

## *Turning Tools for Democratizing Biotechnology into a Bioterrorist Threat*

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Philosophers of science and technology increasingly call for the inclusion of technology and science in the domain of democracy (Feenberg 1999). This is due to the conviction that science and technology can no longer be viewed as neutral, value free concepts, but rather need to be seen as social processes subject to the values, aims and objectives of the multitude of actors involved. A particularly interesting and also somewhat disturbing case is made by government actions against a collective of artists bearing the name Critical Art Ensemble, one that explores the intersections between art, technology, radical politics and critical theory. After writing extensively about revolutions in information technology, the Critical Art Ensemble turned towards revolutions in genetic technologies in the books 'The Flesh Machine', 'Molecular Invasion' and 'Marching Plague'. A chapter from 'The Flesh Machine' is printed elsewhere in this issue.

Apart from writing, CAE also developed several practical techniques to democratise biotechnology, of which a traveling GMO-testing laboratory received the most media attention. However, the US government perceived these attempts at democratization as bioterrorism, resulting in the imprisonment of art professor Steve Kurtz, one of the CAE members. This article will consider first of all the kinds of tools to democratize biotechnology developed by CAE, and secondly why the CAE attempts to democratize biotechnology turned into an accusation of bioterrorism.

### **Tools for democratizing biotechnology**

In the book 'The Molecular Invasion', CAE formulates the problem with biotechnology as an engine of progress and profit that had moved forward at such tremendous speed that it had left the 'general public unaware that it had left the station' (CAE 2001, p.10). Biotechnology is developed largely outside of the public domain, but invades life on many fronts. This molecular invasion

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takes the form of new types of colonial control, contends CAE, with profit as the main goal. Without going into further detail about CAE's perspectives on biotechnology, we would like to emphasize the way CAE proposes to alter this situation: through the development of a *contestational biology* with which to disturb profit flows.

Contestational biology aims to develop 'increasingly complex ways and means of slowing, diverting, subverting, and disturbing the molecular invasion through radical appropriation of knowledge systems and appropriation of the products and processes developed by imperial powers' (CAE 2001, p.12). Interestingly contestational biology contrasts sharply with the strategies of luddites and bioluddites. While luddites mainly acquired power through threats to demolish machines, or actually destroying them (Jongerden 2006), contestational biology aims to disrupt biotechnology by using biotechnology *itself*. It encourages people to gain knowledge about biology and to set up laboratories to carry out biotechnology experiments that can increase control over biotechnical developments. Biotechnology becomes a tool to contest biotechnology.

#### Resisting transgenic production

According to the CAE seven-point plan to resist transgenic<sup>1</sup> production, it is first of all essential to encourage an informed opposition. Irrational fears need to be neutralized to get away from a categorical rejection of biotechnology. The next step is to counter what CAE calls 'Utopian Edenic rhetoric', such as the promises of the industry that biotechnology will 'feed the world'. As these steps are taken, public spaces can be created 'where education and inter-subcultural labor exchange can occur.'

With this in mind, CAE developed the project *Free Range Grains*, which consisted of a small-scale laboratory to test food products for GMO content. This laboratory has traveled around the globe teaching people basic biotechnology research skills and providing a tool with which consumers can test the GMO content of food products themselves.

<sup>1</sup> CAE uses the term 'transgenics' to denote practices of changing and mixing genomes, or pieces of genomes. In chapter 1 of the *The Molecular Invasion*, a fourth domain named Transgeneae is suggested, to complement the other three domains favored by some biologists after the many developments in molecular biology: the Bacteria, the Archaea (consisting of the archaeobacteria) and the Eukarya (consisting of the eukaryotes). This fourth domain would then be reserved for organisms created by mixing genomes in a manner different from evolutionary processes.

#### Fuzzy biological sabotage

Although consciousness raising is very important, CAE realizes that the democratic process is limited in its ability to resist biotechnology. Biotechnology is for a large part owned by corporations that tend to function outside of national democratic rules. To resist the capitalist profit machine, other methods to appropriate power have to be developed. Although democratic biotechnology might be a favored goal, developments in biotechnology have been continuing for so long and have had so many disastrous consequences already that CAE prefers to call for resisting biotechnology first. To that aim, CAE looked into strategies of civil disobedience as possible ways to resist biotechnology. The best response turned out to be *fuzzy biological sabotage* (FBS): 'The fuzzy saboteur situates him/herself in the in-between - in the areas that have not yet been fully regulated.'

Fuzzy biological sabotage can be seen as pranks which make use of biological agents such as microorganisms, plants, insects, reptiles, mammals, tactical GMOs, and organic chemical compounds. It must be made clear that the aim is not to spread pathogenic agents, the sabotage activity being kept in the realm of pranks. An example offered by CAE is the release of mutant flies in a research facility or in neighboring offices. Mutant flies can readily be ordered in a variety of colors and types on the market. These same kinds of flies are used by researchers in all kinds of studies. Confusing situations can be easily imagined when researchers encounter the infiltrating flies. The strategy hopes to accomplish inertia on the workplace, wasting money and work-time.

#### Artist jailed for democratising biotechnology

Many artists, scientists, activists and others were shocked to hear of the arrest of art professor Steve Kurtz, one of the CAE members working on contestational biology projects. The arrest followed the events after the unfortunate and sudden death of his wife, during her sleep one night in 2004. After calling 911, the Buffalo police arrived on the scene, and became alarmed by some of the art materials in the apartment. They informed the FBI who arrived the day after to detain Steve Kurtz for an investigation on 'bioterrorism'. How seriously the bioterrorism threat was taken can be seen from the following excerpt published by the CAE defense fund<sup>2</sup>:

<sup>2</sup> More information can be found at: [www.caedefensefund.org](http://www.caedefensefund.org)

'[A]gents from numerous federal law enforcement agencies - including five regional branches of the FBI, the Joint Terrorism Task Force, Homeland Security, the Department of Defense, and the Buffalo Police, Fire Department, and state Marshall's office - descended on Kurtz's home in Hazmat suits. Cordoning off half a block around his home, they seized his cat, car, computers, manuscripts, books, equipment, and even his wife's body from the county coroner for further analysis. The Erie County Health Department condemned his house as a possible "health risk."

A week later a public health official announced that the house was not a public safety threat. Kurtz was finally allowed to go home.

Instead of acknowledging that there was no possibility of ever making a harmful agent from the material in Steve Kurtz house, the U.S. District Attorney continues its persecution. Steve Kurtz continues to fight the threat of being send to federal prison to this day.

CAE suggests two reasons why authorities reacted so strongly. 'The first reason, we believe, involves the discourse in which we framed our project. By viewing the scientific process through the lens of political economy, we disrupted the legitimized version of science as a self-contained, value-free specialization' (CAE 2005). The second reason has to do with the appropriation of life sciences knowledge systems, including experimental equipment, protocols and biological agents. Amateur science intended to disrupt the dominant narratives of science apparently can only be perceived by authorities as science intended to produce terrorist acts.

### Final remarks

This case is of particular interest to social scientists and philosophers studying science and technology from a critical theory perspective. It shows something about possible strategies to include science and technology in the domain of democratic control. While talking and writing about democratizing science seems to be relatively safe, the moment real action by lay people is taken to re-appropriate a technology and bring it into the public domain authorities feel threatened. In the CAE case, the discovery of some laboratory equipment and harmless bacteria turned into a persecution on grounds of bioterrorism.

### References:

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