

In a famous essay, "The Dualism of Human Nature and Its Social Conditions," Durkheim invoked "the old formula *homo duplex*," explaining that "Far from being simple, our inner life has something that is like a double center of gravity. On the one hand is our individuality—and more particularly, our body in which it is based; on the other is everything that is in us that expresses *something other than ourselves*" (1973 [1914], p. 152; emphases added). Durkheim's deeply ambivalent relation to "pure" science originates in his divided loyalties as expressed in this essay: On one side stands the scientist looking for "laws" of social life; on the other is the ethicist and philosopher of culture, whose main goal is to identify, albeit via strictly scientific methods, the "something other" that encourages people to lay aside their natural egocentricity and embrace values that often conflict with their own best, individualized interests.

From his earliest work in *Division of Labor* and *Suicide* up through his masterly *Elementary Forms*, Durkheim always sang the praises of modern science and insisted that sociology be imbued with rigorous positivism. Yet never far away from his gaze were the "larger questions" that had troubled ethicists since Plato and Confucius, culminating in Leo Tolstoy's famous question: "What constitutes a life worth living?" To this pressing query, science has no answer, as Durkheim well knew.

In addition to his virtuosic sociological research, Durkheim also established the first scholarly journal of sociology in France, trained an entire generation of anthropologists and sociologists (many of them, along with his son, slaughtered in World War I), and wrote a posthumously published history of education in France that remains a standard work. Given all these scholarly achievements, many argue that Durkheim is indeed the father of modern sociology and the first to lay out in exact terms how the sociological viewpoint differs from that of its allied disciplines.

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SEE ALSO *Communitarianism; French Perspectives; Parsons, Talcott; Professions and Professionalism; Sociological Ethics.*

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DUTCH PERSPECTIVES

In the Netherlands, various styles of applied ethical research can be distinguished. They have resulted in "best practices" that formerly regarded each other as competitive, but tend to see themselves as complementary in the early twenty-first century.

Two Preliminary Observations

A first general observation is historical. Twenty centuries ago, the border of the Roman Empire followed the Rhine, thus dissecting the area that later was to become the Netherlands into a southern part (inside the empire) and a northern and western part (outside the empire). This division has written itself into the Dutch cultural landscape in an astonishingly obstinate manner. It is still noticeable today, in terms of dialect, culture, manners, ethics, and religion. Whereas before the onset of secularization the south was predominantly Catholic (that is, oriented toward "Rome"), the north and west were predominantly Protestant.

This difference in cultural geography continues to be visible in the domain of ethics. In the south, ethical research tends to be oriented toward and influenced by

Continental (notably German and French) intellectual developments and trends. Thus, ethicists from this area are influenced mainly by hermeneutical or phenomenological approaches. Ethicists from the northern and western part, however, are more likely to be influenced by analytical approaches and debates. They often subscribe to theories and views that dominate the Anglo-American spheres of influence. Although the difference has become less obvious than it was in the 1980s, the two ethical profiles remain distinguishable.

A second observation has to do with the international status of Dutch ethics. It has been said that Dutch philosophy is the philosophy of the country that possesses the largest harbor in the world, namely Rotterdam (Nauta 1990). And because ethics is a special discipline within the broader field of philosophy, this goes for ethics as well. What does it mean? One might say that Dutch ethicists are better at importing and exporting than at producing philosophy. In terms of style, the Dutch are neither as "profound" as the Germans nor as sensitive to new trends as the French. They do have a special talent, however, for intellectual transfer. Their mastery of international scholarly languages such as English, German, and French also plays a role here. Dutch philosophers often serve as intellectual intermediaries. This is, of course, a generalization, but a systematic review of academic performance will show that as a rule the Dutch tend to focus on assessing, processing and connecting ideas rather than on originating them.

Three Styles of Ethical Research

Three styles of ethical research exist in the Netherlands. They start from different understandings of what ethics is.

- (1) ethics = analyzing and solving moral problems
- (2) ethics = intellectual reflection
- (3) ethics = moral conflict management

According to the first option, which is based on a more or less Anglo-American approach, an ethicist is someone who analyzes moral problems and formulates possible solutions, usually by applying a set of moral principles (ethical input) to problem cases (solutions as output).

The second option reflects a more hermeneutical or Continental way of thinking. An ethicist is seen as someone who tries to interpret certain forms of moral discourse by situating them in a broader cultural and historical perspective. The focus is on understanding, rather than on solving, problems. The philosophical ethicist works toward a "diagnosis" rather than a "solution."

The third option entails a more pragmatic approach. The ethicist identifies stakeholders and value perspectives, and works toward consensus formation, based on stakeholder participation, by means of interviews, workshops, and similar techniques.

These three ways of doing ethical research entail different views on the relationship between expert knowledge and public knowledge. According to the first option, ethicists are experts, perhaps even "ethical engineers" (Van Willigenburg 1991). They have learned to analyze moral problems in a professional manner. Consistency is important, even if this means that ethicists distance themselves from common intuitions and conventional morality.

According to the second option, however, the ethicist's expert knowledge is knowledge of moral traditions, of types of discourse, or of fundamental cultural attitudes that are noticeable in the ways in which moral debates evolve and problem cases are being framed and presented (Van Tongeren 1994). The ethicist relies on erudition rather than analytical tools. The attention is directed toward fundamental issues rather than concrete problems. In other words, the problem cases at hand are regarded as exemplifications of broader, cultural issues.

According to the third option, it is not the ethicist's job to add new insights, but rather to build on the knowledge, values, and intuitions of the stakeholders involved. Rather than performing desk research, the ethicist enters into dialogue with others, inviting them to articulate and clarify their (tacit) views. The ethicist's expertise is of a pragmatic and intermediary nature (Keulartz et al. 2002). Ethicists have at their disposal a toolbox for moral deliberation and moral conflict management. Their input in the decision-making process does not come from ethics as such, but from the views and experiences of stakeholders themselves.

Through the late 1990s, the first style of doing ethical research dominated (the public image of) institutionalized ethics in the Netherlands, whereas the second style was more prevalent in academic circles. Since the early 2000s, the pragmatist approach is gaining ground. In fact, Dutch ethicists tend to be flexible when it comes to method in the early twenty-first century. To some extent, they are willing and able to use all three models, depending on context. Congenial with the pragmatist turn, but not exactly identical with it, is the *empirical turn* in ethics. More and more often, research in applied ethics involves the collection of empirical data and the use of tools borrowed from the social

sciences such as interviews, questionnaires, and participant observation.

Ethics of Science and Technology: Examples

In the Netherlands, as elsewhere, moral disputes tend to arise in response to technological changes. Initially, the growing interest in ethical research was associated with medical or clinical ethics. An interesting case is the famous Dutch euthanasia debate that started around 1970 in response to the dramatic increase of medical technology and therefore of treatment options with which many lives, that previously would have had no chance of survival, could now be saved, or at least prolonged. The debate was triggered by Jan Hendrik van den Berg (1978), a physician who was also trained as a phenomenologist, and therefore a representative of Continental philosophy. Moral problems involved in end-of-life decision were interpreted as indications that something was fundamentally wrong with current views and attitudes toward life and death *as such*. Soon, however, the debate was taken over by applied ethicists who subscribed to an analytical approach. On the basis of the principle of autonomy, they argued in favor of the patients' right to refuse treatment or even to request that physicians end their lives. Eventually, the ethical debate over euthanasia shifted toward a more pragmatic and empirical approach: How are end-of-life decisions actually taken, and by whom, how often, and on what grounds? Last but not least, what kind of technical contrivances co-influence decisions of this type?

During the 1990s, the attention of professional ethicists in the Netherlands drifted away from euthanasia. Reproductive technologies, biotechnology, genetic modification of organisms, and animal research became important items of concern. Even more so than in the case of medical ethics, moral disputes arose in response to technological change. These debates thus exemplified the ways in which technological developments influence ethical controversies. After the introduction of recombinant DNA techniques in the 1970s and 1980s, the genetically modified research animal became an important object of research, and knockout experiments (deleting genes) became an important research tool.

This new technology had a major impact on ethical debates concerning laboratory animals. It caused the focus of the debate to shift away from traditional concerns (animal suffering and animal welfare) to issues involved in the recently acquired power of biologists to modify—to *change*—their laboratory animals, and to adapt them to research requirements. Concepts such as integrity and intrinsic value, borrowed from medical

and environmental ethics, respectively, were used to articulate new moral concerns over genetic engineering.

Furthermore, the three styles of ethical research distinguished above are recognizable here as well, although demarcations are somewhat less rigid than before. The majority of contributions to animal ethics and biotechnology ethics since 2000 adhere to a more or less analytical approach. Their usual aim is to enrich a traditional, consequentialist view (focusing on animal welfare and animal suffering) with deontological elements, using concepts such as integrity and intrinsic value (Heeger and Brom 2001). A more Continental and phenomenological approach, however, is represented here as well. Its aim is to elucidate the different ways in which animals are perceived. Thus, the scientific understanding of animalhood is confronted with life-world perspectives and artistic perspectives. In other words, this line of research studies the various conditions under which relationships with animals (notably in the context of research practices) evolve (Zwart 2000). Finally, promising examples of empirical and pragmatic approaches have begun to enter the animal ethics scene as well.

Early Twenty-First-Century Developments

Genomics, the most recent chapter in the history of the life sciences and their technological applications, is what occupies the majority of ethicists in the Netherlands in the early twenty-first century. The basic trend is toward establishing large, multidisciplinary programs in the domain of ethical, legal, and social issues (ELSI) research. In the context of such programs, ethicists (of various styles and backgrounds) collaborate, not only together, but also with experts coming from various other disciplines, such as the social sciences, psychology, cultural studies, communications, economics, and law. This trend is sometimes referred to as the “elsification” of science and technology.

During the 1990s, the focus of applied ethicists tended to be on the individual or institutional level (the micro- and meso-level) rather than on the societal (or macro-) level. The empirical turn in ethics likewise tended to restrict itself to research on a relatively small scale. But in the early 2000s it became clear that the most challenging issues involved in so-called “enabling technologies,” such as genomics, will present themselves on a much broader, cultural, and societal scale. Rather than providing information on discrete monogenetic defects (relevant for specific target groups), for example, genomics is expected to inundate the public realm with genetic information on multifactorial health risks that will be relevant for virtually everybody.

Although the ethics of science and technology in the Netherlands tends to focus on the life sciences and biotechnology, and on genomics in particular, this is but one example of “enabling technologies” that are emerging in research laboratories in the early twenty-first century. Other technologies, notably Information and Communication Technologies (ICT) and nanotechnology, are items of concern as well (Van den Hoven 1999; De Mul 1999). They are regarded as enabling technologies in the sense that they will give birth to a wide variety of applications. As ethical debates tend to reflect technological developments, the agenda of ethics will no doubt continue to orient itself toward these three major scientific and technological breakthroughs of the past and coming decades.

Genomics, ICT and nanotechnologies will give birth to a wide variety of new and yet unanswered questions. How will new technologies in these fields change existing roles and responsibilities of professionals and citizens? How can the knowledge and information that is generated in these fields be evaluated and used; how can abuse be prevented? In answering these questions, ethicists will find themselves no longer alone, but in the company of (in particular) scholars from Science and Technology Studies (STS) and from the Philosophy of Technology (who often are members of the STS community in a broader sense).

STS scholars study the ways in which science and technology are intertwined (in terms of content and organization, but also socially) with the development of modern societies and cultures. Science and technology are regarded not as the producers or influencers of society and culture, but both science and technology on the one hand and society and culture on the other are seen as interacting with one another and as *co-producing* one another. While STS formerly focused on the deconstruction of epistemological claims, thereby underpinning the idea that there are different ways to perceive nature or reality, the field in the early 2000s tends to move towards a more normative and hence ethically oriented approach. Constructive Technology Assessment (CTA) for example, geared towards the “management of technology in society,” aims at early feedback and learning cycles in the development of new technologies, particularly with respect to the societal use and entrenchment of new technologies (Rip et al. 1995, Schot et al. 1997).

The ambition of STS scholars to put on the agenda the political question “how to help shape the technological culture we live in” has influenced the landscape of STS into a more normative direction (Bijker 1995

among others). Large technological “projects,” and the transformations they are expected to induce, such as nanotechnology, genomics, and ICT, thus have increased the interest for ethical and normative questions from different fields and disciplines. Ethical questions have become the domain of an interdisciplinary research field. Put differently, “elsification” (entrenchment of ethical, legal and social projects in large technological programs) has enhanced new forms of ethical research, characterized by interdisciplinary collaboration, proximity to scientific consortia, and sensitivity to social change. The development of new interdisciplinary modes of doing ethical research also gives rise to new networks and institutions. Interesting examples are Nanonet and the establishment of the Centre for Society and Genomics (CSG) at the University of Nijmegen.

Institutionalization

It is to be expected that in the near future collaboration between philosophers and ethicists on the one hand and social science researchers on the other will continue to increase. At the moment, they still can be seen as separate domains. Research in the Netherlands is organized on the basis of research schools that assemble experts from various universities into common programs. With regard to research into the societal aspects of science and technology, two research schools are particularly relevant: the Onderzoekschool Ethiek (the Netherlands School for Research in Practical Philosophy) and the Onderzoeksschool Wetenschap, Technologie en Moderne Cultuur (the Netherlands Graduate Research School Science, Technology, and Modern Culture, WTMC). Both research schools were established in 1994. In the Netherlands School for Research in Practical Philosophy the analytical style is dominant, but pragmatic and Continental approaches are represented as well. Methodology and epistemology of ethics have been important issues from the very outset, and the “empirical turn in ethics” is a major item of concern. The Netherlands Graduate Research School Science, Technology, and Modern Culture brings together researchers from the interdisciplinary field of science and technology studies (STS). In the Netherlands, STS emerged in the late 1960s as a result of new interactions between history, philosophy and sociology of science. The focus of WTMC is on the interrelatedness and interpenetration of science, technology, and society. The membership list of WTMC indicates that the school recruits scholars from the sociology of science, history of technology, philosophy

of technology, philosophy of science, arts and culture, psychology, political sciences, science dynamics and policy and innovation studies.

Although demarcations in terms of style have become less obvious than in the past, the Netherlands School for Research in Practical Philosophy is dominated by ethicists who come from an analytical background, although Continental and phenomenological approaches to technology are present as well. The Netherlands Graduate Research School Science, Technology, and Modern Culture is oriented more toward pragmatism and constructionism. Yet, as was already noticed, within the Dutch STS community, interest in normative (ethical) issues has increased in the past five years. See for example Verbeek (2003), who analyzes the ways in which artifacts influence human experience, while new technologies are interpreted as material answers to ethical questions.

The Future

Until recently, bioethics and the philosophy of technology were seen as separate fields. As has been indicated, this will no longer hold in the near future. Bioethics increasingly will have to regard itself as an ethics of science and technology. A broader understanding of the coevolution of science and technology thus will have to become an integral part of bioethics. The emphasis (within applied ethics and bioethics) on the micro-level will shift towards the development of science and technology *at large* and towards ethical and philosophical questions concerning the role of science and technology in modern societies. The focus on (and the interest for) the moral aspects of (for example) the interaction between physicians and patients, or between laboratory researchers and laboratory animals, will be increasingly overshadowed by the need to address the social dynamics of technological change. These broader issue will dominate the future agenda of bioethics, applied ethics and—as it often does already—the philosophy of technology.

Ethics can be expected to broaden its perspective and become an increasingly interdisciplinary endeavor. And while ethicists will “discover” the importance of the broader social and cultural impact of technological innovations, social scientists already working on these questions will increasingly acknowledge the importance of the normative issues they tended to avoid in the past.

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SEE ALSO *Applied Ethics*; *Engineering Ethics*; *European Perspectives*.

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DYING

SEE *Death and Dying*.

DYSTOPIA

SEE *Utopia and Dystopia*.