Technology as Skill and Activity: 
Revisiting the Problem of Alienation

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Abstract: Can we conceive of a philosophy of technology that is not technophobic, yet takes seriously the problem of alienation and human meaning-giving? This paper retrieves the concern with alienation, but brings it into dialogue with more recent philosophy of technology. It defines and responds to the problem of alienation in a way that avoids both old-style human-centered approaches and contemporary thing-centered or hybridity approaches. In contrast to the latter, it proposes to reconcile subject and object not at the ontic level but at the ontological, transcendental level and at the level of skilled activity. Taking inspiration from Dreyfus’s reading of Heidegger and engaging critically with the work of Borgmann and Arendt, it explores a phenomenology and ethics of skill. It is concluded that new and emerging technologies must be evaluated not only as artifacts and their consequences, but also in terms of the skills and activities they involve and require. Do they promote engagement with the world and with others, thus making us into better persons?

Key words: philosophy of technology, alienation, phenomenology, ethics, skill, virtue

Introduction

Influential currents in contemporary philosophy of technology have moved away from pessimistic, technophobic approaches such as Heidegger’s (Heidegger 1977) or Ellul’s view of technology (Ellul 1954), which drew attention to the alienating effects of technology and which assumed a sharp distinction between humanity (good) and technology (bad, a great danger to humanity). Rejecting an instrumental view of technology, according to which technology is a mere means to human ends, contemporary philosophers have drawn attention to the non-intended consequences of artefacts without relying on the notion of alienation. They have also shed off a too monolithic view of technology and instead have attended to
particular artefacts. For example, Verbeek has argued against what he calls ‘the alienation thesis’ and has proposed to pay attention to what particular technologies and artefacts do (Verbeek 2005).

These new directions have made philosophy of technology more thing-centred as opposed to human-centred. It has become a philosophy of artefacts. Moreover, a related response to early philosophy of technology and its alienation thesis has been to stress hybridity or the cyborg nature of humans: instead of radically separating humanity and technology, many authors have argued that humans and technology are intrinsically bound up with one another (Verbeek 2005, 2008; Haraway 1991; Latour 1993, 2005), a thesis which all too easily can be interpreted in terms of ontology: a claim about what is. Humans are technological. Finally, naturalistic thinking has always claimed that there is no ontological gap between humans and things: humans are a kind of things and as such they are part of larger wholes such as systems or networks and are themselves composed of smaller elements.¹

While philosophy of technology has benefited enormously from shedding of one-sided, technophobic and instrumental views of technology, I feel that something has been lost on the way. First, contemporary currents have not only rejected the dark pessimism of early philosophy of technology, but they have also dismissed a major problem these earlier thinkers discussed: the problem of alienation and its relation to technology. But by doing so, it seems that these contemporary theories can no longer account for experiences of alienation by technology, which have not disappeared. Often people feel that technology has removed us from ‘nature’ or that machines have decreased the amount and quality of ‘direct’ human contact. It turns out that we can no longer make sense of these experiences. Indeed, if humans and things are intimately close in various ways, then why would there be a problem of alienation by technology? If technologies and artefacts mediate our relation to the world, as Verbeek argues, then how could they make us feel as if we are separated from that world? Thus, this way of going ‘beyond alienation’ ignores that many people still (or nevertheless) feel alienated, an experience which cannot be understood within the hybridity or cyborg paradigm. Second, the thing-centred approach—at least in its naturalist version²—tends to disregard human subjectivity and in particular the way humans give meaning to, and find meaning in, what they are and what they do. Humans are either reduced to designers and users of technology, or to things.³ What remains out of sight is how humans meaningfully relate to themselves and their world.
In order to remedy these shortcomings, it is not an option to return to the technophobic view and re-affirm the importance of humanity and human values, since this would bring along once again an instrumental view of technology and a (too) sharp distinction between ‘technology’ and ‘humanity.’ These assumptions have been rightly criticised and must be avoided. What is needed instead, is the development of an alternative position that takes seriously the problem of alienation, yet is neither human-centred in the old sense, nor thing-centred or lost in hybridity and cyborg fantasies. In this paper, I wish to contribute to this task by re-defining the problem of alienation and by re-defining technology as skill and activity. This should prepare the ground for an exploration of what I will call a phenomenology and ethics of skill, which includes a phenomenology of alienation—albeit a different one than in ‘old-style’ philosophy of technology.

While the position I will start to develop here cannot be reconciled with a naturalist approach, I believe it is compatible with the works of Verbeek, Haraway, and Latour provided their claims are interpreted (or, in the case of Latour, significantly modified) as being concerned with the transcendental-ontological level of analysis (I will explain this below). However, in this paper my emphasis will be on developing the position and sketching the philosophical programme rather than on commenting in detail on the work of these authors.

**Alienation Revisited**

The concept of alienation has a long history in Western thinking and culture, ranging from the story of the fall of Adam and Eve to Marx’s view that capitalist production relations alienate workers from the products of their work and from each other. The term refers to a state or feeling of separation, estrangement, isolation, and often also the absence of value and the absence of meaning. We may be alienated from people, from things, and from our environment. ‘Alienation’ can refer to a characteristic of human existence—in a Heideggerian sense we are beings that stand-out (ec-stasis) (Heidegger 1996); according to Plessner we have eccentric positionality (Plessner 1981)—but it can also refer to a felt aspect of lived experience: sometimes we feel estranged from others and from the world.

What does it mean to say that technology alienates? When traditional philosophers of technology make this claim, they do not mean that technology creates eccentric positionality (this kind of ‘alienation’ is an unavoidable part of human existence), but rather that it removes us from nature and/or from authentic existence, makes us feel isolated, and removes value and meaning from the world or at least makes us experience the world as valueless and meaningless. For example,
one may feel that information and communication technologies separate us from our natural environment, or that technology has enabled us to create artificial environments in which we can no longer find meaning. Whereas claims about alienation as an ‘objective’ state and the references to ‘nature’ and ‘authenticity’ are problematic, this does not imply that we should disregard experiences of alienation. Contemporary philosophy of technology rejects theories that focus on such experiences and presuppose that doing so would necessarily promote a far too pessimistic a view of technology. As I mentioned previously, Verbeek’s reaction against a one-sided and conservative strand in philosophy of technology involved an argument against what he calls ‘the alienation thesis’ and a proposal for a more empirical and thing-focused philosophy (Verbeek 2005). But the result of this operation for contemporary philosophy of technology is not only that we have now left behind the overly pessimistic views of technology Verbeek rightly criticizes (it was too one-sided and flawed in other ways), but also that the concept and experience of alienation seems to have vanished from our radar screen altogether.

Moreover, in ‘classical’ philosophy of technology, alienation by technology has also been defined as a problem of objectification: we fear that technology makes us into things: objects rather than subjects. For example, Heidegger argued that modern technology reveals the human as a ‘standing reserve’ (Heidegger 1977), a thing that is available. The response to this problem by the new currents in philosophy of technology has been to show that this is a false problem: subject and object are not distinct, they are strongly linked, or that we should reconcile them. For example, one may point to the artificial nature of humans (Plessner 1981), show that there is actually hybridity and cyborgism (see again Verbeek, Haraway, Latour), or simply assume that humans are things (naturalism).

While I agree that one response to the problem of alienation must be that subject and object are strongly related or must be reconciled, I disagree with a particular way of interpreting the nature of this link or reconciliation and, ultimately, with how the problem of alienation is defined. I will propose that reconciliation should not be done at the ontic level (what humans and things are), but that we should acknowledge that subject and object are already reconciled at the level of skill and experience-activity. I will show that the problem of alienation does not concern an ontic gap between humans and things, but is rather related to three kinds of different gaps: (1) a gap between experience and its conditions of possibility, (2) a gap between humans and their world(s), and (3) a social gap.

Furthermore, I hope to make more room for, and take seriously, our experiences and feelings of alienation—including alienation by technology—in spite
of our existential relationality and the entanglement of subject and object. I will argue that some ways of relating to the world are more alienating than others. I will also need to show if and how this kind of alienation problem is linked to the previous problem with regard to the relation between subject and object.

**Alienation: Transcendental Ground and Normative Question**

Let me respond to the contemporary ‘solutions’ to the alienation-as-objectification problem. First, naturalism does not solve the alienation problem but creates one: it makes us into objects. As beings who feel that they are more than things, we are not and cannot be satisfied with this solution. Second, the hybridity paradigm misses the mark if it makes an ontic rather than an ontological claim: it concerns ‘what is’ rather than the conditions of possibility of what is. Influenced by Heidegger, let me first point out that feelings of alienation, however genuine in other ways, nevertheless presuppose that we are already standing in-relation to others and to things. We are already joined with the world. Thus, in this sense it is true that humans and technologies are intimately linked. If there must be an ontology at all, it is a relational ontology as a transcendental ontology. Let me explain this.

Heidegger used the term ‘being-in-the-world.’ His approach concerns a priori conditions:

The question of being thus aims at an *a priori* condition of the possibility not only of the sciences which investigate beings of such and such a type . . . but it aims also at the condition of the possibility of the ontologies which precede the ontic sciences and found them. (Heidegger 1996: 9)

This transcendental approach puts the hybridity paradigm into question in so far as the latter supposes that there is an ontic hybridity of humans and things. Humans and things *are* not one. Humans are not things, and things are not human. If it is said that technologies mediate, therefore, this claim must be understood as concerned with the transcendental-ontological level: things mediate our experience and our acting-in-the-world and are in this sense bound up with our subjectivity, but they are not the same nor do they merge at the ontic level.

Moreover, there *is* a possibility of reconciliation of subject and object in a different way too: in skilled activity and lived experience, subject and object are intensely related and meaning emerges and is created. Being-in-the-world is always a doing-in-the-world and this creates ways of doing: habit and skill. This involves bodies and indeed technologies and artefacts, but not as (the origin of) causal forces that mould us or that are part of us as objects. Rather, particular
technologies are part of, and co-constitute, particular ways of doing as ways of relating to the world. In this sense humans are always already technology, but the ‘are’ should not mislead us into interpreting the connection between humans and technology in an ontic way.

Let me explain this by using Dewey. In *Human Nature and Conduct*, Dewey makes a distinction between knowing how and knowing that, and argued that we ‘know how by means of our habits’ (Dewey 1922: 177; Dewey’s emphasis). Here knowledge is not theoretical but a matter of practical skill. This is interesting in itself: Western philosophy usually pays attention to theoretical knowledge; skill has received much less attention. Dewey’s distinction allows us to retrieve a different kind of notion of knowledge. But the concept of skill does more: it also calls into question any strict separation between subject and object. Dewey argues that in skilled activity as habit we and our environment work together. We can interpret this as a kind of reconciliation of subject and object in an ‘ontic’ way (humans and technology merge), but we can also understand it differently: not as a claim about what ‘is’ but rather about what we habitually and skilfully do, about what is going on, and about the conditions of possibility of this skilful doing. Dewey compares the cooperation of organism and environment involved in habit with breathing and digesting: “Breathing is an affair of the air as truly as of the lungs; digesting an affair of food as truly as of tissues of stomach” (Dewey 1922: 14). Similarly, we could say that habit as skilled activity is an affair of the subject as truly as of the object. It is relational and environmental by definition.

This conception of habit also implies that technology is not separate from, but part of, and presupposed by, habit and skilled activity. Dewey writes that

> habits are arts. They involve skill of sensory and motor organs, cunning or craft, and objective materials. . . . They require . . . manifest technique. . . . We should laugh at any one who said that he was master of stone working, but that the art was cooped up within himself and in no wise dependent upon support from objects and assistance from tools. (Dewey 1922: 15)

Similarly, we should laugh at any one who said that technology is a matter of objects and tools that are unrelated to the skilled activities and habits of the humans involved.

This epistemology of skill can also be applied to ethics. For instance, Dreyfus and Dreyfus (1991), who also point to Dewey’s distinction between knowing how and knowing that, have argued that moral knowledge should be conceptualized in terms of skill. We are always already embodied and engaged in practices when
we encounter a moral problem. Moral knowledge is a matter of building practical know-how. For ethics of technology, this means that evaluating technology is not so much a matter of evaluating something—literally: some thing, an artefact—that is external to our activities, our experience, and our life, but is a matter of finding a better way of doing, of training better habits, of developing the right kind of know-how, including the right kind of technologies.

If we interpret these insights in a transcendental way, this amounts not only to a rejection of a monolithic view of ‘technology’; it is also a more ‘dynamic’ interpretation of Heideggerian epistemology and the tradition it is part of (in particular Kant) in the following way. It is less about the conditions of possibility of theory (a way of seeing, see again Heidegger about the a priori conditions of possibility of the ontologies of the sciences) and more about the conditions of possibility of practice or know-how (a way of doing). From the previous discussion we can conclude that technology is such a condition of possibility, which is itself dependent on know-how: practice, habit, and know-how are entirely dependent on, and bound up with technology and vice versa.

This turn to skill—and indeed to technology as skilled activity—implies that at the ontological, transcendental level there is no problem of alienation—with regard to technology or otherwise. In this sense it is appropriate to say that if we feel alienated, it is always alienation ‘in spite of’: alienation amounts to not recognizing the deeper bonds that are there at the transcendental level. We are already related. What alienates us, are theories, principles or procedures that make us feel as if we are detached from the world. What matters, instead, is finding out good ways of doing and good ways of living by being engaged with the world and while being engaged with the world. Thinking should not be divorced from experience and practice.

However, if we stop here, we risk to end up with a view that once again does not take seriously feelings of alienation. If we are always already related, such feelings seem misplaced. Therefore, we must also make distinctions between different levels and degrees of relationality and engagement with the world. At a basic, transcendental level we may well be always connected to the world and to others, and we cannot be separated from the world and from others. This is part of our existential condition. Moreover, in our habits and in our skilled activities, we are-in-the-world in a way that resembles breathing. Inside and outside are related in the flow of skilled activity. Subject and object are reconciled. But we are not always acting in this way and we are not always intensely related to the world in this way. At the level of lived experience, therefore, we can ‘nevertheless’ feel
alienated since we can be more or less engaged in the world, act in more or less habitual and skilful ways. Therefore, we should not only make a transcendental claim regarding alienation, but also a normative one, based on the phenomenology of skill. We are all basically related to the world, to one another, and to the environment; but some ways of relating to the world are more engaging and less alienating than others. If we get more skilled, and engage more with the world, then alienation disappears or at least diminishes. If we must use the verb ‘to be’ at all, then, it is true that, paradoxically, we become the relational beings we already are. But sometimes we experience, act, and live in a disengaged way, and feel removed from the world and from others.

In order to further explore this kind of alienation and to clarify the role of technology, we need to consider some examples and further discuss what kind of normativity we can get out of the phenomenology of skill. I will do so by responding to work of Borgmann, Dreyfus and Kelly, and Crawford.

**Borgmann: The Machinery and the Stove**

The normative claim can be further developed and refined by responding to the work of Borgmann. Like Dreyfus, Borgmann highlights the value of skill and engagement. He writes:

> Physical engagement is not simply physical contact, but the experience of the world through the manifold sensibility of the body. Skill is intensive and refined world engagement. Skill, in turn, is bound up with social engagement. It molds the person and gives the person character. (Borgmann 1984: 42)

I will return to this social aspect of skill later. For now, let me relate Borgmann’s view of skill to ethics of technology in order to explore what kind of normative conclusion can follow from a phenomenology of skill. Borgmann distinguishes between on the one hand focal practices such as gathering around a stove or drinking wine together, and on the other hand modern technology which is captive of what he calls the ‘device paradigm’ (Borgmann 1984). Influenced by Heidegger and his transcendental claim about modern technology, he thinks that modern technology reveals things in a particular way and indeed makes us live in a particular way: technology makes goods available to us, technology remains in the background. This means we engage less with the world and involves a kind of de-skilling: “The machinery makes no demands on our skill, strength, or attention, and it is less demanding the less it makes its presence felt” (Borgmann 1984: 42).
I agree with Borgmann that an ethics of technology should be an ethics of skilled engagement, that skilled activity is good and that we should promote such focal activities. However, I also have several objections to his view. First, Borgmann is still too much influenced by Heidegger’s monolithic view of modern technology, which does not differentiate between different kinds of technologies and different kinds of technological practices. Second, is the de-skilling thesis true? Whereas in an industrial age de-skilling might have been part of the (alienation) problem, in the information age this is not necessarily so. Some contemporary technologies may demand more skilled engagement rather than less; it is important to differentiate and look at the activity and practice as a whole rather than only at the artefact. Finally, if value is created at all, it is created in, or emergent from, experience-activity and practice itself. It is not something that is a priori attached to particular practices. Borgmann should not be read as giving an objective list of good practices—although when he gives examples such as the stove he does little to avoid this reading. How can we avoid a nostalgic and romantic evaluation of technologies, which dreams of a pre-modern utopia, yet benefit from Dewey’s, Dreyfus’s, and Borgmann’s insights about skilled engagement?

I propose that we do not distinguish a priori between focal and non-focal activities, but rather between more or less active, skilled, and engaged activities as shown in concrete experience. Perhaps any activity can be more or less engaged, and technology does not necessarily promote disengagement. What matters is how and to what extent we engage with the world and create a world, which includes our body, technologies, and sometimes ways of seeing. Alienation in this sense is neither an ‘objective’ feature of human existence nor a ‘subjective’ feeling only, but basically a lack of engagement with the world and with others—which has an experiential, felt aspect (I feel alienated by not engaging) and an active aspect (I feel in this way because I don’t do the right things, or rather, I don’t do things in the right kind of way). To those who skilfully bring forth a world and in whose activity a world grows, alienation means nothing and nothing is alien.

If this analysis of the problem alienation makes sense, then what we need is a philosophy of skill and activity, not of things. We have to go beyond a philosophy of technology narrowly conceived of as a philosophy of things. Thing-centred and hybridity-oriented currents in philosophy of technology rightly question instrumental and technophobic views, but are mistaken if and in so far as they dismiss the problem of alienation and if they are interpreted as responding to the problem of alienation by asserting the ontic hybridity or identity of humans and things (which they did in response to the concept of alienation as objectification). For
example, in Verbeek there is a remaining tension between on the one hand an ontic reading of the reconciliation of subject and object (for example his work on what things do, Verbeek 2005, and on cyborg intentionality, Verbeek 2008 can be interpreted in this way) and, on the other hand, a more transcendental claim about mediation by things and meaning-giving in relation to things. The latter interpretation is more philosophically fruitful, and can be connected to the phenomenology of skilled activity and the analysis of alienation suggested in the previous pages. To use a distinction made by Borgmann and Heidegger: philosophy of technology should be less about Dinge and more about Bedingungen (Borgmann 1984: 198).

Humans and things ‘are’ not one; rather, in skilled and engaged activity subject and object merge and a world and meaning are created. If we feel alienated, we ‘deny’ this possibility, but not in the sense that we deny an objective feature of human existence and/or an ontological state, but rather in the sense that we fail to engage with the world and with others to a sufficient degree. If we only talk about what humans and things are (for example influenced by a philosophical anthropology à la Verbeek), we are unable to analyse this kind of alienation: to talk about humans as always already technological in an ‘ontic’ way seems to preclude the possibility of defining situations and configurations when our technologically mediated activities are alienating in the sense that they do not promote the kind of skilled engagement rightly praised by Borgmann and Dreyfus. This is a problem not only for understanding human-technology relations but also for making normative claims about them, in particular for making normative claims in terms of alienation. Thus, we must recognize that at the ontological-transcendental level, we are engaged beings, who are always in-the-world and technologies are part of that a priori bond. But at the same time, if we want to take seriously the phenomenology of our experiences with technology, we must also call attention to feelings of alienation that arise from a lack of engagement, and from this perspective it does make sense to also make a normative claim saying that we should become more engaged, more related to the world. We can then evaluate particular ways of doing and particular technologies in the light of this criterion.

Thus, what we need is not only a phenomenology of skill but also an ethics of skill. On the one hand, we can say something about human existence by making a transcendental claim and by drawing attention to an ‘excellent’ way of relating to the world: we must presuppose that we are already acting-in-the-world and giving meaning to the world, and we do so especially in skilled experience-activity. If we say that we ‘are’ alienated and mean by this that we really ‘are’ separated from the world and from others, we deny this transcendental ground, this condition of
possibility, and we are blind to the possibility of having a more intense kind of connection to the world and to others. At the same time this suggests an ethics of skill, which makes a normative claim: more engagement with the world is better. Alienation is basically disengagement. But to say this is not ‘neutral’ but is a source of normativity: it urges us to try to better engage. Thus, an ethics of skill refuses to go down the route of relativism: it does not only show and recognize that there are different ways of relating to the world, as any philosophical phenomenology must do, but it also claims that some ways of relating to the world are better than others and provides a normative criterion: skilled engagement.

Moreover, this approach re-defines the problem of alienation: whereas ‘old-style’ philosophers of technology located the source of alienation in something ‘external’—‘technology,’ ‘the system,’ etc.—now the source of alienation is located in my activities, my particular way of relating to the world and with others. This means that responsibility for diminishing alienation does not only lie in ‘the system’ or the ‘they’; it is also my own responsibility to become more engaged. (However, this does not imply that changing this is necessarily a matter of individual choice—see below.)

Can we provide more specific guidance on which ways of engaging are better than others, or do we have to leave the normative requirement very general (more engagement is better)? And, if we recall that one aspect of alienation was the feeling of meaninglessness, what is the relation between skill and meaning? Does skilled activity also diminish that kind of alienation?

**Skilled Engagement, Meaning, and Dependence: Making Wheels and Taking Care of Bikes**

In order to further develop the idea of an ethics of skill and to give some more concrete examples of skilled engagement, let me respond to work by Dreyfus and Kelly (2011) and Crawford (2009). This will also give me room to say more about the relation between skill and alienation, and between skill and meaning.

In *All Things Shining*, Dreyfus and Kelly present a picture of skilled activity that further clarifies how engaging in skilled activity can counter alienation in at least two ways. First, it shows that skilled activity also gives meaning to what we do. One meaning of alienation I mentioned in the beginning of my essay is the feeling that there is no meaning and no value in the world. Dreyfus and Kelly present skilled activity as one way to counter nihilism. They reject Nietzsche’s solution to rely on the strength of one’s will, “to become gods ourselves” (Dreyfus and Kelly 2011: 46); we are not that strong. What we can do, however, is to engage in skilled
activities that make us discern the meanings that already there in the world (Dreyfus and Kelly 2011: 209). We can act in a “nurturing style” that involves caring for things rather than treating it “as a mere resource” (Dreyfus and Kelly 2011: 217; see also Heidegger). Second, Dreyfus and Kelly also make us think about what this idea means for our contemporary lives and about concrete activities and technologies. They give the example of the craftsman (in particular the wheelwright), who achieves a kind of “intimacy with the wood” and has a “feeling of care and respect for it” (Dreyfus and Kelly 2011: 210). They criticise contemporary technologies such as GPS navigation devices for making us lose our sensitivities and call for “poietic practices that resist a technological way of life” (Dreyfus and Kelly 2011: 214). Consider again Bormann’s “device paradigm”: Dreyfus and Kelly seem to agree with Borgmann that devices make life easy for us, but in doing so they also remove the possibility for meaningful, skilled engagement.

A similar point has been made by Crawford in Shop Class as Soulcraft. He complains that our daily devices are designed in such a way that they become “unintelligible to direct inspection” (Crawford 2009: 1) and hence promote replacing the thing rather than trying to repair it when it breaks down. Moreover, he tells us from his own experience that an office job is a very alienating way of living your life. In response, he recommends developing manual competence and refers to his own work experience as a motorcycle mechanic to show that such work is more engaging and more meaningful. Like Dreyfus and Kelly, he highlights how skilled activity involves “a handling, using, and taking care of things which has its own kind of knowledge” (69; Crawford refers to Heidegger here), which cultivates the virtue of “attentiveness” (82), and which renders us involved “in a personal way”: we care (95). Interestingly though, he criticises the Arts and Crafts movement for promoting “spiritualized, symbolic modes of craft practice” which paved the way for “therapeutic self-absorption” (29). Yet he also criticizes contemporary information technology: “You can’t hammer a nail over the internet” (34) and this reduces possibilities for human flourishing. Moreover, he argues that “to disburden us of mental and bodily involvement with our own stuff” (see also again Borgmann—he uses Borgmann directly on p. 65)—he gives the example of a Mercedes car full of electronic equipment—has also given us “fewer occasions for the experience of direct responsibility” (56) and fewer occasions for the education of the will “so that it no longer resembles that of a raging baby who knows only that he wants” (60). Yet in spite of defending some kind of idea of self-reliance and self-mastery, Crawford rejects a particular idea of autonomy: one that “denies that we are born
into a world that existed prior to us. . . . For in fact we are basically dependent beings: one upon another, and each on a world that is not of our own making” (208).

These reflections, which are of great interest in their own right, may inspire ways of living that are more engaged and hence less alienating in the sense I have been developing so far. However, there are some differences between the ethics of skill I wish to articulate here and the ethics of skill that emerges from these books. First, neither Dreyfus and Kelly nor Crawford are entirely successful in avoiding a nostalgic, romantic view of skilled activity. This is especially true for Dreyfus and Kelly: the example of the wheelwright is very telling, since it suggests a pre-modern utopia not dissimilar to the utopia of William Morris and the Arts and Crafts movement, or to Heidegger’s pre-modern fantasies. Crawford explicitly rejects this direction of thought, but—in spite of his own declared intentions—is in danger of romanticizing the mechanical age when he a priori rejects the internet as a place for skilled activity and human flourishing. Both books offer a rather one-sided if not hostile reaction to contemporary information and communication technologies. But why would these technologies preclude the possibility of skilled engagement by definition? And are all contemporary electronic technologies equally disengaging? A serious ethics of technology understood as an ethics of skill must carefully evaluate particular technologies. In this respect, Dreyfus’s and Kelly’s example of GPS navigation technology is interesting, but receives a too one-sided and superficial analysis; the issue regarding the relation between this kind of technology and alienation is not only more complex but could also benefit from a more detailed phenomenological analysis of the skills, activities, and practice in question.9

Furthermore, both Dreyfus and Crawford seem to present the ethical issue regarding changing our lives towards more engagement as an individual problem. More generally, it would be interesting to elaborate the social dimension of the ethics of skill, which is underdeveloped in these books. Dreyfus and Kelly remark that community is important in sport and religion (Dreyfus and Kelly 2011: 193), but the social mainly appears in the form of the masses or the crowd, which is swept up by “a wild, ecstatic sacred” (Dreyfus and Kelly 2011: 220). Moreover, Crawford’s quest for meaningful work and his neo-Stoic ideal of individuality (see, for example, Crawford 2009: 205) still take the individual as a starting point. However, in his book we can discern different, less dangerous and more benign conceptions of the social than the crowd: here the social presents itself in the actual skilled activity itself (repairing often requires working together, which relates the men in the workshop; in the process “some shared conception of the good
is lit up, and becomes concrete” (Crawford 2009: 181, see also p. 197 on “the good life”), in the intrinsic connection between social relations and dependence on things (the repairman “puts himself in the service of others,” who depend on the things he repairs (Crawford 2009: 16)—see also references to Arendt’s work below and in Crawford), and in the emerge of “a community of those who desire to know” (Crawford 2009: 177, 199). In the remaining pages of this essay, I wish to highlight and further analyse the social aspect of skilled activity and focus on those moments when it is not individual problem-solving (by individuals and for individuals) but common problem-solving. In other words, I wish to develop a notion of skilled activity that is more in line with a Deweyan social conception of ethics and with Crawford’s suggestion that the good life or human flourishing emerges in common skilled activity. In the next section I want to elaborate the ethics of skill as a social ethics.

Towards a Social Ethics of Skill

Individual Choice and Eudaimonic Engineering?

One way to interpret the requirement that we should be more engaged is to make it a demand of individual ethics. As individuals, we must choose to become more engaged and we must choose a particular way in which we want to engage with the world. Moreover, engagement might be interpreted as a ‘feeling’ one can create for oneself. However, as Dreyfus and Kelly have also argued, making something a matter of arbitrary choice or a matter of strength of will is itself a route to nihilism: an exclusive focus on self-control, individual choice, and autonomy removes the possibility of being moved by what is valuable and meaningful (see for instance Dreyfus and Kelly 2011: 204). More generally, this idea of engagement as choice also denies that we are dependent beings to the extent that it promotes a problematic ideal of autonomy (see also Dreyfus and Crawford again, but also others). It seems that we need a more substantial, richer answer to the problem of how we can become more engaged.

If we want to avoid the view that becoming more engaged is a matter of subjective feeling or arbitrary individual choice, we could try to find an ‘objective’ criterion based on human nature. For example, we might want to follow the ‘empirical turn’ some philosophers make10 and turn to a kind of ‘science of happiness’ for ethical guidance. For example, positive psychologists Seligman (2002) and Csikszentmihalyi (1990) recommend engagement and in particular ‘flow’ as a way to become more happy. This work is very interesting and we may compare
this ‘flow’ to the flow Dreyfus and Kelly describe: in skilled activity, what happens is not so much a matter of agency and deliberation but of doing what the situation demands. However, the problem with this approach—as an answer to the problem of alienation—is not only that its ‘objectivity’ merely supports individualist and subjective ethics, but also that it is vulnerable to my earlier objection to naturalism: it makes us into objects of (self-)manipulation and thus does not solve the alienation problem but creates one. What we may call ‘eudaimonic engineering’ makes humans into instruments for reaching the good. It makes us into devices or resources for producing value.\textsuperscript{11} A better turn, if there must be any, therefore, is a different one: a social one. Rather than seeing ethics as an individual matter, we better follow Dewey’s advice and see ethics as a kind of social experiment\textsuperscript{12} and a social quest for the good life. World-revelation and world-creation is a social enterprise, and it is in the social that “some shared conception of the good is lit up,” to quote Crawford again.

**Ethics of Skill as a Social Ethics**

Although it does not give us specific guidance, attending to the social aspect of ethics helps us to specify and complement the normative criterion ‘engagement,’ and provides us with a more comprehensive view of alienation. Alienation is about the relation between humans and world in two senses: it is about the relation between humans and things, as Verbeek and Ihde argue, but it is also about the relation between humans, about the social. Developing anti-alienation technologies, activities, and skills should help us to achieve more engaged relations in these two senses. They should improve our relation to the world, but also our relation to others. Our world is always already a social world. We are social beings, beings-with (see also Heidegger on *Mitsein*). There is not just subjectivity but also inter-subjectivity. This means we should evaluate technology and design in this twofold way: does it promote more engagement with the world and with others?

Moreover, the social dimension is relevant at two levels: it figures at the transcendental level, that is, as a condition of possibility, and it plays a role as a normative criterion. One the one hand, we should recognize that we are always already social and that our skills as particular ways of engaging with the world and creating worlds are also at the same time ways of engaging with others. On the other hand, our practices and activities can be more or less social, and in order to become less alienated we should engage *more* with others. Technologies play a role at these two levels: as part of social engagement that is always already in place and that preconditions our activities, and as part our particular ways of doing and
engaging with the world, as part of our particular skills. For example, Crawford shows that when we engage in manual labour (here: working on motorbikes) and develop our skills, this does not only contribute to personal development and flourishing; at the same time it is an excellent way of engaging with others and both common good and a community of known-how emerges.

In Borgmann, we can also find this social aspect of skilled engagement. When he talks about the meaning of focal (‘hearth’), he says that “the hearth sustained, ordered, and centred house and family” (Borgmann 1984: 196). We can draw the normative conclusion from Borgmann that we need activities-skills that sustain, order, and centre the social. However, these activities-skills cannot be defined a priori, as might be suggested by Borgmann’s examples. Furthermore, we must reject Borgmann’s—and perhaps also Crawford’s—romanticism and nostalgia: contemporary technologies can also, in principle, sustain, order, and centre the social. There is no reason why for example information technologies could not help us to be more engaged with the world and with others.

In Arendt’s work we can find a similar idea concerning the social (and therefore moral) significance of technology, although it is more focused on artefacts than on skilled activity. In *The Human Condition* (1958) she writes:

> To live together in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it; . . . What makes mass society so difficult to bear is not the number of people involved . . . but the fact that the world between them has lost its power to gather them together, to relate and separate them. (Arendt 1958: 52–53)

Thus, things gather us. From Arendt we can learn that alienation is indeed about the human-world relation, but that it is crucial to understand that this world is also and perhaps primarily a social world. Things help to make this social world happen and sustain it. In this sense, they play a transcendental role. Feeling alienated can involve the feeling that the social world is absent, which denies and itself depends (among other things) on a world of things that can gather us, on a social-material a priori. Without this a priori, we could not have the feeling of alienation. We would not have the slightest idea about what we are alienated from. But at the level of skills and activities, things can also influence the particular ways in which we create, discover, and sustain a social world. At this level, they may create (more or less) feelings alienation, and the transcendental argument should not be used as an excuse to neglect analysing and evaluating what happens at that level.
Thus, even if things always create and sustain a ‘between,’ particular skill-activities and skills-technologies can gather us to a higher or lower degree. Evaluating ‘technology’ means to evaluate how particular skill-technologies shape our relation to the world and to others. Note, however, that gathering does not mean: making one. Arendt says that things also separate us. Countering alienation, then, does not require us to create ontic oneness or ontic hybridity of humans and things, to make us into cyborgs. This would nihilate separation and thereby nihilate the social. Rather, we need to evaluate technologies in relation to their power of gathering and separating. For example, we may evaluate internet-related technologies with regard to their power to gather and separate us. And both possibilities presuppose a social-technological a priori in which we are already related to things and to others. In this sense, there is no existence ‘outside’ the social or ‘outside’ technology. If anything has ‘hybrid’ or ‘cyborg’ qualities by definition, it is this techno-existential and socio-existential transcendental ground, and it is in this way that we must (re-) interpret Haraway and Verbeek.

**Conclusion: Beyond Ethics of Technology as Ethics of Artefacts**

Which new and emerging technologies promote engagement with the world and gather us, relate (‘lienate’) us? Can ‘digital’ things do this? Can particular smart technologies gather us, as opposed to merely ‘connect’ us? These are important questions and such an ethics of technology, based on the engagement criterion and the social criterion is possible. We must evaluate technologies not only with regard to how we should shape our relation with things, but also and especially how we should shape our relation with others. Phenomenological analysis of what happens to our experience and activities can assist this task.

However, in the kind of ethics of ‘technology’ proposed here, technology-as-artefact must be removed from the centre of normative inquiry. In the light of my suggestions about an ethics of skill and activity, a better question is to ask which skills-activities and their related practices and habits promote engagement with the world as social engagement. The question is not primarily ‘how to relate to technologies’ but how to relate (better) to the world and how to create a (common) world. The concept of skill as a way of doing (involving know-how) links the human actor, the human mind and the human body with the material aspects and ‘technology.’ In the process, the human is transformed, the skills are transformed, and the environment is transformed. There is no ‘independent variable’ (if we must use the language of empiricism at all). The skill-activity model is based on a
thoroughly relational and non-dualist metaphysics, which emphasizes change and development.

New technologies can indeed change our skills or rather require that we change our skills. Evaluating technology, then, means to ask what skills-activities it promotes. Those technologies-activities that lead to more engagement with the world and create better worlds are better. Skills-activities, or ways of doing, that gather us are better. But there seems no a priori answer to the question which technologies are more ‘focal’ in this sense; the relation between technologies and skills-activities is complex (and needs further study and reflection). Social experience and imagination are needed to realize and explore better possibilities. It is only in ‘intensive and refined world engagement’ that we—not so much as individuals but especially as a society—can find good ways of doing, good skills. This does not mean that moral norms and ethical guidelines such as principles or codes should play no role in ethics, but siding with Deweyan pragmatists I wish to emphasize that this role is limited and that ultimately experience teaches us which forms of personal and common life are better than others.

Future technologies will require us to develop and test new skills. Perhaps there are limits to our capacity to understand these future technologies now and to how they might alter our ways of doing. However, the problem may be less hard since ‘understanding’ should not be taken to mean theoretical understanding but concrete experience in skilled activity. We should not understand ‘technology’ according to some ‘paradigm,’ as Borgmann still does following Heidegger and as for example Feinberg does when he analyses the rationality of technology. Rather, we should look at particular technologies (on this point the ‘empirical turn’ is right), but view them neither as ‘paradigm’ or ‘system’ nor as artefacts. What matters, ethically speaking, is not so much what ‘technology’ is (Heidegger, Borgmann, Feinberg, Habermas, etc.—to some extent also Dreyfus) or what things do (Verbeek); what matters is what we do in relation to the world and to others. And even if we do not fully understand the things that gather us or may gather us in the future (that is, understand what they ‘are’ in an ontic sense), it is important that things perform this task and that we evaluate not so much the things as such but the whole skill-activity of which they are part. If particular skills-activities cannot contribute to a way of better engaging with the world and with others, then these skills-activities are indeed alienating and must be regarded as a threat to the growth and creation of meaning and common good.
Afterword:
The Growth of Skills and the Moral Growth of Persons and of Society

This call for an ethics of skill may sound as if more engagement and the evaluation of engagement is entirely up to us, as if it is a matter of individual or collective agency. This is misleading. I already questioned the interpretation in terms of individual choice. Moreover, the concept of skill, as influenced by Dreyfus’s phenomenology and Dewey’s remarks on habit and know-how, also suggests a different view of human activity, especially skilled activity. Normally activity is seen as the outcome of intention—caused by our minds or the result of free will. In contrast, the phenomenology of skill emphasizes the non-intentional aspects of the process, especially when activity is habitual and requires skill. In engaged and skilled activity, a particular relation to the environment takes shape and both the form of the activity and its consequences for the person, her skills, and the environment are not entirely within individual or human control. It involves what Dreyfus and Kelly describe as “to be drawn by a force outside oneself but not enslaved to it,” to be “neither wilful agent nor unwilling slave” (Dreyfus and Kelly 2011: 8). The ethics of skill sees such experiences not as problematic but as the signpost of ethical excellence. More generally, experience and activity always ‘happen’ to some extent; specific forms of life ‘grow’ as much as they are created. This gives us a different picture of activity than the one proposed by standard agency-centred accounts (whatever their position on determinism and free will). Activity does not entirely depend on agency and what matters ethically is not only agency but the development and growth of the particular skills-activities as a whole.

Note also that although change is emphasized in this growth-oriented ethics, this does not mean that everything is different all the time. Taking inspiration from Dewey’s remarks on habit and knowing how, I suggested that activities create not only material objects and traces (and are shaped by material objects) but also ways of doing, that is, skill-as-habits. Thus, ethics is not to evaluate (only) single skills-activities, but the patterns that emerge in time, the habits that are formed. Moreover, there is a strong and interesting link to virtue ethics here, since as I said these ways of doing and these habits also shape the person—including the person’s character. Over time human ways of doing do not only materialize—literally, for example changing the landscape—but at the personal level ways of doing also ‘mentalize’: they change the person we are. By this I mean not so much that our brains change as a result of our habits (the naturalist thesis concerning the so-called plasticity of the brain), but also and especially that the person’s charac-
ter and identity change—including the persons ethical and moral character and identity. Virtue grows as a result of specific ways of doing, which lead to a specific form of life. Moral character is a kind of artefact (to the extent that we create it, that we control its coming into being) but also at the same time a kind of organism (to the extent that it grows out of our skills-activities beyond our control). Furthermore, this moral character is not something entirely ‘mental’: we come to embody our ways of doing and our moral character, for example in how we move, how we deal with objects, and indeed how our brains is ‘re-wired’—or better: re-grown (I prefer to avoid a computer metaphor here). In a sense, virtue or moral character has no existence apart from our (embodied) ways of doing. The metaphysics of skill-activity breaks down dualities such as mind-body and mental-physical.

Moreover, as I have said we can learn from Dewey’s pragmatism that habits are not a merely individual matter, but a social matter too. Thus, evaluating skills-as-habits means to evaluate our common ways of doing. This renders ethics not a matter of individual deliberation alone, but also and especially a matter of public concern and—preferably—public deliberation. We need to find out what skills as ways of doing are good for *us*. In the light of a relational metaphysics, we do not first appear as individuals who then need to decide on the social; rather, we appear first of all as social beings that already *share* skills, ways of doing, habits, bodies, technologies, and—hopefully—virtues. This means we also share the task and responsibility to evaluate our common ways of doing—keeping in mind again that those ways of doing and forms of life are not entirely within our control. Hence their growth requires as much adaptation as their creation demands steering.

Finally, note that here are interesting parallels between the notion of ethics as skill proposed in this paper and Eastern thought, in particular Zen Buddhism, which teaches meditation not as distracted or self-absorbed contemplation, but as contact and engagement with the world. However, I want to leave open if an ethics as skill recommends the shaping of a (real) self or if it sees this self as ‘virtual’ in the sense that ultimately it lacks reality. What matters in an ethics of skill is not what happens to (individual) self, but the growth of practical wisdom and good living habits. The normative conclusion is: technologies should be evaluated in the light of their contribution to the growth of ethical skill and meaning, understood as active knowing how to engage better with the world and with others. This is not a matter of theory and science but of practice and concrete experience. *Experiencing* how it is to engage in a way that cultivates common flourishing, we do no longer feel alienated. Instead, as the vehicles of good skills-activities we are linked up to the world and to others. Participating in world-gathering, we experience and create human good.
Notes

1. This is also true for the social sciences in so far as they talk about socio-
technical systems.
2. This is not, of course, the case in Verbeek’s work, in Ihde’s work, or in other
writings inspired by phenomenology.
3. In a sense, this is even true for creational monotheism: humans are artefacts
made by a divine creator.
4. The distinction is a Heideggerian one, see for example Heidegger 1996:
10–11.
5. It would be interesting to compare this to the Marxist thesis of de-skilling.
6. I believe this is also a problem in Dreyfus’s objections to the internet: why
would the internet discourage engagement per se? Is internet use really a bodi-less
activity?
7. Note that Borgmann uses the distinction to make a different argument: we
must return to the (simplicity of) things.
8. Dreyfus and Kelly argue that when the GPS is navigating for you, you do
not need to engage with the environment and you do not use skill. You do not see the
landmarks, street signs, sun, etc. This implies that in a sense you are turned ‘into an
automated device’ (Dreyfus and Kelly 2011: 215). (I have made a similar point in my
recent paper on walking ethics.)
9. I have attempted to do so in a recent paper on the phenomenology and ethics
of walking.
10. For example, Kroes and Meijers have argued for an empirical turn in philoso-
phy and technology and Søraker has argued for an empirical turn in information ethics.
11. Note that a technology of the self à la Foucault faces a similar problem: the
self becomes an artefact itself. We become at the same time artefact and designer.
12. I have no room to offer a fully interpretation of Dewey here, but let me list
some relevant points of entry. One is his view on education. One could argue that eth-
ics must be a social matter because the individual is social. According to Dewey, the
individual has no meaning apart from society and vice versa. In his ‘My Pedagogic
Creed’ (2006), he writes that ‘the individual who is to be educated is a social indi-
vidual and that society is an organic union of individuals. If we eliminate the social
factor from the child we are left only with an abstraction’ (Dewey 2006: 24). More-
over, Dewey’s view of ethics and politics is both social and ‘experimental’: he recom-
mends the experimental method ‘in social and moral matters.’ We have to try out what
works and use our moral imagination to solve our common problems. In Democracy
and Education he complains: ‘Men still want the crutch of dogma, of beliefs fixed by
authority, to relieve them of the trouble of thinking and the responsibility of directing
their activity by thought.’ (Dewey 1930: 394). Dewey defended an ideal of democracy
centered on consent and participation. For a summary of Dewey’s ethics see for example Fesmire 2003. For a discussion of the relation between democracy and social experiment see for example Caspary 2000.

13. See for example Varela 1999: 41.

References


