

# Taming monsters: The cultural domestication of new technology<sup>☆</sup>

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## Abstract

Central to public discomfort about new technologies is the notion that they are unnatural. Experts often suppose that better knowledge of technology and risks would help overcome public aversion. This assumption turns out to be fairly fruitless, often even increasing social polarization. The pattern of diverging risk assessments about technology might be improved by a better understanding of the moral gut feelings at stake. However, current technology ethics does not seem to be equipped for elaborating theories to explain public discomfort. Either public fear is not taken seriously, or ethical–theoretical rationalizations of moral intuitions lead to unsatisfactory, naturalist constructions, such as the intrinsic value of nature.

For a better understanding of current risk controversies, a detour is made to the cultural anthropology of Mary Douglas on pre-modern ideas regarding danger. This offers some clarifying insights into modern perceptions of technological risks. Departing from anthropological observations, a so-called *monster theory* is sketched, which gives an explanation for the fascination with and aversion towards new technology, leaving aside ‘naturalist’ and ‘nature-skeptic’ explanations of technology ethics. Monster theory offers a point of departure for a new, pragmatic approach to controversies about new technology, the approach being named a pragmatist monster-ethics. It tells us we have to reflect on and shift cultural categories as well as to adapt technologies in order to domesticate our technological ‘monsters’.

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<sup>☆</sup>This article is based on my book “Monsterbezwinging” [1], published in Dutch. A revised version of this book is now being translated in English and will be published in 2007.

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## 1. Two worn-out grooves

During the Christmas holidays of 2002, an American company called Clonaid claimed the birth of the first cloned human baby. Before any scientific proof of this media-provoking news was offered (in the end the baby never appeared), opinions exploded from newspapers, chat sites and broadcasting stations all over the world. Apart from the skepticism about the news itself, the media coverage enflamed the ongoing controversy concerning cloning and ‘designer babies’. While disapproval and disgust about the manufacture of babies dominated, together with calls for a ban, others continued to tell us that cloning promises great perspectives, particularly therapeutic cloning in the interests of medical science.

The commotion about the alleged cloned baby does not represent a solitary case. Public and expert reactions to new, evocative technologies actually show a steady and persistent historical pattern. Whether it is nuclear energy, plastics, steam engines, GM food, xenotransplantation or nanotechnology, time after time public discussion remains stuck in a groove. More exactly, public discussion is stuck in two worn-out grooves, one of salvation and fascination, the other of doom and abhorrence. Indeed, it seems that this ‘utopia-dystopia syndrome’ [2] shapes initial public judgment. However, the syndrome does not appear in all cases of new technology. Useful innovations such as fiberglass cables, a new type of wheelchair or a technique for storing heat slipped into use without being exposed to suspicion of special, unknown risks, or of wide-ranging forecasts of human welfare. But as soon as the cloned sheep Dolly was presented in 1997, opponents hastened to declare that fundamental, natural boundaries had been crossed, while proponents were sketching the limitless frontiers that could be opened up by this kind of experiment on animals.

In this recurring pattern two aspects catch the eye. First, it seems that different risk perceptions in the technology debate are linked to different ways of appreciating the unnaturalness of technologies. The fact that technology oversteps natural boundaries is regarded as having either very positive or very negative value. Secondly, the controversy is often portrayed as a conflict between emotion and reason. In 2000 for example, Greenpeace provoked the Dutch public with large roadside billboards, suggesting that an American genetic company had them posted with the message (translated from Dutch): “*Your lettuce stays fresh because we put rat genes in it. Enjoy your meal!*” (Fig. 1).

In a recent lecture to an audience of Shell managers, Rudy Kousbroek—a well-known Dutch writer, cynically criticized Greenpeace’s campaign: “They even gave up trying to assert something sensible. They do nothing more than speculate on the public’s ignorance, their only target being to frighten people. The tragic thing is that this emotional language without argument doesn’t make the public and the media suspicious at all. It is alarming that the public does not automatically choose the side of those who appeal to verifiable facts and data” [3].

Thus, it seems, we should welcome the increase in official efforts to grapple with public polarization. At present, in fact, we are being bombarded by a number of attempts at steering, from governmental bodies, to raise the quality of public debate on technology. In the last few years these attempts have resulted in large-scale information campaigns and carefully orchestrated public discussion. But so far they have not been very successful in avoiding intense public disquiet about new technology. We have seen various examples of this in the Netherlands. In 2001 the national government launched a broad discussion on

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