A journal interested in the relationship of technology and human beings should take an interest in all aspects of humanity and how it is affected by technology. It therefore must consider questions of ethics and morality, as these are of pivotal importance in many situations. The individuals who contribute to the *Journal of Technology and Human Interaction* in their roles as associate editors, members of the editorial review boards, authors, or commentators reflect this interest. Also, the first issue of the journal addressed several topics of ethical concern, such as gender imbalances in information systems, the identification of stakeholders, questions of religion and privacy. The journal thus is well placed to develop and further the debate on these questions.

What I would like to discuss in this editorial preface, is the relationship between research in IT/IS and ethics. There are two established aspects of this relationship: the ethics of doing research and ethics as a research subject. The latter takes ethical issues as a point of interest and researches them from an academic point of view. This can mean that the researchers do empirical research on practiced morality, conceptual research on ethical ideas, or that they try to walk the tightrope of connecting the two by offering ethical advice on moral issues. As a point of interest, one should note that this last approach can lead to profound problems which are exacerbated by different research cultures. Scholars interested in empirical work on moral matters often have an information systems background and use sociology as their reference discipline. This allows them to observe human behaviour and establish what users of IT believe to be right and moral. Conceptual researchers who are more interested in ethical theories and their relationship to IT typically have a background in philosophy and much less of an interest in empirical observation. Both sides often agree that they need to be informed by each other. The empirical researcher on morality will need some knowledge about ethical theory, and the ethical theorist requires some knowledge of moral realities to see whether his or her theories are connected to the “real world.” However, this can lead to the attempt to use empirical findings to create ethical rules which, in turn, can quite easily lead to committing the naturalistic fallacy. The naturalistic fallacy, which most philosophers have recognised since Hume, stands for the problem of drawing conclusions from the “is” to the “ought.” Most philosophers agree that this is not possible, which then raises the problem of how empirical knowledge of moral behaviour and ethical theories can or should be linked.
While ethics and morality as subjects of IT research thus produce problems of a specific kind, which other IT/IS research does not have to face, it is nevertheless a fertile area. There are academic sub-disciplines such as computer ethics and information ethics, which deal with these matters and produce a wealth of research on topics such as privacy, surveillance, intellectual property, access, power, data quality, social impact of technology, and others. Most of these topics are mirrored in mainstream IS research, and one can find discussions of these issues in most major journals. One can thus conclude that ethics and morality are well-established and recognised objects of IS and IT research.

Similarly, there is a strong tradition of considering the ethics of IS/IT research. This has to be seen in conjunction with the drive to institutionalise research ethics in all social sciences, and even beyond. This tendency is a result of the perceived shortcomings of researchers who did not take their perceived moral obligations seriously. Such misbehaviour ranged from the catastrophic transgressions of medical scholars in concentration camps to less serious offences where researchers did not inform their subjects correctly or exceeded the bounds of what public opinion held acceptable. As a result, many Western research communities have instituted rules and procedures which are meant to guarantee the moral acceptability of research. Research proposals are routinely vetted for potential ethical problems, and ethical risk assessment is done as part of the research process. IS/IT research is usually subjected to these procedures. There are arguably some special problems that can arise in IS/IT research, such as the question of ethical problems in Internet research. These problems are taken seriously and discussed. While we cannot take for granted that they are solved, we can again state that they are part of the established research process (cf. Ess, 2002).

We can thus summarise what was said so far by saying that ethics and morality as research objects, as well as the ethics of doing research, are regarded as worthwhile subjects of consideration in IS/IT research. There is another area where IS/IT research meet, where the attention to ethical issues is spurious at best. This area is the ethical implication of research approaches or paradigms, which I will discuss for the rest of the editorial.

**ETHICAL IMPLICATIONS OF RESEARCH “PARADIGMS”**

In the discussion of research approaches, we find a general agreement that these can be described as “paradigms” of which there are three: positivist, interpretivist, and critical (Chua, 1986; Orlikowski & Baroudi, 1991). I should admit that I believe the term “paradigm” to be misleading in this context. Thomas Kuhn (1996) introduced the term to the debate about the philosophy of science to explain the non-linearity of scientific progress. In contemporary IS research, it means something different. Here it stands for a set of assumptions about ontology, epistemology, and methodology which characterise a certain approach. While this is in some respects a useful categorisation of research, it can also be misleading. The implicit assumption of talking about three research “paradigms” seems to be that the paradigms are (1) mutually exclusive and (2) complete. This means that the choice of one paradigm will rule out the use of other paradigms, and that researchers have only the three paradigms to choose from and no other alternatives. I believe both implications to be wrong. There is large overlap between different aspects of the paradigms. In terms of epistemology and methodology, for example, it is hard to find a difference between interpretive and critical research. One can also imagine critical research that uses positivist
approaches. The mutual exclusiveness of the paradigms is thus not given and is one of the reasons for the interpretivist/positivist debate, which may not always be helpful for the field.

At the same time, one should recognise that the three paradigms do not cover all possible approaches to research. They are strongly linked to sociology as a reference discipline (cf. Burrell & Morgan, 1979) and thus have a strong empiricist leaning. That means that the important conceptual/philosophical research, which has a central role in ethical research, is not covered by the idea of paradigms at all.

The concept of research “paradigms” can thus be highly misleading and can hide possible choices researchers can make. I will still use it in this editorial because it is widely established and allows a differentiated discussion of ethical implications of approaches to research. The reader should only keep in mind the above caveats when thinking about research paradigms.

I will now consider whether the paradigms are of ethical importance in themselves or whether they contain value choices or ethical presuppositions that researchers should be aware of.

ETHICS OF CRITICAL RESEARCH

Critical research is the paradigm which, according to Orlikowski and Baroudi (1991), is the least frequently used one in IS research. Recently there has been increased activity in critical IS research as witnessed by the first two workshops on Critical Research in IS, the participation by IS researchers in Critical Management conferences, and several publications and special issues. This can be interpreted as meaning that critical research is increasingly recognised as a legitimate way of doing research in IS. It is nevertheless still far away from the mainstream, and examples in leading IS journals are rare.

In terms of the relationship between a research approach and ethics, critical research is probably the easiest paradigm to classify because it has a clear ethical side. Critical research used to be inspired by Critical Theory or Critical Social Theory, which usually referred to Marxist-inspired theories, often those of the members of the Frankfurt School. Increasingly, critical research draws upon other sources of theory, which are often summarised under the heading of “postmodernism.” Given that one can argue that Critical Theory — at least in its current version as represented by the writings of Karl-Otto Apel and Jürgen Habermas — can be called “modernist,” we thus have two possibly contradictory sources of theory in the field. The scope of critical research has therefore become quite wide, and it is not always easy to say what exactly is critical (Brooke, 2002).

Critical research can nevertheless be defined by at least two characteristics: an agonistic view of society and a critical intention to change the status quo, to make a difference. The agonistic view of society is often inspired by Marx, and it posits that relations between individuals and groups are fundamentally difficult and lead to conflicts. While Marx emphasised the difference between social classes, modern critical researchers have widened their interest to include conflicts between, for example, the more and less developed world or between genders. Based on this conflictual view of society, critical research wants to change the status quo, expose conflicts, and lead to a better society (Ngwenyama & Lee, 1997; Alvesson & Deetz, 2000; Trauth, 2001).

By leaving the traditional descriptive course of science and research, critical research implicitly has to rely on ethical assumptions. Critical research, by wanting to make a difference and changing social reality, must make normative suggestions as to
the course these changes should follow. This does not mean that every piece of critical research must be carried by a complete utopian vision, but it does mean that the researchers need to have an idea where society should move to. This is a premise of critical research that must be based on ethical considerations. I have already stated that since Hume most philosophers agree that normative statements cannot be deduced from descriptive statements — that “ought” cannot follow from “is.” By suggesting that things ought to be different, critical research thus has to refer to normative ideas that are by definition not part of empirical research.

The probably best example of this is the idea of empowerment and emancipation. Critical research, at least in the Habermasian tradition, which is probably prevalent in IS research, posits that research should help empower people and emancipate them (Alvesson & Willmott, 1992; Lytyinen & Hirschheim, 1988; Hirschheim & Klein, 1994; Cecez-Kecmanovic, 2001). This is quite clearly an ethical stance. No empirical observation can inform us that individuals should be empowered and emancipated. Rather, it is an ethical premise that is built into the basic assumptions of critical research. For the purpose of this editorial, critical research is thus an obvious case: critical research is ethical research by the very definition of the term.

ETHICS OF POSITIVIST RESEARCH

At first sight, it would appear that the relationship between positivist research and ethics is even easier to define than in the case of critical research: there does not appear to be any. Positivist research can of course research ethical matters, and it also has to follow ethical standards when pursuing research questions, but it appears to be neutral in terms of ethical implications of the paradigm itself.

The reason for this is the realist ontology upon which positivist research is built. Most scholars agree that one of the defining characteristics of the positivist attitude is that it believes in the objective existence of reality, which is independent of the observer (Darke, Shanks, & Broadbent, 1998; Varey, Wood-Harper, & Wood, 2002; Myers & Avison, 2002). This ontological realism implies that the observer can make true statements by describing the world as it is. Truth is usually understood as a correspondence between statement and the state of affairs. The role of the observer is to note reality and avoid interfering with it, in order not to falsify results. Research has the purpose of detecting laws that can be used to predict future occurrences. While this brief description may be more applicable to natural sciences than to social sciences, positivist IS research does try to adhere to it as much as possible, while conceding that in some respects, such as observer neutrality, this is hard to do.

Ethics plays no obvious role in this understanding of positivist research. The approach could thus be characterised as “a-moral.” This means that morality is simply not relevant to the activities of research. It should be misunderstood to mean “immoral,” which would be against moral rules. Positivist research seems to be value neutral. And this is exactly what many positivist researchers, mostly in the natural sciences, but also some in the social sciences, including IS, would say.

However, the ideas of value-neutrality and a-morality of positivist research are misleading. There are at least three points where ethics enters the foundations of positivism: its Enlightenment background, opportunity costs, and its inherent conservatism. In order to see the ethical quality of positivism, one should look at its history. It came to prominence in the 19th century as part of the Enlightenment movement that wanted to shape
the world using rational means to improve the lot of individuals and society. Positivism and the related approach of empiricism were part of the attempt to overcome obscurantism and reactionary ideology. It wanted to replace blind faith by knowledge and science. In its own time, positivism was thus a highly critical approach (Hausman & McPherson, 1994; Chomsky, 1998; Wynn, 2001). And much of the progress that we can see if we compare modern Western societies with the states they were in 150 years ago can be accredited to positivist research and science.

At the same time, positivist research requires decisions about the allocation of resources which cannot be ethically neutral. A positivist IS scholar who decides to research how CIOs can improve their decision processes makes the implicit decision not to study other issues, such as the digital divide, gender issues, or other more obviously morally relevant questions. At the same time the researcher spends resources that are often tax based and whose use requires ethical justification.

Finally, positivist research has an intrinsic ethical side in that it takes the world for granted as it is and attempts to limit itself to description. Doing this means that the status quo is privileged over alternative realities. This, in turn, leads to a fundamentally conservative attitude of positivist research. Where critical research explicitly states that it wants to change reality, positivism implies that reality as it is is good and worth studying. Both approaches thus have a view of reality that can have moral implications and require ethical justification. The main problem for positivism is that these moral implications are often hidden by the apparent naturalness of the given reality and that positivists are thus less forced to consider the ethical justification of their position than critical researchers.

**ETHICS OF INTERPRETIVIST RESEARCH**

In many respects, interpretivist research seems to be located between positivist and critical research. It shares the critical scepticism regarding realist ontology, but at the same time follows the positivist tenet that research should be primarily descriptive. Unlike positivism, it believes that social relationships require a knowledge of specific contexts and which can rarely be quantified. It is aware of the role of the researcher in the construction of research findings, but still believes that interacting with others can produce privileged knowledge.

The role that ethics can play in interpretive research can thus be described using some of the arguments stated above. Just like positivist research, interpretivist research, even if understood as predominantly descriptive, can never be value free or a-moral. The very act of deciding on a research topic, and committing resources to investigate it, is already a value choice with moral implication which requires ethical justification.

The research methodology and epistemology that interpretivist researchers use have an ethical quality. Interpretive research is often characterised as relying on two philosophical traditions, namely phenomenology and hermeneutics (Boland, 1985; Galliers, 1991; Butler, 1998; Beavers, 2002). Phenomenology is the philosophical doctrine based on Husserl’s theories that we should attempt to access the essence of our objects of observation. This does not imply an ontological realism, however, but recognises that perception is an intentional activity by the observer. This idea has been developed by Heidegger and others to emphasise the impact the situation of human beings has on perception. Humans can never observe objectively and in a detached manner. We are always already in a situation, we are embodied, we know of
our coming death, we are surrounded by others who affect our life-world. The essence or meaning of phenomena is thus never a completely idiosyncratic experience, but always socially constructed, or at least affected by interaction.

But how do we know what the others perceive as meaning, as the essence of phenomena? This is where hermeneutics as the art of understanding comes in. Hermeneutics originally aimed to determine the true meaning of texts, notably the bible. Under the influence of Heidegger, Gadamer, and others, it has developed in such a way that it now emphasises the social construction of meaning. An important aspect of this is the hermeneutic circle (Gadamer, 1990). This means that we can only understand a text in the light of our prior knowledge. This knowledge is then extended through the understanding of the text, so that knowledge base and textual understanding are in a circular relationship.

What does this tell us about the ethics of interpretive research? There are many possible answers to this. One promising approach is to look at the concept of the “other,” which dominated much of French philosophy of the second half of the twentieth century. One philosopher who developed this in such a way that may be fruitful for information systems researchers is Paul Ricœur. Ricœur is often credited with extending the hermeneutic understanding of texts to other forms of communication and to action. In information systems research Ricœur is usually regarded as a hermeneutics scholar. What is often overlooked is that, intrinsically linked to his thoughts on hermeneutics, he also developed ethical theory. For him ethics is based on the other, who is removed from the self, but who constitutes an ethical obligation and who allows for responsibility ascription. When interacting with the other, we need to pay attention to three aspects of ethics: First, there is the idea of a good life that is the basis of all ethical considerations. Second, there are the moral rules that can be deducted from the good life. Finally, these rules have to be prudently applied to real-life situations (cf. Ricœur 1990, 1995, 2001).

For the interpretive researcher this means that the interaction with others that phenomenology as well as hermeneutics require cannot be ethically neutral. By trying to understand the meaning produced by research subjects, the researcher automatically enters in a non-neutral relationship with them. This means that there is a vision of the good life. The researcher can choose to take this vision seriously and interact with it or not. Either way, this is a moral decision. On the basis of the good life, there are moral rules, which the researcher cannot simply ignore. Finally, there is the question of the prudent application of norms, which in many cases will affect information systems research. Briefly, by choosing to undertake interpretive research, the researcher implicitly recognises the other as a fundamentally equal human with rights and obligations. This implicit recognition then leads to ethical consequences that Ricœur’s theories may help us understand.

CONCLUSION: ETHICS AND RESEARCH ON IT

I have used this editorial to ask the question whether there are links between ethics and research in information technology or information systems. By using the widespread distinction between three research paradigms, I have argued that in all three cases ethics is fundamentally linked to research, albeit in different ways. Thinking this through, I come to the conclusion that there is no value-neutral research in general, and particularly not in social sciences such as information systems. Currently, this is not a widely shared perception. Most research in IS does not reflect explicitly on its ethical dimension. The ques-
tion arising from these considerations is thus: how can we ensure that ethics is given the place it deserves in information systems research? While I have no ready-made answer to this, I hope that the Journal of Technology and Human Interaction will widen the debate about the topic and help us understand the ethical issues better. It certainly aims to provide a platform for those researchers who are conscious of the ethical implications of their activity and hopes to attract research from this community of researchers.

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