

# *from The New Yorker*

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COMMENT

## **Science and the Perils of a Parable**

**by Malcolm Gladwell**

In the movie "A Civil Action," the families of eight leukemia victims accuse two major corporations of contaminating the drinking water of Woburn, Massachusetts. John Travolta's portrayal of the lawyer who argues their case has been justifiably praised by critics for its subtlety: he is neither a villain nor a hero but an uncomfortable and ambiguous combination of the two--a man of equal parts greed and idealism who is in the grip of a powerful obsession. Curiously, though, when it comes to the scientific premise of the story, "A Civil Action" (like Jonathan Harr's best-seller, on which it is based) permits no ambiguity at all. It is taken as a given that the chemical allegedly dumped, trichloroethylene (TCE), is a human carcinogen-- even though, in point of fact, TCE is only a probable human carcinogen: tests have been made on animals, but no human-based data have tied it to cancer. It is also taken as a given that the particular

carcinogenic properties of TCE were what resulted in the town's leukemia outbreak, even though the particular causes and origins of that form of cancer remain mysterious. The best that can be said is that there might be a link between TCE and disease. But the difference between what "might be" and what "is"--which in scientific circles is all the difference in the world--does not appear to amount to much among the rest of us. We know that human character can be complex and ambiguous. But we want science to conform to a special kind of narrative simplicity: to begin from obvious premises and proceed, tidily and expeditiously, to morally satisfying conclusions.

Consider the strange saga of silicone breast implants. Almost seven years ago, the Food and Drug Administration placed a moratorium on most uses of silicone implants, because the devices had been inadequately tested and the agency wanted to give researchers time to

gather new data on their safety. Certain that the data would indict implants in the end, personal-injury lawyers rounded up hundreds of thousands of women in a massive class-action suit. By 1994, four manufacturers of implants had been instructed to pay out the largest class-action settlement in history: \$4.25 billion. And when that amount proved insufficient for all the plaintiffs, the largest of the defendants--Dow Corning--filed for Chapter 11, offering \$3.2 billion last November to settle its part of the suit.

Now, however, we actually have the evidence on implant safety. More than twenty studies have been completed, by institutions ranging from Harvard Medical School to the Mayo Clinic. The governments of Germany, Australia, and Britain have convened scientific panels. The American College of Rheumatology, the American Academy of Neurology, and the Council

on Scientific Affairs of the American Medical Association have published reviews of the evidence, and last month, in a long-awaited decision, an independent scientific panel, appointed by a federal court, released its findings. All of the groups have reached the same conclusion: there is little or no reason to believe that breast implants cause disease of any kind. The author of the toxicological section of the federal court's panel concluded, "There is no evidence silicone breast implants precipitate novel immune responses or induce systemic inflammation," and the author of the immunology section of the same report stated, "Women with silicone breast implants do not display a silicone-induced systemic abnormality in the types or functions of cells of the immune system."

There is some sense now that with the unequivocal of the December report, the tide against implants may finally be turning. But that is small consolation. For almost seven years, at a cost of billions and in the face of some twenty-odd studies to the contrary, the courts and the public clung to a conclusion with no particular merit other than that it sounded as if it might be true. Here, after all, was a group of profit-driven

multinationals putting gooey, leaky, largely untested patties of silicone into the chests of a million American women. In the narrative we have imposed on science, that act ought to have consequences, just as the contamination of groundwater by a profit-seeking multinational ought to cause leukemia. Our moral sense said so, and, apparently, that was enough. Of course, if science always made moral sense we would not need scientists. We could staff our laboratories with clergy.

It may be hard to shed a tear for implant manufacturers Dow Corning, even though their shareholders have been royally ransomed for no good reason. Those who sell drugs and medical devices must expect to be held hostage, from time to time, by the irrationalities of the legal system. The women in this country with breast implants do, however, deserve our compassion. They chose cosmetic in order to feel better about themselves. For this, they were first accused of an unnatural vanity and then warned that they had placed themselves in physical peril, and the first charge informed the second until the imagined threat of silicone implants took on the force of moral judgment: they asked for it, these women. They should have been satisfied with what God gave them and stayed home to reread "The Beauty

Myth." Well, they didn't ask for anything, and what they did with their bodies turns out to have no larger meaning at all. Science, tempting though it is to believe otherwise, is not in the business of punishing the politically retrograde, nor is it a means of serving retribution to the wicked and the irresponsible. In the end, one may find that the true health toll of breast implants was the seven years of needless anxiety suffered by implant wearers at the hands of all those lawyers and health "advocates" who were ostensibly acting on their behalf.

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