physical or
    material processes” (Lévy, op. cit., p. 93).
32. Lévy, op. cit., p. 102.
33. Ibid., p. 108.
34. Ibid., p. 107.
body; “when a member of the thinking community clothes his angelic body, . . . he is immediately situated in a changing intellectual landscape . . . He evolves within a universe of shared significations and problems”.35 Indeed, the attribute that distinguishes the technological agent intellect from mere media of communication, which have “already established continuity in space and time”, is that “media continuity is merely physical”.36 And if the technologies of cyberspace amounted to no more than advances in engineering within the social context of existing ICTs, then their moral implications would extend no further than new applications of current ethical imperatives. But for Lévy, the “mechanism” of collective intelligence brings about an evolutionary leap in the history of the human species, which carries along with it a demand for a rethinking not only of ethics, but also politics, economics, ontology, epistemology and aesthetics. He insists that “it is by their passage through virtual worlds, by acquiring an angelic body, that souls can best imagine humanity”.37 Disembodiment, and all its implications, are central to the way he imagines humanity transformed in the new anthropological and ontological space created by cyberspace technologies.

In Lévy’s chapter on the ethics of collective intelligence,38 the disembodiment characteristic of the angelic social relations he champions throughout his book shifts ethics to a realm where moral agents need not acknowledge their bodily dependence on one another, for having donned their angelic bodies, they have left the source of that dependence far behind. If MacIntyre is right, social relations in which the body plays no role lack any serious moral dimension. And the fact that we find no serious moral dimension in Lévy’s Collective Intelligence does not prove MacIntyre right, even though its absence is compatible with MacIntyre’s being right. The chief virtue of the ethics of cyberspace, says Lévy, is hospitality. Since virtual space is one of constantly shifting significations and problems, we take on the attributes of nomads, constantly wandering but never settling stable territories as we did in previous anthropological spaces. Because hospitality is necessary to create and maintain the social bond of a humanity constantly on the move, it is a nomadic virtue. But since the grounds for extending hospitality in the knowledge space abstract from bodily attributes, it lacks the scope of misericordia. It is a virtue that extends beyond direct communication links because it is grounded in our shared bodily and animal nature. The networks of giving and receiving upon which, MacIntyre argues, our common good depends, and in which the depth of its moral dimension consists, are absent from Lévy’s ethics. An illustrative example, one which provides a telling contrast to the virtues of acknowledged dependence, appears in Lévy’s discussion of the collective voice that directs the affairs of an anticipated real-time, electronic democracy. Its morality consists in “the rules of civilized conversation”, which “means that we refrain from shouting, listen to others, don’t repeat what has just been said, answer in turn, and try to say something pertinent or interesting depending on the state of the conversation”.39 Lévy’s work shows that when human interaction is restricted to the exchange of representations, ethics is reduced to the etiquette of polite conversation.

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35. Ibid., p. 108.
37. Ibid., p. 103.
38. Ibid., ch. 1.
39. Ibid., p. 68.
Is There an Information Ethics?

Lévy’s work is but one example of the view that the changes brought about by ICTs are so profound as to create an entirely new space for ethical reflection. Cyber-ethics, on this view, is in a world of its own, because it seeks to achieve the goods of disembodied agents — of angels — and the common goods of an angelic community. My attempt to draw attention to the shortcomings of this view should not be taken to imply that insistence on the material context of ICTs is absent from work on information ethics. To cite just one example, Elizabeth Buchanan’s lucid and well-referenced overview of information ethics situates the problem of information inequality firmly within the context of material inequalities by, inter alia, recognizing the commodity form of information, especially in its global context. What I wish to suggest, first and most generally, is that thinking about information ethics benefits from two kinds of theoretical reflection: (1) relevant ethical theory, and (2) theory about the general attributes of information. Second, that for a full appreciation of the importance of materiality for information ethics, MacIntyre’s is an example of the kind of ethics we need, and a theory of information as an effect of the relevant social practices of embodied agents is the kind of information theory we need. The remainder of this paper concerns the second of these.

Lévy’s cyber-ethics is presented here as an example of what happens to information ethics when information is conceived as abstract and immaterial. The most common modern version of this view, as I suggested at the beginning of this paper, is the conception of information as a kind of mental substance, a view with a venerable, Cartesian ancestry. According to it, to be informed by a document (understood in the widest sense, to include all kinds of media forms), consists in the presence of the document’s meaning to a mind in a state of understanding. In previous papers, I have suggested that an alternate position draws upon the philosophies of Wittgenstein, with its view of language use as a social practice, hence grounded in a form of life rather than mental events, and of Foucault, especially its focus on the conditions of the existence of statements, hence on their exterior attributes rather than interiors, such as meanings.

That any document becomes informing only when specific social practices are in place is becoming widely recognized in information studies. The first of two recent examples is The Social Life of Information by John Seeley Brown and Paul Duguid, who point out that “the language of information . . . can blind people to social and institutional issues. . . . that language
can suggest that information is indifferent to institution, organizations, and material constraints.”⁴³ In the language of information they refer to, information is construed as the content of a text, a “noble substance that is indifferent to the transformation of its vehicles”, something that “can be liberated and manipulated as a kind of pure essence”.⁴⁴ Brown and Duguid provide many examples of the disastrous consequences that follow from such assumptions. They draw attention to the strength of the constraints imposed by the materiality of information, which arise from both its physical properties and the inertia of the valuable social practices in which it is embedded. Speaking of such constraints, they note that “before an apparent constraint is dismissed, it is important to consider the social resource that people may have developed around it.”⁴⁵ The second example is *The Nature of the Book* by Adrian Johns, whose meticulous scholarship shows the extraordinarily difficult labor that had to be performed for readers to come to trust the printed book as a source of knowledge.⁴⁶ Johns’s work reminds us that one of the conditions for thinking of books as bearing information, or giving rise to it in the minds of readers, is that the hard labor of stabilizing the social practices that brought about a trust in books has been forgotten, and is therefore no longer visible. At the time that labor had to be performed, whether or not books conveyed information was highly contested. A condition for believing that information can be liberated and manipulated as a “pure essence” is the occlusion of the social practices upon which the emergence of information depends. When information circulates, it does so, not by virtue of its own inherent properties, but because of the social networks without which it could not exist. “Attending too closely to information”, say Brown and Duguid, “overlooks the social context that helps people understand what that information might mean and why it matters.”⁴⁷

To embed information in social practices, and social practices in the imperatives of the body, means that several consequences ensue for information ethics. First, the relevant ethical theory must recognize those imperatives. MacIntyre’s is one example. Second, the relevant information theory must recognize the two-fold materiality of information: its physical properties, and the institutionalized social practices that provide the necessary conditions of its emergence. Third, there is no information ethics. By this I mean that ethical reflection about information is not fundamentally different from ethical reflection generally. *Pace* Lévy, our social relations and moral virtues are those of rational animals, not angels, whether we address each other face to face, by telegraph, on the telephone, or send smoke signals. Since information always refers us to materiality and social practices, a leading issue of information ethics such as access, cannot be construed simply as access to something called “information”. Access to information refers us to *access to social practices*. The problem for the poor, the marginal, the

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⁴³. Ibid., p. 250.
⁴⁵. Brown, & Duguid, op. cit., p. 244.
outsiders,\textsuperscript{48} is not that they lack laptops, but that they are unjustly excluded from the social networks essential for trust in documents, in utterances, in representations and texts of any kind, in short, for information to emerge for them at all. Information inequities therefore refer us to the same inequities that drive our ethical concerns generally: inequities of opportunity, nutrition, shelter, health, education, welfare, and justice. Whatever is special about information ethics derives only from the specificity of the information services provided to specific publics. It is therefore analogous to legal ethics, medical ethics, dental ethics, or the ethics of plumbers. Like these other fields, much of what is unique to it consists in applying ethical principles to information services. These applications should, I suggest, be driven by an ethics of acknowledged dependence, and a materialist information theory. Once we abandon the animal world for the spectral terrain of angels, where pure information flows from spirit to spirit, we may gain the satisfaction of inhabiting an ethical zone that belongs just to us, but we lose the virtues we need to deal with serious ethical issues.

References


