The advance of scientific inquiry over the past two centuries has not gone unchallenged. In his 1976 book, *The Occult Establishment*, James Webb uses the apt phrase "rejected knowledge" for the ideas that, at a given point in history, prevailed, then were opposed by science, and finally were rejected as false. Though vitalism (the belief in some form of "energy" or "lifeforce" at work in all things) has been rejected by the mainstream of science over the last two centuries, this "rejected knowledge" became central to beliefs such as organic agriculture and alternative medicine. These beliefs are now part of the contemporary critique of modernity and science.

This continuity over time of beliefs rejected by the mainstream is called the "underground of rejected knowledge" by Webb. Those who find themselves alienated from society are likely to identify established knowledge with the established social order and therefore turn to "rejected knowledge" as a basis of their rejection of the mainstream.

Webb develops his thesis with reference to Nazi Germany, which is unfortunate in one respect, since it is difficult to separate anything the Nazis did from the horrors of the Holocaust and World War II. Yet it is equally true that most of the central stream of contemporary "rejected knowledge" biodynamic organic agriculture, homeopathic medicine, animal rights, etc. in one form or another passed through Germany in the 1930s and had avid proponents among the very top leaders of the regime: Hitler, Himmler, Hess, Darre, etc.

One need not invoke Nazis, though, to argue that "rejected knowledge" has its dangers and threatens human well-being.

**Avoiding Vaccines**

To some, beliefs about alternative therapies may seem harmless, but there was a recent case in Germany in which two homeopathic doctors who opposed the MMR vaccine were reportedly responsible for a measles epidemic involving over 700 children, thirty of whom were hospitalized. There is fear that the rising infection rate could result in children dying needlessly.

A story in the London Times (March 6, 2002) by Alan Hall traces these practices to the Waldorf School, "which actively encourages people not to have their children vaccinated. Now we have an epidemic." The Waldorf School is described as "a holistic teaching centre based on the methods of the late Dr. Rudolf Steiner and is one of several in Germany that promotes alternative medicine." Parents also received anti-MMR letters from activists "advising them not to vaccinate their children."

In the United States, a Waldorf School is among those schools in Boulder, Colorado where children are not receiving their pertussis and other immunization with fatal consequences both for those children and their younger siblings who have not yet been vaccinated. A letter to the *Lancet*
(August 24, 2002) indicates that in the United Kingdom in a twelve-month period, "eight infants of preimmunization age have required extracorporeal support for intractable cardiorespiratory failure due to Bordetella pertussis infection." Five of them died "despite extracorporeal membrane oxygenation support, and one survivor has substantial neurological disability." Although the reported cases indicate infection by members of the same household, parents with infants who have not yet received their full complement of vaccinations might be wise to inquire of their New Age/alternative medicine friends whether their children have been immunized before allowing them to come over and visit.

There seems to be an oddly bipolar distribution of children who are not getting immunized in developed countries: the children of the very poorest and the children of those with the highest levels of formal education, at least when defined in terms of academic credentials. For the latter, it is a classic case of what Thorstein Veblen called "trained incapacity," since it takes a considerable amount of what purports to be learning to deny the obvious benefits of immunization.

Similarly, a study in the August issue of Obstetrics & Gynecology found that infants and mothers were twice as likely to die in home births and were at greater risk for other health problems which could later be fatal, but those choosing to have children at home were highly educated and more "likely to be married, white, non-smokers," which put them in a category that would otherwise be at lower risk for complications.

**Long Island Breast Cancer**

In Agriculture and Modern Technology (DeGregori 2001), I mentioned an article that cited eight successive studies that fail to find any evidence that DDT (or other chlorinated hydrocarbons) caused breast cancer, and more studies done since then have confirmed the finding. Needless to say, the advocates of the study were "disappointed" with its conclusions (all quotes herein about Long Island breast cancer studies come from either Toy or Kolata; see below for sources). Geri Barish the president of 1 in 9: The Long Island Breast Cancer Action Coalition, the group that successfully sought funding for the series of studies on breast cancer and environmental pollutants was still certain that the pollutants caused breast cancer even after the studies' results were announced. Barish "knows that the pollutants studied are dangerous" and asks, "How could they absolutely say that a known carcinogen is not absolutely involved in the cause of cancer?" Since no study will be able to "absolutely" determine that there is "absolutely" no causal relation, then other similar studies will continue and research resources will be consumed that could have been more productively used to advance the cause of women's health. The activists reject establishment conclusions that do not fit their agenda.

After the last Long Island breast cancer study, it was revealed that the breast cancer rates there "are not much different from those of the rest of the country, and a number of areas in the Northeast and elsewhere have higher rates," though reports of 30% higher rates in Long Island have been the staple of activists and the media. The alleged sources for the higher numbers were the New York State Department of Health and the National Cancer Institute; both deny ever making such claims. Even the lead investigator for the latest study "never alluded to a Long Island breast cancer epidemic in applying for the grant" and "said that the Long Island rates from 1987 until 1989 were 'generally comparable to the SEER rates,' referring to national rates reported by
the National Cancer Institute in its Surveillance, Epidemiology, and End Results program."

These studies promoted by activists steeped in "rejected knowledge" have costs beyond the millions of dollars spent on them. Though driven by "rejected knowledge," they must be carried out by competent mainstream scientists who could otherwise have used the funding for more productive research. Some researchers are complaining that promising leads on the possible (real) causes of autism are not being pursued because of the ongoing need to do one more study on the safety of the MMR or the DPT, which activists charge with causing autism.

"Rejected knowledge" tells us that there is a skyrocketing epidemic of cancer, though the statistics tell us otherwise. There is, however, a cancerous epidemic of "rejected knowledge."

**Pro-Organic Bias**

Reputable institutions such as local Humane Societies or Consumers Union sometimes find themselves infiltrated and taken over by animal rights activists or organic food enthusiasts much to the dismay of longtime members of Consumers Union such as me, who subscribes for scientific testing of products and not for ideological pronouncements rooted in "rejected knowledge."

In a recent report on pesticide residue, for example, researchers tested both conventional and "organic" produce for the pesticides used in conventional agriculture but not for those pesticides used in "organic" agriculture. One could have reasonably anticipated their findings without the need for empirical investigation. Consumer Reports, which has a history of comparing "pesticide residues" on conventional and "organic" produce by omitting any reference to "natural pesticides," touted this report with the headline: "Organic is lower in pesticides. Honest." A good rule of thumb would be that if someone follows an assertion with the exclamation "honest," it could mean they are deliberately fudging the truth no mention was made of "natural pesticides." Environmental groups made similar claims following the report's release.

**Consumers Union Green vs. Africa**

No more horrific example of the cancer of "rejected knowledge" can be found than the activism in southern Africa against the use of transgenic (or g.m.) corn for famine relief. Among those most active in this fear campaign was a person identified as a Consumers Union staff member and advisor to the government of Zambia. The NGO false fears and anti-g.m. food campaigns based on "rejected knowledge" have greatly hindered the relief efforts undertaken by the United States government, which supplies over 60% or more of the food provided by the World Food Program. There was simply no way that the donated maize could be certified as g.m.-free, nor was there any food-safety reason why it should be.

With 13 million people experiencing famine, 300,000 of whom are at near-term risk of dying, each hour of delay of food shipments may mean many hundreds and possibly thousands of helpless victims of drought and famine dying. When there are warehouses with food and starving people outside being denied access to it, we can speak of them as victims of "rejected knowledge." Here we begin to see the full destructive potential of "rejected knowledge."

**More Conflicts To Come**
However terrible the situation in Southern Africa maybe, it foreshadows much larger future dangers on issues such as transgenic food production and other endeavors where the potential of science and technology to save human lives is thwarted by the militants of "rejected knowledge." However decent and well-intentioned these militant believers may or may not be, we can no longer shy away from terms like "evil" to describe their actions and the "rejected knowledge" that motivates them.

Sources

Note: The material for this piece is taken from my newly published book, *The Environment, Our Natural Resources, and Modern Technology* (Ames: Iowa State Press, A Blackwell Scientific Publisher) and a book manuscript that I have just completed. Sources for this piece include:


Hall, Allan. 2002. Anti-vaccine Town Struck by Measles Epidemic: Homoeopaths Who Reject MMR are Blamed for German Outbreak, The Times (London) 6 March.


Pigott N; Novelli V; Pooboni S; Firmin R; Goldman A. 2002. The Importance of Herd Immunity
Against Infection, Lancet 360(9333), 24 August.


Links