**Lancaster University Management School
Working Paper
2003/091**

The ""'measure of a man"'' and the ethics of machines

Lucas Introna

The Department of Organisation, Work and Technology
Lancaster University Management School
Lancaster LA1 4YX
UK

The 'measure of a man' and the ethics of machines

Lucas D. Introna
Center for the Study of Technology and Organisation
Lancaster University Management School, Lancaster, LA1 4YX, UK,
l.introna@lancaster.ac.uk

Abstract

In this paper I argue for an ethics of machines. In arguing for an ethics of machines I am not only arguing for the consideration of the ethical implications of machines (which we already do) but also, and more importantly, for an ethics of machines qua machines, as such. Thus, I attempt to argue for a decentering of ethics, urging us to move beyond any centre, whatever it may be—anthropological, biological, etc. I argue that if we take ethics seriously we must admit that our only measure cannot be that of man. To develop the argument I use an episode in Star Trek where the fate of the highly sophisticated android Commander Data is to be decided. I show how the moral reasoning about Data remains anthropocentric but with some attempt to reach beyond it. I proceed to use the work of Heidegger and Levinas to suggest a possible way to think (and do) a decentered ethics.

Introduction

Increasingly we find ourselves surrounded by machines.[1] As we draw on, and become dependent on the possibilities they provide, the boundary between our machines and us are becoming less and less obvious. What is a soldier without the technology of global positioning, night vision, laser guided telescopes, mobile telecoms, and more? What is the detective without the detecting technology of genetic profiling, fingerprint matching, voice recognition, bugging, and so forth? Is a soldier really a soldier without his kit? It seems that his kit is becoming integral to what he is, *as soldier*. As society develops we are putting more of ourselves 'in' machines (depending on them to make decisions we use to make), and machines are increasingly 'inserting themselves' into us (as artificial limbs or extensions of ourselves), doing very important things we use to do for ourselves. At the end of the progression we have the android and the cyborg. We are becoming, always have been, human/machine hybrids (Haraway, 1991; Latour, 1993). As we progress along this path, which already started with the first tools, and without out wanting to speculate about the inevitability of such a progression or how rapid or slow this may be, it will certainly become increasingly important for us to consider the ethics of machines.

When referring the 'ethics of machines', I am referring to it in two very distinct ways. In the first, more traditional sense, I mean the values and interests built into the very materiality of the machines we draw upon—inscribed in their 'flesh' as it were (Winner, 1980). In drawing upon the possibilities presented by these machines we become wittingly or unwittingly enrolled into particular scripts and programmes of action (in the actor network theory sense of the word). These scripts and programmes make certain things possible and others not, include certain interests and others not (for example the increased use of ATM may have lead to the closure of bank branches which exactly excludes those that can not use ATM's, such as physically disabled people). In this sense of use the ethics of machines is very important and is in desperate need of our attention (a

---

[1] I am using the notion of 'machine' in a very broad sense here to refer to some form of preconfigured, 'encapsulated' or 'located' potential for doing or achieving something not possible without such a machine.

good example of this type of work Philip Brey (2000) proposes in his disclosive ethics). However, this paper is not primarily concerned with this sense of machine ethics. It is rather concerned with the ethics of machines in the sense that Levinas uses the word ethics. For Levinas ethics is being arrested by our infinite responsibility toward the Other facing us. Or, differently stated, for Levinas the question of ethics is the impossible question of the infinite ethical significance of the Other facing us that proceeds, and grounds, all subsequent ethical thinking. Thus, when I am raising the question of the ethics of machines I am raising the fundamental question of the ethical significance of machines as such, i.e. the question of the weight of our moral responsibility towards machines, qua machines.

In order to develop and structure the discussion I will draw on a particular episode of Star Trek titled: "The measure of a man"[2]. In this episode the ethical significance, and therefore subsequent rights, of the android Data becomes contested. This 'case study'—if I may call it that—will give us some indication of how the problem of ethical significance of machines can become apparent and considered. In discussing this case I will argue that its approach to the issue, as well as the work of Levinas, is essentially anthropocentric—ultimately the measure of ethical significance is 'the measure of a man'. I will argue that it will ultimately fail to provide us with an adequate way to consider the ethical significance of machines. I will then proceed to suggest a more radical interpretation of Levinas as a possible way forward towards a *decentred ethics*.

Commander Data and the measure of a man

Those familiar with Star Trek will know that Commander Data is a highly sophisticated android designed by Doctor Noonien Soong. Dr Soong created only one Data in his lifetime. Lieutenant Commander Data is now one of the officers on the USS Enterprise, which is part of the Federation's Starfleet. The acclaimed robotics expert Commander Maddox has been authorised by Star Fleet's Admiral Nakamura to remove Data from the USS Enterprise for study, with the intention to refit and replicate him. Maddox intends to download Data's brain into a computer for analysis, and then reload a copy back into a refitted and upgraded Data. Due to certain technical complexities the procedure is risky and he could not guarantee the end result. Data objects to the procedure by claiming that the end result would not be him. He suggests that "there is an ineffable quality to memory that [would not] survive the shutdown of [my] core." As such he is concerned about the continuity of his identity, for him it would be like dying and waking up as somebody else.

After considering a number of options Data decides to resign as officer of the Starfleet in order to prevent the possibility of being disassembled. Commander Maddox responds by arguing that Data does not have the freedom to resign since he is a machine and as such the property of the Starfleet—a view shared by Admiral Nakamura. He argues that they "would [not] permit the computer on the Enterprise to refuse a refit", why should Data be accorded such a right? The matter is referred to Captain Phillipa Louvois of the understaffed local Judge Advocate General's (JAG) office for a decision. After considering the legal position she issues her own summary ruling that Data is not a sentient being but mere machine, and therefore, as property of the Federation, lacks the legal right either to refuse Maddox's refit or to resign from the Starfleet. The USS Enterprise's Commanding Officer, Captain Picard, immediately challenges her decision. Due to resource constraints of the JAG office an impromptu hearing is arranged by Captain Phillipa Louvois where Captain Picard will defend Data and Commander Riker, the direct subordinate of Captain Picard, will represent the Starfleet view that Data is a machine and as such cannot resign or refuse the refit. Commander Riker is profoundly disturbed at being placed in this position as his relationship with Data leaves him in no doubt as to the status of his colleague and trusted friend. However if he refuses Captain Louvois' ruling will stand, thus, he agrees.

The court case starts with Commander Riker outlining the case for the Starfleet i.e. that Data is a machine and as such cannot resign or refuse the refit

---

[2] This paper is based on an early transcript of the episode located at http://www.crosswinds.net/~capttrekker/ tsttngetf/sttngs2et/tng135tmoam.htm.

RIKER   Your honor, there is only one issue in this case and one relevant piece of evidence. I call Lieutenant Commander Data. Data seats himself in the witness chair, and places his hand on the scanner.
COMPUTER VOICE   Verify, Lieutenant Commander Data. Current assignment, USS Enterprise. Starfleet Command Decoration for...
RIKER   Your honor, we'll stipulate to all of this.
PICARD (leaping to his feet) Objection, your honor, I want it read. All of it.
PHILLIPA Sustained.
COMPUTER VOICE (resuming) ... Gallantry, Medal of Honor with clusters, Legion of Honor, the Star Cross.
RIKER Commander Data, what are you?
DATA (looking to Picard for guidance, Picard nods to him to answer) An android.
RIKER Which is?
DATA Webster's Twenty-Third Century Dictionary, Fifth Edition, defines Android as an automaton made to resemble a human being.
RIKER (musing) An automaton. Made. Made by whom?
DATA Sir?
RIKER Who built you, Data?
DATA Doctor Noonien Soong.
RIKER And he was?
DATA The foremost authority in cybernetics.
RIKER More basic than that. What was he?
DATA (puzzled, but groping for the right answer; he says questioningly) A human?

*** [He removed Data's hand after a demonstration of Data's strength] ***

RIKER (continuing) Data is a physical representation of a dream, an idea conceived of by the mind of a man. His purpose? To serve human needs and interests. He is a collection of neural nets and heuristic algorithms. His responses are dictated by an elaborate software program written by a man. The hardware (slapping the hand [of Data] against his palm) was built by a man. [Riker has been preambulating around the courtroom, each step bringing him closer to Data. He is now at his side, and without warning he leans down, presses the switch, and turns him off. Data collapses like a broken toy.]
RIKER (continuing) And this man has turned him off. Pinocchio is broken, the strings are cut. Riker lays the hand down next to Data. Shocked silence fills the room. Picard's reaction -- shock and certainty that he cannot win.
PICARD I request a recess.
PHILLIPA Granted.
Riker who, as he walks to his chair, is in agony. A single tear runs down his cheek. He has destroyed a friend.

Riker's argument is simple and clear. Data is a machine, made by a man for serving the purposes of man, as such he is subjected to man's choice—he can be switched off. As a machine he has no intrinsic value or significance other than his value to those who made him, his owners. Since they wish to replicate and upgrade him they are free to do so. There is of course an interesting contradiction in the proceeding, as hinted by Picard, in that Data has previously been awarded the 'Command Decoration for Gallantry', and medals of honour for services rendered. Presumably such distinctions have not been awarded to the computer on the Enterprise. I will take up this issue again later on in the paper.

In his defence Captain Picard realises that he cannot deny the obvious, i.e. that Data is a machine, once made by a man. He opens his defence:

PICARD (making his opening statement) Commander Riker has dramatically demonstrated to this court that Lieutenant Commander Data is a machine. Do we deny that? No. But how is this relevant? We too are machines, just machines of a different type. Commander Riker has continually reminded us that Data was built by a human. We do not deny that fact. But again how is it relevant? Does construction imply ownership? Children are created from the

building blocks of their parents' DNA. Are they property? We have a chance in this hearing to severely limit the boundaries of freedom. And I think we better be pretty damn careful before we take so arrogant a step.

Picard argues that it is plausible for us to think of ourselves as 'machines'. It is not whether we are or not machines. It is rather the status we attribute to the machine when interacting with it. If we award a machine medals are we not implicitly according the machine a sort of autonomy that would make it meaningless to award the medals to his designer or to a chair? Presumably if we award it medals we will also hold it, rather than the designer, accountable in the event of a mistake or inappropriate behaviour.

Picard proceeds with his defence with Commander Maddox on the stand. Maddox suggested that Data is a machine because he is not sentient. He defines sentience as having intelligence, self-awareness and consciousness. He reluctantly agreed that Data seems to conform to at least the first two of these. Nevertheless he insists that Picard is sentient and Data not. Picard proceeds:

PICARD But you admire him?
MADDOX Oh yes, it's an outstanding --
PICARD (interrupting) Piece of engineering and programming. Yes, you've said that. You've devoted your life to the study of cybernetics in general?
MADDOX Yes.
PICARD And Data in particular?
MADDOX Yes.
PICARD And now you're proposing to dismantle him.
MADDOX So I can rebuild him and construct more!
PICARD How many more?
MADDOX Hundreds, thousands. There's no limit.
PICARD And do what with them?
MADDOX Use them.
PICARD How?
MADDOX As effective units on Federation ships. As replacements for humans in dangerous situations. So much is closed to us because of our fragility. But they...
PICARD (interrupting; he picks up an object and throws it down a disposal chute) Are expendable.
MADDOX It sounds harsh but to some extent, yes.
PICARD Are you expendable, Commander Maddox? Never mind. A single Data is a curiosity, a wonder, but a thousand Datas, doesn't that become a new race? And aren't we going to be judged as a species about how we treat these creations? If they're expendable, disposable, aren't we? What is Data?
MADDOX What? I don't understand.
PICARD What... is... he?
MADDOX (angry now and hostile) A machine!
PICARD Is he? Are you sure?
MADDOX Yes!
PICARD But he's met two of your three criteria for sentience, and we haven't addressed the third. So we might find him meeting your third criterion, and then what is he?
MADDOX (driven to his limit) I don't know. I don't know!
PICARD He doesn't know. (to Phillipa) Do you? That's the decision you're facing. Your honor, a courtroom is a crucible. In it we burn away the egos, the selfish desires, the half-truths, until we're left with the pure product -- a truth -- for all time. Sooner or later it's going to happen. This man or others like him are going to succeed in replicating Data. And then we have to decide -- what are they? And how will we treat these creations of our genius? The decision you reach here today stretches far beyond this android and this courtroom. It will reveal the kind of a people we are. And what (points to Data) ... they are going to be. Do you condemn then to slavery? Starfleet was founded to seek out new life. (indicating Data) Well, there he sits, your honor, waiting on our decision. You have a chance to make law. Well, let's make a good one. Let us be wise.

PHILLIPA This case touches on metaphysics, and that's the province of philosophers and poets. Not confused jurists who don't have the answers. But sometimes we have to make a stab in the dark, and speak to the future. Is Data a machine? Absolutely. Is he our property? No... The courtroom erupts in joy.

It seems to me that there are at least three distinct steps in Picard's argument for us to consider. Firstly, the whole court case is meaningless since the Federation has already confirmed Data's status as more than a 'mere machine' since they have place him in a role of responsibility and have allocated him certain duties in which they expected him to be accountable. They have also judged him to be doing these duties exceedingly well by awarding him medals. Therefore, all their past interaction with Data already suggests a status that this case now attempts to deny.

His second step is to suggest that Data is not a machine but a person since he conforms to all the criteria of sentience suggested by Maddox: intelligence, self-awareness and consciousness. He gains agreement that Data is intelligent and self-aware, both of which suggests consciousness. Although he cannot prove it, the court (and in particular Maddox) can equally not prove that he, Picard, possesses all of these, except by some form of intuition. Such intuition would suggest that it is evident to any human being that they possess these capacities and therefore other human beings should also. However, this intuition would not tell us anything about androids such as Data. Nevertheless, it is possible to imagine that we could construct a Turing type test for sentience, and that it seems entirely feasible that Data could succeed in passing such a test (based on the evidence of Data's behaviour in the Star Trek series). However, the most important point in his defence, for my argument, is that he takes the measure of ethical significance to be the 'measure of a man', i.e. machines are ethically significant if they are like us, sentient beings. It would be an interesting thought experiment to imagine a world in which the androids were the majority and they would decide that, besides sentience, having a 'reuseable' body is the ultimate measure of ethical significance. This suggestion points the intimate link between ethics and politics. I will return to this matter in the next section.

The final step in his defence, which draws on the first two, is that ultimately we are going to be judged as a species about how we treat these creations of ours; and if they are "expendable, disposable, aren't we?" This final step is, in my view, the first step towards a non-anthropocentric approach to the ethics of machines. This is what I will now turn to.

Ethics beyond the "measure of a man"

The fundamental problem of the case of the android Data is that the ethical landscape is already colonised by humans. We humans have seized the ethical discourse and turned it into our language, for our purposes. In this ethical landscape it becomes impossible for Data to state his case unless it is made in our terms—terms such as 'machine', 'property', 'sentience', etc. It is us humans that are making the decisions about the validity, or not, of any criteria or category for establishing ethical significance. It is Data that is on trial not we humans. For example we often take 'sentience' as criteria for considering ethical significance worth because we argue that it is a necessary condition for feeling of pain. Why should pain be a criterion? Is it because we can feel pain? Are not all our often suggested criteria such as originality, uniqueness, sentience, rationality, autonomy, and so forth, not somehow always already based on that which we by necessity comply with?

However, the problem is not the particular criteria we choose but that we tend to choose it in our terms to favour our interests. Furthermore, in choosing criteria we set up a hierarchy of ethical significance in which some are more valuable than others from the start. For example on the USS Enterprise it is the humans whose significance is beyond dispute, then there are valuable androids like Data, and then there are quite valuable machines like the onboard computer, and finally there are the not so significant equipment such as chairs. Such hierarchies, and we can easily construct many of these, are quite intuitive and seems very reasonable—at least to us humans. It is clear that a human is ethically more significant than a dog and a dog more than a stone. Who would disagree with that? I would if I was a stone and I could speak in human terms. However, since I cannot I am doomed to remain at the disposal of humans. My 'otherness' is rendered equal by their value categories. In their terms they can dispose of me—physically and ethically—in whatever way

they want. It seems that it is only when non-humans 'object' in human terms that they take notice. For example we now consider the ozone because in ignoring its 'objections' we will become damaged ourselves, we will literally feel it on our skin.

It seems to me there are at least two anthropocentric reasons why an anthropocentric ethics will ultimately fail. The first reason is the problem this paper started with, namely, that it is becoming increasingly difficult to draw definitive boundaries between our machines and us (as suggested by the work in STS and ANT). In fact one could argue, as some do, that these boundaries never existed in the first instance (Haraway, 1991). They argue that neither our machines nor we ever function in isolation from each other. Rather, our machines and us draw upon each other for our being what we are. We are, as members of society, mostly configured in complex 'networks' in which a certain mutual dependence and symmetry of interaction is required for its smooth operation. The second reason, related to the first, is that by considering machines as mere resources in the network we, also in the network, equally become viewed as mere resources. In Picard's words if they are "expendable, disposable, aren't we?" This 'boundary ambiguity' is dramatically illustrated in the case of Data. In the normal functioning of the USS Enterprise everybody treated Data 'as if' he was 'a human'. They gave him duties, expected him to keep his word, befriended him, etc. However, when he objected to the refit, they suddenly wanted to draw a ethically significant boundary (machine/person), which they have already denied in their normal everyday interaction with Data. Thus, the irony of an anthropocentric ethics of machines is that ultimately we already deny, or at least erode, its validity in a system in which we are all already more or less configured as 'machines' in programmes and scripts driven forth by its own internal logic. The ethical significance we accord machines effectively becomes the ethical significance we ourselves acquire. In the complex social network of everyday life other humans and our machines also 'objectify' us. For example I cannot get my money out from the bank machine because I forgot my PIN number. Until I identify myself in its terms (as a five digit number) I do not exist. Equally if I cannot prove my identity by presenting inscribed objects (passport, drivers licence) I cannot get a new PIN number. In Heidegger's (1977) words we all become 'standing reserve', on 'stand by' for the purposes of the network. The value hierarchy presumed never existed in the first place. The fate of our machines is also our fate. The 'otherness' we claimed, and denied others, is in fact denied to all. What now?

We all—humans, machines and stones alike—need a decentring of ethics—all things in their own terms from themselves. What would the content of such an ethics be? Taylor (1986) argues that an entity is ethically significant if it has an "intrinsic value". By this he means entities that have 'a good of its own' and who's flourishing would be considered to be a good thing. One can ask who will be the judge of the 'good' referred to? Not in the easy cases but in the very difficult cases where we have to choose between competing 'goods'. Luciano Floridi (2003) argues that Taylor does not go far enough, that we can indeed define a minimalist category of moral worth by a using the very abstract category of "information object" in which things like sentience and biological life would be incidental and local particulars. I will not attempt to explain here the definition of an 'information object' that he uses as that will require more space than is available. However, one can ask why 'information'? Is it because we already value information? Is it because we see in information structure, coherency and order (as suggested in information theory) and not chaos, which we may not want to value? As brave and laudable as the efforts of Taylor and Floridi may be, and they are, one could question whether these attempts really escape the sphere of the anthropocentric. Obviously one can ask whether it is at all possible for us humans to escape our own prejudices? Furthermore, it seems that every attempt to define a common ethical category for all things will fail, as it will itself already violate every entity by exactly denying its Otherness[3]—by comparing what is absolutely incomparable.

In contrast to these attempts this paper suggests that ethics will only have a possibility to *happen* if we actively distance ourselves from the assumption of a need for a definitive ethical

---

[3] In the discussion to follow I use Otherness (with a capital 'C') to suggest the notion of other that is more than mere difference. In other words an Other that is other than any difference whatsoever that we may be able to suggest and construct, i.e. radically and absolutely Other. In this regard I follow Levinas (1996).

category to ground ethics. When we embrace an ethical imperative in which we let things be 'what they are' in their Otherness. Thus, an ethics that take the always already Otherness of the other as its guide (as suggested by Levinas(1991))—nothing more and nothing less. A decentred ethics requires that *all things are equally worthy of ethical consideration from the start*. This does not, however, mean that a human being is simply equal to a chair in ethical significance. It is not a call for the "Royal Society for the Protection of Chairs". It is rather a profound and humble admission that we cannot compare ethically a person to a stone without violating the Otherness of both. Neither are we suggesting that we anthropomorphise things—'make' them like us—as was done in the case of Data. Rather, it is the argument of this paper that we need not, and ought not attempt to draw these boundaries; attempting to draw these boundaries, even very carefully, or making them like us, is exactly our first and violent transgression of the radically Otherness of *all* things. Indeed, we need an ethics of machines that is more than a set of 'rules' or principles for moral decision-making. Moral decision-making need as its 'ground', not a system for comparison, but rather a recognition of the impossibility of all comparison—every comparison is already violent. What this paper is calling for, if ethics is to happen, is to abandon these attempts at moral ordering, through boundary making and morphing (them into us or us into them), and to let things be, what they are, in themselves, in their terms, for their sake. The always already Otherness of the other is what moves ethics (Levinas, 1996).

One may respond by claiming that such an ethical imperative leaves us in a dead-end with nowhere to go. Yes, it does leave one on uncertain ground and that is exactly its strength. It is when we believe that we have 'sorted' ethics out that violence is already present. However, its when we become unsure, when we are full of questions, when our categories fails us, and we need to think afresh, start all over again, that it becomes possible for us to be open to the questioning appeal of the otherness of the Other. Where does this leave us? What do we concretely do? I will suggest that a decentred ethics could be based on, but not limited to, the following aporia[4]:

- The suspension of the law
- Letting the Other speak
- Undecidability
- Justice.

Derrida (1992) suggests that it is when we suspend the law (categories and codes) to make a 'fresh' judgement, that ethics becomes possible. If the possibility of becoming disturbed by the other as Other becomes circumvented by the self-evidence of the category, code, reasons, etc., then the law becomes a law onto itself—pure violence. In the case of Data the category remained in tact in many interacting ways. It was Data that was on trial. It was evident to everybody that he was the 'lesser' machine and that they had the right to decide his fate. Their right to decide did not come up for consideration. Furthermore, once the court case started his friends ironically believed that his moral worth was in being 'like them'. They did not suspend their categories of 'machine', 'person' and 'sentience' and asked the question "what is it about Data, as Data, that we value". One can most certainly question whether Data really did find 'justice' in being spared because he was almost like them?

Levinas, suggests that it is in speaking that the other reveals itself as Other. For Levinas speaking is the showing of the Other of itself from itself as always already Other (Levinas, 1991). Do we actively encourage the others to speak? Of course Levinas was talking about other humans, but what about our machines and nature? Do they not speak when they break down as we attempt to domesticate them? Do we listen? In ethical discourse do we actively seek exceptional speaking? Do we actively seek for breakdowns and differences that unsettle rather than confirm our categories? Ethics will happen only if we become unsettled by the voice of the Other. Data never got the opportunity to speak—except in answering their questions. However outside the court he did speak. When confronted by Maddox about his resignation he said: "I am the culmination of one man's

---

[4] I use the term 'aporia' as Derrida does to indicate the double meaning of something that is both an expression of doubt and a perplexing difficulty.

dream. This is not ego or vanity, but when Doctor Soong created me he added to the substance of the universe. If by your experiments I am destroyed, something unique and wonderful will be lost." Data is claiming that it is exactly his Otherness that is at stake here. Should the court case not have focused on this?

The reality of ethical situation is that eventually a decision has to be made—one way or the other. This decision is mostly required urgently. Ethics does not have the luxury of time to think about all the alternative, weigh them carefully and come to a reasoned, justifiable outcome. We can obviously talk and reason but in the final instance the decision is now, yet it is undecidable. There can simply be no final reckoning, no squaring of all the books. The agonising that accompanies every ethical decision already suggests that every decision is also already a transgression. However, when we do make a decision should we not immediately and simultaneously declare the inherent uncertainty and exceptional nature of the decision? It seems to me that in a decentred ethics there is a need to announce and remain open to the possibility that we got it wrong. There is a need to announce that ethical decisions are wrought with uncertainty. There is no doubt that Data's case is a difficult one. What about all the people that may in future lose their lives because there is not a Data available? What about the knowledge lost to the Federation? And we may add many more. We cannot speculate about how the case would have turned out had they followed a decentred ethics. Nevertheless, what seems to be a victory for Data is not necessary so. By avoiding the agony of an undecidable decision all Others have become violated. For ethics to happen we must also declare immediately that there are an innumerable other Others equally deserving of our attention and resources. Ethics immediately and simultaneously implicates politics, the question of justice (Critchley, 1999). By circumventing ethics the participants in the court case have also committed an injustice to all. Yes, ethics is impossible!

Conclusion

What now? In considering a decentred ethics we have multiplied many times over our moral responsibility. Not only are we always already responsible for the other human being that we encounter, we are also always already responsible for every other thing (machine or otherwise). Not only must we face the face of the destitute we must also face the fragility of all things we encounter. Moreover, we are in an impossible situation where we have to continually "compare the incomparable". The hierarchy of values can no longer 'simplify' ethics for us. Not that it did. However, it did give us a way to justify ourselves: "it was just a such and such a thing after all". As Latour points out, "we have never been modern". The tidiness of our value hierarchy masked the moral complexity we dared not face. Ethics is impossible! Yes, and so it should be. The insurmountable weight of our ethical responsibility is exactly what gives ethics its force (Levinas, 1991(1974)). It is exactly the impossibility that leads us to keep decisions open, to reconsider again and again our choices. To live a moral life is to live in the continued shadow of doubt, without hope for certainty. If we reduce ethics to tidy hierarchies of value then ethics becomes a mere moral calculation—not that we should not calculate and (re)consider—but this ought to happen with 'fear and trembling' as Kierkegaard suggested. Clearly we must make very difficult choices on an everyday basis. However, what make these choices difficult—even always impossible—are precisely the impossibility of our categories, boundaries and hierarchies, and the infinity of our responsibilities. It is in the shadow of this infinite responsibility that we must work out, instance by instance, again and again, how we ought to live, with **all** Other (things). This is the task of a decentred ethics.

References

Brey, Philip (2000). "Disclosive Computer Ethics," *Computers and Society*, Vol. 30, No. 4, December, pp. 10-16.

Critchley, S. (1999) *The Ethics of Deconstruction: Derrida and Levinas*, Edinburgh University Press, Edinburgh.

Derrida, J. (1992) Force of the Law: The "mystical foundation of authority", In *Deconstruction and the Possibility of Justice* (Eds, Cornell, D., Rosenfeld, M. and Carlson, D. G.) Routledge, London.

Floridi, L (2003) "On the Intrinsic Value of Information Objects and the Infosphere", *Ethics and Information Technology* 2003 (4.4), 287-304

Haraway, Donna (1991) "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature* (New York; Routledge), pp.149-181.

Heidegger, Martin, (1977) *The question concerning technology, and other essays.* Trans. William Lovitt. New York: Harper and Row.

Latour, Bruno (1993) *We Have Never Been Modern*. London: Harvester Wheatsheaf

Taylor, P. W. (1986) *Respect for Nature – A Theory of Environmental Ethics* (Princeton NJ: Princeton University Press).

Langdon Winner, "Do Artifacts Have Politics?", *Daedalus* (Winter 1980), pp.121-36.

Levinas, Emmanuel (1991(1974)) *Otherwise than Being or Beyond Essence*. Trans. Alphonso Lingis. Dordrecht: Kluwer Academic Publishers.

Levinas, Emmanuel (1996) "Ethics as First Philosophy." *The Levinas Reader*. Ed. Sean Hand. Trans. Michael B. Smith. London: Blackwell, pp. 75-87.

Star Trek: The Next Generation, "The Measure of a Man", Transcript #40272-135, Located at http://www.crosswinds.net/~capttrekker/tsttngetf/sttngs2et/tng135tmoam.htm [accessed 26 January 2003]