The Ethical Researcher

Dewald Roode Department of Information Systems University of Cape Town Cape Town Dewald.Roode@uct.ac.za

Abstract. This paper takes a slightly light-hearted look at what defines an ethical researcher, and concludes that most of research is done in an entirely unethical way. It shows the way forward for such unethical researchers and makes a contribution to the field of ICT research, where questions about ethics have rarely surfaced, let alone been addressed.

1. Introduction

There is a natural tendency amongst researchers to think that ethics only come into play when human subjects are involved in the research. Researchers working in the medical field, however, would know that the animal world immediately places ethical obligations on research: environmental researchers likewise have come to understand that the environment is something that has to be taken into account. Yet, researchers working in, specifically, ICT, would often if not always think that their disciplines are somehow immune to ethical considerations: there are no people involved in the study, the environment or the animal world is not affected, so why should they submit their research to ethical scrutiny or worry about ethical considerations?

It is a premise of this paper that no research immunity can claim from ethical considerations, and that all research in one way or another, has a bearing on one or more of the following: the human world, the animal world, and the inanimate world - the planet. This connection to one or more of the different worlds does not just follow from the claim that "all things are connected", but from the simple fact that if research is not connected to one or more of the above worlds, then such research does not get beyond mumblings of the researcher to him or herself. To illustrate, say the researcher develops, in a majestic feat of innovative research, a new algorithm for the solution of a hitherto intractable problem. Where is the connection to any of the worlds? If the algorithm is not going to be used in work that would yield solutions to problems, then, yes, the work and its ethical implications would remain in a state of suspended animation (where so much of research resides). But if this is really a breakthrough, then surely the algorithm will be applied in the solution of problems that have previously been insoluble. And these problems, if they manifest in none of the mentioned worlds, are they then really problems? Ah, but what about purely mathematical problems? Surely, they can be purely intellectual problems, with no bearing on any world, here, now or in the future? But that would mean that the world of mathematics is disconnected from humans, the playing field of the gods, where humans are just allowed the occasional off-the-bench impact period of play.

Herring [1] emphasizes the intricate connection between research ethics and research objectives and methodology. She points out that different types of research imply differences in the possible relationships between researcher and subjects and, consequently, in research ethics.

The following classification of research by Bakardjieva and Feenberg [2] illustrates her point:

- Naturalistic research: the researcher wants to disturb the "natural order" of the research object as little as possible, ideally, not at all.
- Participatory research: the researcher wants subjects to consciously reflect on the research questions and contribute to the research.
- Consensual/"Understanding" research: the researcher's aim is to reconstruct the

researcher's aim is to reconstruct the subject's own view of the world.

• Critical research: the researcher puts subjects' performance to a test/judgment under certain principles (of equity, fairness, ideological distortion, etc.). If it is agreed, then, that no research in any of the categories given above, can claim immunity of having an impact, however indirect, on one of the worlds (and to the sceptical reader it might be pointed out that he or she could, instead of the "worlds" mentioned, think about Popper's three worlds if the world of animals and the inanimate world do not seem of interest), then the question that has to be addressed is about what the researcher should do to behave ethically. This is taken up next.

2. Ethical norms and guidelines

Most universities require research proposals of masters and doctoral students to be submitted to a Faculty Ethics Committee for approval before the student is allowed to proceed with the research. Likewise, researchers in general would be required to submit their proposals, when funding from a research agency is concerned, to such scrutiny. Apart from the fact that this leaves open a gap for researchers who are "just doing research", it is a sad fact that scrutiny by a committee absolves the researcher from any serious considerations about the ethical nature of the research or the method and methodology employed. Lip service is paid to ethics, and it all just becomes a matter of getting the approval of the committee. The committee itself, composed of a number of unlucky individuals who serve their stint on the committee, would typically just apply a number of ethical norms and guidelines to proposals submitted to them. The researcher or potential researcher, it could be said without generalizing too much, does not have any serious thought about ethics as such, and if questioned, would find it very difficult to explain his or her philosophical views on ethics. At most the researcher would offer a couple of rules of thumb that have been acquired along the way.

Let us follow this researcher, representing quite the majority of researchers, and who shall henceforth be called our hypothetical researcher. What are these "philosophical views on ethics", and why would they influence the ethical behaviour of our researcher?

3. Philosophical Views on Ethics

Generally speaking, there are two prevalent philosophical views on ethics: the

consequentialist view, and the deontologist view.

Consequentialism refers to those ethical theories which hold that the consequences of a particular action form the basis for any valid moral judgment about that action. In other words, the end justifies the means. Thus, a morally right action is an action that produces good consequences.

Deontological ethics is an approach that focuses on the rightness or wrongness of actions themselves, as opposed to the rightness or wrongness of the consequences of those actions.

A particular form of consequentialism is utilitarianism, propagated in the 19th century by Jeremy Bentham, and by his secretary James Mill and James' son John Stuart Mill. Much of our modern society follows. unwittingly, a utilitarian approach, the ethical doctrine that the moral worth of an action is solely determined by its contribution to overall utility. Utility, in simplest terms, refers to the greatest good for the greatest number of Clearly, a utilitarian argument people. justified the dropping of atomic bombs on Hiroshima and Nagasaki to end World War II: an allied invasion on the Japan mainland, it was argued, would have cost many more lives overall than the 250,000+ people killed by the two bombs.

The most famous deontological theory of ethics is that of the German philosopher Immanuel Kant. The discussion of Kant's deontology is taken from [3]. There are several reasons why Kant's theory of ethics can be considered to be deontological. "First, Kant argues that to act in the morally right way, people must act according to duty. Second, Kant argued that it was not the consequences of actions that make them right or wrong but the motives of the person who carries out the action. Kant's argument that to act in the morally right way, one must act from duty begins with an argument that the highest good must be both good in itself, and good without qualification. Something is 'good in itself' when it is intrinsically good, and 'good without qualification' when the addition of that thing never makes a situation ethically worse. Kant then argues that those things that are usually thought to be good, such as intelligence, perseverance and pleasure, fail to be either intrinsically good good or without qualification." Pleasure, for example, is not

good without qualification, because when people derive pleasure from watching someone suffering, this makes the situation ethically worse. He concludes that there is only one thing that is truly good: a good will.

The consequences of an act do not determine that the actor has a good will, since unintended good consequences could follow from an act that was actually motivated by a desire to cause harm, and similarly, bad consequences could follow from a wellintended act. Instead, Kant claims, "a person has a good will when he or she 'acts out of respect for the moral law'. People 'act out of respect for the moral law' when they act in some way because they have a duty to do so. So, the only thing that is truly good in itself is a good will, and a good will is only good when the willer chooses to do something because it is that person's duty. Thus, according to Kant, goodness depends on rightness."[op. cit.]

What enables us to make moral decisions? Kant refers to the capacity which allows us to make moral decisions as pure practical reason, "which should be contrasted with pure reason - the capacity to know; and with mere practical reason -which allows us to interact with the world in experience. Hypothetical imperatives guide action in an instrumental way, or in other words, they tell us about which means will be best to achieve our ends. But hypothetical imperatives do not tell us anything about the ends we should choose. On the other hand, Kant considers the *right* to be prior to the good. What is right to do cannot be determined with reference to anything empirical or sensuous; rather, they can only be determined by pure practical reason. Reason, separate from all empirical experience, is capable of determining the principle according to which all ends can be determined as moral, and it is this fundamental principle of moral reason which is known as the categorical imperative." [4]

Kant gives three formulations of the categorical imperative, and we will not pursue the successive development of these, but just state them:

First formulation: "Act only according to that maxim whereby you can at the same time will that it should become a universal law."

Second formulation: "Act in such a way that you treat humanity, whether in your own person or in the person of any other, always at the same time as an end and never merely as a means to an end."

Third formulation: "Therefore, every rational being must so act as if he were through his maxim always a legislating member in the universal kingdom of ends."

Another concept that Kant introduces, is that of the 'kingdom of ends'. This refers to the 'union of different rational beings in a system by common laws'. "Since it is through laws that consequences are evaluated based on their universal validity, he states that we can conceive of a systematic whole that includes both the rational beings as ends in themselves, rather than simply means to other ends, and the unique ends which these rational beings may aspire to. This systematic whole is the kingdom of ends." [5]

"People can only belong to the kingdom of ends when they give universal laws unto it, and are subject to those same laws, and all laws within it. Such rational beings must regard themselves simultaneously as sovereign, when making laws, and as subject, when obeying them. Morality exists in the action of all universal law which can make the kingdom of ends possible." (*op. cit.*)

Given these different philosophical views, what view should a researcher adopt? Is there a 'correct' view? Obviously not, and the best we can say is that it is more important that the researcher should adopt *a* view, as that this is necessarily the 'right' view. What is unethical, is to proceed without adopting any view, in the sense that the researcher does not even know that he or she does not know that there are indeed philosophical views.

To see how our hypothetical researcher is affected by all of this, we will assume the deontological viewpoint, and apply the third formulation of the categorical imperative.

4. The Unethical Researcher

While many researchers are not aware of this, all research requires the researcher to make certain choices and assumptions. These pertain to the research approach followed, the method. research and the research methodology. Perhaps idiosyncratically, I put 'method' higher the level than the 'methodology' level, with the latter referring to the collection of research data, and the former to the way in which the research would be conducted, such as case study research, action research, modelling and simulation, etc.

Clearly, the ethical norms and guidelines enforced by ethical committees pertain to the methodology level, and for the sake of the argument pursued in this paper, we may assume that our researcher acts ethically in accordance with the rules, norms and guidelines.

The (un)conscious decision about the research method that will be followed is tied intrinsically to the methodology level, and can therefore also be regarded as ethically safeguarded. This leaves us with the research approach, which, in the absolute majority of cases, is not a conscious decision of the researcher but simply an acceptance of the *status quo* – this is how research is done and has always been done.

What are these research assumptions? They are assumptions about the nature of the things that the researcher will investigate, and how the researcher will obtain knowledge about these things, and communicate this to the scientific world. When people are directly involved in the research (as in the last three categories of research given in Section 1), then the researcher should also make assumptions about the nature of these human beings: do they act in a determinist way, or can their actions be described as voluntary?

The assumption referred to above, or at least the first two sets of assumptions, are called ontological and epistemological assumptions, respectively. It says a lot that most researchers would not recognize these terms, or, worse still, regard them as merely belonging purely to the philosophers of science.

Back to our hypothetical researcher, who does not know or care about these assumptions and just *do* research. Can we apply the third formulation of Kant's categorical imperative and argue that this researcher acts unethical?

Before we undertake this analysis, we should first take note of Kant's distinction between perfect duty and imperfect duty when considering the duties imposed by the third formulation of the categorical imperative.

"According to his reasoning [4], we first have a perfect duty not to act by maxims that result in logical contradictions when we attempt to universalize them. The moral proposition A: 'It is permissible to steal' would result in a contradiction in conceivability: the notion of stealing presupposes the existence of property, but were A universalized, then there could be no property, and so the proposition has logically annihilated itself.

"Second, we have imperfect duty, which is the duty to act only by maxims that we would *desire* to be universalized. Since it depends somewhat on the subjective preferences of humankind, this duty is not as strong as a perfect duty, but it is still morally binding."

Interpreting the third formulation of the categorical imperative, we can therefore say that we ought to act only by maxims which would harmonize with a possible kingdom of ends. We have *perfect duty* not to act by maxims that create incoherent or impossible states of natural affairs when we attempt to universalize them, and we have *imperfect duty* not to act by maxims that lead to unstable or greatly undesirable states of affairs.

So, if the maxim of our researcher is 'do research as it has always been done; it is not necessary to worry about ontological and epistemological assumptions', then surely we can argue that attempts to universalize such a maxim would create incoherent or impossible states of affairs in research. Imagine a research world where no debate takes place about the objects of research, and their true nature, and where no considerations are given to how new knowledge is created, and what the nature of such knowledge is. But isn't this exactly what happens in the majority of research? Hasn't our premise been that our hypothetical researcher is not a lone ranger, but indeed a representative of quite a large army of researchers?

Let us be a bit more careful in analysing the maxim of our hypothetical researcher. The maxim that there is no need for ontological and epistemological assumptions presupposes the existence of ontology and epistemology, but if the maxim were universalized, then there is no ontology or epistemology in research, and the maxim annihilates itself.

So, if our researcher acts ethically, in accordance with his perfect duty, then he should make ontological and epistemological assumptions concerning his research. He also has to act in such a way that he does not create a state of affairs in research that could be characterized as highly undesirable and unstable, by, for example, making derogatory remarks about researchers who worry about their ontological and epistemological assumptions. The ethical researcher thus has an obligation to think about his ontology and epistemology, and cannot cast this aside as inconsequential and of no importance for his research. The kingdom of ends, which is the scientific pursuit, demands this perfect duty.

It is therefore an inescapable conclusion that most of researchers behave unethical with regard to this important aspect of research, however much they do pay attention to the superficial aspects of 'do no evil'. What should they do to redeem themselves?

5. To be an Ethical Researcher

Clearly, the maxim of our hypothetical researcher who has been unmasked as an unethical researcher, cannot do. Let us try out a different maxim, such as: 'Do research with a thorough understanding of what research is, and make careful ontological and epistemological assumptions'.

For the purposes of this discussion, Kant's 'kingdom of ends' is here understood to be, as mentioned above, the scientific pursuit. This 'kingdom' is a systematic whole of rational researchers as ends in themselves, and the unique ends – scientific 'truths' – that the researchers aspire to. Researchers belong to this kingdom of ends when they form universal laws for the pursuit of science, and regard themselves as subject to those same laws and all other laws within the systematic whole that is the pursuit of science.

It now remains to show that the maxim of our reformed hypothetical researcher harmonizes with the scientific pursuit.

When research is done with a thorough understanding of what research is, it means that the researcher understands the implications of 'making a contribution to knowledge in a particular domain of science' – the objective of any research. This is in harmony with the scientific pursuit, which is about accumulating knowledge of an ever refined nature about topics of interest.

When 'making a contribution' is fully understood, the researcher would know how to *construct* a contribution, and not to let it happen by accident, which would not qualify as doing science. But fully understanding how to construct a contribution means that the researcher understood the process of epistemology – the construction of knowledge. And can the researcher, in the process, escape giving account of his or her ontological beliefs about the 'things' about which he or she constructs knowledge? Not likely, since to know how to construct knowledge about 'things', the researcher has to understand the 'things' and their true nature.

Our reformed researcher could therefore change his or her maxim to simply 'Do research with a full understanding of what research is'.

It is a sad indictment of the status of research to say that most researchers do not live by this maxim. They do research by simply following examples of previous research – a process started early on when they are led up this garden path by their supervisors at the masters and doctoral level, and continue with this approach in their own research careers, again passing the doctrine on to their students. Sure, there would be the odd one out who would stop and proclaim: "What is this? What are we doing, and why are we doing it like this?" But the majority just happily continue to perpetuate an unethical way of doing research.

It is clear how all of this could be changed: introduce courses about research in which the research process, as an approach to the construction of knowledge, is discussed and analysed. The 'research methodology' courses that are typically dished up to students simply introduce them to descriptive and inferential statistics and do not address the essence of research. On the contrary, the focus of such courses flies in the face of the essence of what research is by pretending to address 'research' when merely the processing of research data is Such attempts at introducing addressed. students to research could best be totally discarded, leaving it to the ingenuity of the student and supervisor to discover when he or she requires assistance with the analysis of masses of data: every university offers statistical services to researchers and students.

Instead, research methodology courses should be taught as ways of critically thinking about the construction of knowledge, not as un-involved and 'objective' researchers dealing with inanimate structures and mere data, but as human beings actively creating or constructing part of the world others will have to live in, and live with. Phillips [6] reminds us that "... for the ancient Greeks, there was no distinction of any sort between duty towards others and duty towards self. Every act [compare a *research act*, today], every deed in ancient Greece was committed by a member of its citizenry with a keen mindfulness of its impact on everyone else. Each recognized that one could not attain personal excellence at the expense of others, but only by paving the way for them to attain it as well." In hard scientific terms this does not mean a researcher will not do research unless others are capable of the same, but it does mean that research is simply another act of social (reality) construction, and as such cannot take place in isolation (even in theory) of the rest of society.

Our researcher, then, becomes an ethical researcher if he or she believes in making a contribution to research, by *constructing* that furthermore, contribution, and if our researcher can see that this (contributive) knowledge construction cannot be justified if it is artificially constructed in isolation of the rest of society. An ethical researcher need not necessarily be concerned with philosophical questions of morality, but he or she does need to be aware of what Von Glasersfeld [7] called the three presuppositions without which "you cannot start any construction." The researcher, as an organism/system that needs to function alongside other organisms/systems, needs [a] memory, [b] values, and [c] the ability to reflect. None of these suppositions are realizable to the system without other systems being involved. To be true to his or her own (constructive) system, a researcher cannot help but be intrinsically ethical.

References

- [1]Herring, S. (1996). Linguistic and Critical Analysis of Computer-Mediated Communication: Some Ethical and Scholarly Considerations. *The Information Society*, 12(2): 153-168.
- [2]Bakardjieva, M. and Feenberg, A. (2000). Involving the Virtual. *Ethics and Information Technology*, 2, 233-240.
- [3]Wikipedia, Deontological ethics.
- [4] Wikipedia, Categorical imperative.
- [5] Wikipedia, Kingdom of ends.
- [6] Phillips, C. (2004). Six Questions of Socrates. New York: WW Norton.
- [7] Von Glasersfeld, E. (1991). *The Construction of Knowledge*. <u>http://www.univie.ac.at/constructivism/EvG/papers/166.pdf</u>

Acknowledgement

The contribution of Johann van der Merwe, who acted as reviewer of this paper, is gratefully acknowledged.