



Let's Stand Up and Shout!

Excerpts from *As Arbitrary Gods*

Eudoxa Policy Study #4

Eudoxa Policy Study #4: Let's Stand Up and Shout!

Written by Anders Sandberg, Alexander Sanchez and Waldemar Ingdahl.
Translation by Lene Johansen.

As Arbitrary Gods was originally published in Swedish as “Som egenmäktiga gudar -Den svenska debatten om gen- och bioteknik på 1970- och 80-talen” The book was written by Anders Sandberg, Alexander Sanchez and Waldemar Ingdahl, all partners and owners of The Eudoxa Think Tank Inc. It was originally published in Stockholm, Sweden by Timbro in 2002. We would like to thank Mattias Bengtsson, CEO of Timbro for his permission to translate parts of the work for publication in English.

This series of policy studies are published by The Eudoxa Think Tank. They address issues that are current or will be in the near future. Eudoxa Studies are in depth studies on how emerging technologies impact our culture and our society.

Eudoxa AB
Sveavägen 133
113 46 Stockholm
Sweden
+46 (8) 338-168
www.eudoxa.se

Copyright © 2003 by the Eudoxa Think Tank AB

ISSN 1652-0726

Nothing written here is to be construed as necessarily reflecting the views of the Eudoxa Think Tank or as an attempt to aid or hinder the passage of any legislation.

Table of Contents

<i>Table of Contents</i>	1
<i>About Eudoxa</i>	2
<i>Executive Summary</i>	2
<i>Let's Stand Up and Shout!</i>	3
<i>The Unholy Cow</i>	5
<i>The Source of Resistance</i>	6
<i>The Misunderstanding of the Professional Societies</i>	9
<i>References</i>	12

About Eudoxa

The Eudoxa Think Tank is a think tank based in Stockholm, Sweden. The main focus of the group is explaining the cultural impact of emerging technologies integrating the analysis with classical free-market ideas and dynamist thoughts of experimentation, innovation and decentralization.

We work for a diverse society based on a strong moral foundation of individual rights, where individuals have the right to utilize modern technology and medicine according to their own moral judgement. We believe this foundation promotes tolerance and acceptance that will tie our society together, not break it apart. The inspirations behind our vision are a firm belief in individual liberty, free enterprise, a limited government and that ideas have impact on our society.

Eudoxa currently has staff working out of Stockholm, Sweden and Kansas City, Missouri, giving them the advantage of being able to approach both the European and American market with a comprehensive perspective drawn from experiences from both continents.

Executive Summary

Let's Stand Up and Shout! is a translation of the fourth chapter of "As Arbitrary Gods". The book takes a comprehensive look at the Swedish discourse on gene- and biotechnology during the 1970-ties and 80-ties.

The study looks at four major cultural trends in the discourse that still exerts a strong influence on the current discourse. The first is the combination of a romantic, but materialistic view on the world: The truth about reality transcends the material world, so we can not have confidence in our ability to perceive the consequences of our actions. Those that control the development of technology control the future of our society.

The second trend is that the emotional connection between "dangerous foods" supercedes the lack of a causal connection.

The third trend is the resistance against "playing God" or "manipulation with life and the proper order of nature" as identified by the Eurobarometer in 1996.

The fourth trend is the "clash of cultures." Scientist communities try to participate in the value driven public discourse with their fact driven arguments. This leads to a classic "talking past each other" scenario which undermines the credibility of scientists in the public eye and disenchant scientists and public alike.

Let's Stand Up and Shout!

-excerpts from "As Arbitrary Gods", published by Timbro

Member of Swedish Parliament and future spokesman for the Green Party in Sweden: Birger Schlaug wrote the article "Warning against Biological Soldiers" in "Dagens Nyheter" 03/03/1989:

"Let's stand up and shout! Gene technology is a threat to us! ... History has shown that knowledge will not be left unused. We all know that gene technology will be abused – and gene technology is comprised of knowledge that can devastate both ecology and humanity in a brief historic moment. Gene technology has made it possible to cut and paste directly into our genetic makeup. To chose and discard in the innermost sanctuary of life. The development has a furious pace."

The emotional tone is utilized from the beginning of the commentary. Gene technology is attacking nature and what is right in our society. The attack is swift. He claims that by necessity; a counterattack must be radical and equally swift.

"Criticizing developments in gene technology is not about being hostile to technology. It is about accepting that humans are not mature enough to handle the tools they have acquired. It is about reverence for life, and also that humans fancy the misconception that our current knowledge equals truth."

Schlaug's view on nature and epistemology is romantic; truth transcends the physical world. It cannot be achieved by reason or empirical method. The inherent order of nature is inviolable. Based on this, we have no way of assessing the physical or moral risks according to Schlaug.

"Hitler was not the only madman. The world is full of maniac scientists, Nobel Prize winners and policymakers. They have achieved an exquisite tool in gene technology... Eugenics was a Nazi term; the biological soldiers are in our midst. They are praised as great men, as the avant-garde of development... It is just a mere statement of the facts; these servants of darkness have been granted a marvelous means through gene technology."

Schlaug claims that "the establishment" is part of a conspiracy that goes beyond just wanting to "throw" humanity into a technocratic world¹ as Åhman claimed in her book. They also want to force us into a new world order. The conspiracy consists of scientist, policymakers, industrial corporations and authorities. Just like Haldane² and Åhman, Schlaug views society as driven by technology. Those who control research on technology also control the future development of our society. It is hard to understand how their romantic world view and their materialist view on history fit together.

¹ Åhman, 1981

² Haldane, 1923

Just like other critics of gene technology of this time period, the main period they refer to is the Nazi period³. The reason behind this reoccurring connection is deeper than demagogy – Nazism and gene technology is associated through several couplings. Gene technology is partly seen as elitist and ruthless, and partly associated with eugenics. Nazism is the only widely know ideology with clearly defined biological goals, which in turn makes it the only ideology with a “gene-ethic”. Through these associations, Nazis become the *real* advocates of gene technology and vice versa in Schlaug’s eyes.

“Evolution scientists would like to inseminate a human ovary with gorilla sperm. How about a hybrid that can fix the dirty jobs so we humans don’t have to. Capitalism can make this happen for us, it might even yield profit.”

Here we see the reappearance of the 80ties “Hitler-rat”; Gene technology creates monsters –creatures that overstep boundaries for what is natural. Besides the experience of disgust in face of the monstrous, we also face the fear of the new superior hybrid that will replace humanity. These are hardly new themes; the interesting thing is that they are presented in the commentary sections of reputable newspapers as an argument for political action.

“The splitting of atoms could be used to give violence a whole new dimension and consequences for future ages that are incomprehensible. Despite all the assurances of “the good intensions”; splitting genes imply so many more consequences.”

Nuclear power and gene technology and now even the force of the free market has melted into one huge Gordian knot.

Schlaug’s commentary has a rhetoric style and an ideological content that before this belonged in the evening tabloid press; all of a sudden it appears in the most prestigious papers. This fact, including Schlaug’s swift political career climb shortly after is significant. His loose association between large parts of the health care community, science community and business community on one side and Nazism on the other would previously not have been allowed to stand. The commentary did presumably not convince any large number of readers that did not already share Schlaug’s view on the world. Rather it served to inspire his own audience and establish Schlaug as their spokesman.

The intellectual content is largely the same as we have seen previously in the debate, but the rhetoric is hardened compared to the beginning of the 80ties. What direction could the debate possibly take after this point? The discussion climate demonizes the opponents in ways that was unprecedented and make any dialogue impossible. The proponents of gene technology have evil intensions, they are not even misguided and thus any dialogue is meaningless. In a climate like this the only course of action that is open is militant activism.

³ Bakshi, 2001

Even though Schlaug's commentary is more radical than others in the environmentalist movement, it is level with the general radicalization of their value scale. An example is the name change of the Nordic Society against Aggravating Animal Experiments to Animal Rights.

Anne Sofie Bakshi from University of Linköping has studied the common representation of gene technology in media and what images are shaped in the public discourse. She claims that gene technology texts in the public discourse, including motions in parliament and editorial pages in the daily papers acts as a monologue; the dominant perspective does not make the opponents perspective invisible, but rather presents it in a weakened form where it is portrayed as wrongful or immoral. Through this all other approaches to the issue is bad alternatives. Schlaug succeeded in creating his own Frankenstein-monster.

The Unholy Cow

When the Eurobarometer 1996 examined Swedes attitudes to gene technology, they asked open ended questions in addition to the specific ones on what came to mind when the subjects heard the expression "modern biotechnology including gene technology." 12% of the interview subjects mentioned the cattle breed Belgian Blue or synonyms like "monster bulls" and "deformed beef cattle." That was the most common association to gene technology and was seen as very negative; many claimed that the gene technology had gone too far by creating monster like Belgian Blue. A significant part of the Swedish opinion considered biotechnology as unnatural and unwanted and the source of unwanted monsters⁴.

Despite the symbolic value of Belgian Blue, the cattle have in actuality been bred by conventional means. The double musculature was created by a natural mutation that was discovered in the 30ties and that was bred into the stock in the post war era to increase the meat production. The practical use of pure breed Belgian Blue is purely to create hybrids. The goal is not the breed in itself but beefy hybrids.

Belgian Blue is marketed as ecological food in USA, the beef is lean and low in cholesterol, and the animals are not given growth hormones. The beef that is considered tasteless and tough by most Europeans are compared to chicken by Americans⁵.

Why has Belgian Blue become so closely associated with gene technology? One part of the explanation is the timing of the polls. It was done in 1995 right after the farmer Gunnar Nilsson reported that he would import sperm to impregnate his heifers. The controversy was a fact and the media coverage was a huge contributor to the association to "monstrosities" that many of the subjects in the poll expressed. This alone does not explain the strong association to gene technology. And the image of the monster bull has

⁴ Fjaestad et al. 1998

⁵ Organic Gourmet

been retained in the public discourse. It returns in a somewhat distorted form on a regular basis and fits the theme of gene technology as the source of monsters. This theme appeared first in the debate in the early 70ties.

One clue to the association is the reappearing formulation of a connection between Belgian Blue, gene technology, Creutzfeldt-Jacob Disease and Foot-and-Mouth Disease. This association is done even by individuals that should know better. There is no causal connection between them, but on an abstract level they are all representatives for the “dangerous food” and agriculture that has lost its innocence. Industrial agriculture is no longer in touch with what is natural. The facts that Belgian Blue is not a result of gene technology; that dead beasts are not used as feed anymore and that Foot-and-Mouth Disease is a natural occurrence is irrelevant. The symbolic connection is all that counts in the discourse, not the causal connection.

It is only recently that the image of the idyllic farm has been replaced with the knowledge that farming is an industry⁶. This is both disenchantment of the public and is perceived as a threat to tradition. We also find the notorious Swedish “Christmas eve theorem” haunting the image⁷. The theorem states that if forced to choose between two good things, you will choose both. Retaining the rural idyllic farm together with high-intensity farming’s low prices, high quality and the short walk to the corner grocery store are both preferred choices. The effect of the theorem is that the public disregards the actual costs of the rural family farm, and in this light the emergence of industrial farming is viewed as a betrayal that it is justified to be indignant about.

The food panics that appeared regularly during the 90ties have a connection to the opposition against gene technology on an emotional level.

The Source of Resistance

Why gene technology is so emotionally charged? It can be compared to the euthanasia discussion that started in Sweden approximately during the same time. Emotions ran high and stirred up a wide debate. But the euthanasia debate has matured and unlike the gene technology debate it has progressed from its initial phase. Euthanasia has addressed new issues in a constructive manner from the acknowledgement of negative euthanasia to the possibility of positive euthanasia. The issue has gained a widespread acceptance. The discourse on gene technology on the other hand has become more emotionally loaded with time.

Gene technology touches emotional issues on God, evolution and our relationship to nature. Different cultures will put different weight on each of these issues. The American discourse is more about “playing God” than the European one, who has a bigger focus on humans’ relationship to nature. The discourses on biotechnology and

⁶ Moses, 1999

⁷ Fjaestad et al. 1998

gene technology in its different shapes are mostly a channel of objections, a surrogate debate. Rather than discussing the nature of our society and our civilizations relationship with nature, we discuss biotechnology⁸.

Many of the opponents of biotechnology would reevaluate our society, technology and the predominant view on nature, but the significant discourse is done according to a technical-administrative mold where value evaluations is out of the question. Besides, we lack the conversational tools and cultural references for a serious discourse freed from assumptions on reevaluations of that sort. Many feel that they don't stand a chance in a technical debate but yet they hold opposing views that can not be formulated based upon their ethical foundation. The solution is the surrogate debate and acceptance of the external model of explanation that also make participation possible.

The 1996 Eurobarometer examination of attitudes towards modern biotechnology found there where two distinct groups that expressed pessimism about biotechnology and gene technology by use of cluster analysis, the groups where "the blue skeptics" and "the green critics". The blue skeptics (9.2%) based their traditionalist, conservative resistance on moral principles. The green critics (8.6%) have a more modern resistance founded on insecurity and risk. The gender distribution in the blue group is about equal (54% men and 46% women), while 76% of the green group is female. The core blue skeptic has an average age of 55 years, has little education and lives in a small, rural city. He or she is a materialist, does not know a lot about biotechnology and does not perceive it as very risky. The core green critic on the other hand has an average age of 36, has higher education, lives in a large city, votes left of center. She has post-materialist values and relatively solid knowledge about biotechnology. The green critics perceive the risks of biotechnology to be great.⁹

The blue skepticism is conservative and would like to slow down or control development, while the green is radicalized and would like to confront development. This also applies to their respective strategies in the debate. The blue skepticism, as represented by the Christian Democratic Party demands ethical control of gene technology, but concedes to the possible positive benefits of the technology. The green critics, as represented by the Green Party and the Centre Party during the 70ties demands abstinence from the technology. In their opinion the technology is immoral and/ or unacceptable regardless of practical results.

What is the moral consequence of the gene technology that is perceived as immoral? This is how Fjaestad et al sums it up:

"Many Swedes believe that genetic engineering is an improper manipulation of life and; more specifically, with the meaningful order of nature and ecology where every specie has its place and function. The limitations of natures should not be overstepped by the aid of artificial tools."

⁸ Moses, 1999

⁹ Fjaestad et al, 1998

You find similar thoughts in many places; a clear formulation of this romantic view of nature is found in *Bang Bang*¹⁰, Sven Wernström juvenile novel:

“Somewhere in the middle of the area inside the barbed wire was the big nuclear power plant silent and abandoned. This was the last one still in function... A long time ago there had been many. Some had shut down by themselves; some had been disabled by the people. There had been constant fights with the monitors at that time. But grandpa and the others had not given in as it was necessary to stop the dangerous things ... Nuclear power was something horrible and unnatural... All other power comes from the sun, either as waterpower, coals, oil, gas, solar heat, wind- or muscle power. It is the sun that keeps all movement and life on earth going ... But nuclear power was something else. It was outside of the order that life and humans was part of ... It was cheating death.”

This quote is using natural order as a critique against nuclear power, but the same argument can with ease be directed against gene technology. Both authors are united in the common view of nature.

It is worth noting that this romantic view on nature often contains anti rational aspects; the order of nature is too complex to be fully comprehended.

This view is often invoked in cooperation with the precautionary principle in the gene- and biotechnology debate; nothing new might be introduced unless you can prove that it is safe. When nature is too complex to be understood (and the milder version that we do not have knowledge comprehensive enough to understand it fully) and actions need to be guided by the precautionary principle; you get a stalemate where it is impossible to introduce new things into nature.

The romantic view of nature, where nature is ordered, meaningful and primordial will often slide into an animistic view where nature is animated and teleological. Even an eminent scientist like biologist Erwin Chargaff, the man who discovered how the base pairs of DNA are combined makes this transition:¹¹

“Do we have the right to counteract the evolutionary wisdom that has accumulated over millions of year without being able to return, just to satisfy a few scientists’ ambition and curiosity?”

Evolution is now wise, while Ehrling and Ekengard claim that nature strives towards diversity:¹²

“To cultivate the earth means that we, from an ecological point of view reduce the number of species to cultivate one crop, e.g. wheat. Through cultivating the land, fertilizing it and the use of pesticides, we counteract nature’s strive towards diversity... This strive is manifested in weeds and insect pests.”

¹⁰ Wernström, 1980

¹¹ Norman, 1976

¹² Ehrling & Ekengard, 1980

Stefan Edman, founder of the Church of Sweden's environmental council and former advisor to Prime Minister Göran Persson, unites the Christian and Ecosophical mystic – nature is animated:¹³

“Humans give voice and speech to all beings. It is through humans that the created world can speak with God. Whether nature execrates or praise, renounce or praise its creator is dependent on us. Our acidic lakes that are almost empty of life can no longer carry their fresh testimony of Gods wisdom, they are forced to give a twisted and false image of his greatness, and they have to renounce its creator. And they do so in agony, they can not be blamed, the blame is ours. Humans have been given the freedom to cooperate with them, but we have used this freedom to vandalize them so they can no longer be recognized, they have become caricatures of creation. We have crushed the mirror of wisdom in every drop of water”

Any attempt to inform away resistance to gene technology based on values like this is vain. We are dealing with a world view that give existence meaning and it must be met with alternative views.

Despite the fact that most Swedes do not fully share this romantic notion, it is still mixed into our common culture. This leads to an emotional empathy for these views even among those that does not actively belong to groups that have a negative view on gene technology.

The Misunderstanding of the Professional Societies

Gene technology in the political discourse is often presented as something that has been forced upon us by researchers and doctors. It is a disturbing, incomprehensible and ethically risky project that the political institutions now have to react against, -after a correct debate. The political institutions are the guarantee of order and ethics. Within the medical community's discourse you will find the idea that they are the guarantee for good ethics and medical practices and that the political sphere are needed to legitimize this, but that the political sphere do not fully understand the issues and are reacting too slow.”¹⁴

Another factor that has contributed to the development of the discourse is the increased fragmentation of our society into professional societies that under normal circumstances does not interact a lot with each other and each other's discourses. This fragmentation increases the risk of spreading antagonistic or conspiratorial views on other groups' activities in our society.

That the characteristics of group you belong to yourself are perceived as more righteous and more in accord with the values of their society compared to the other groups is a

¹³ Uddenberg, 1990

¹⁴ Bakshi, 2001

very well documented social psychological phenomena.¹⁵ This occurs regardless of the background of the groups members. You even find the phenomena in arbitrary assembled research groups. Members of one group tend to upgrade what they experience as their good abilities and downplay other arbitrary assembled groups' abilities. It has also been showed that they disparage or distrusts information that come from other groups regardless of the quality of the argument or documentation.¹⁶ This effect occurs even in situation that lacks these kinds of hindrances for understanding; it is reasonable to assume that the cultural and differences in assessments that exist to a higher degree limits communication and creates suspicion.

In the discourse on gene technology, natural science experts have assumed a key role, but due to the particularities of research culture the communication have been complicated. In their role as professionals, which is the one that is most often assumed in the debate, their opinions has to be well funded and any insecurities has to be pointed out. This is a problem: They can not meet non-fact based questions and arguments with their science based argumentation. They appear insecure when they point out the weakness of their own arguments and facts. To tackle the ethical questions the scientist has to shed the garb of their profession.

One of the mistakes scientists do is to assume that the public discourse as formal and scientific. One example of this is found in the attempts to start a dialogue on gene technology in the 70ties. The participants spoke past each other, the scientists argued with facts while the public and the policymakers argued with values. Value-based arguments do not belong in a formal, scientific debate so the scientists concluded that they did not want to have serious communications or that they could not meet on the same level. They addressed the parts of the discourse that could be addressed with fact-based arguments and avoided the rest of the discussion. This led the public and the policymakers to conclude that the scientists were uninterested, or even opposed to ethics.

One reoccurring thought among scientists, doctors and business community is that the resistance against gene technology is due to lack of knowledge or erroneous interpretations of science. The resistance could be defeated by informing it away. As soon as the public and the policymakers are thoroughly informed they will realize that the benefits of gene technology far exceed the risks. They do not perceive the deep differences in values behind the resistance.

In the internal discussion among the scientists during the 70ties displayed a consciousness that the risk assessments was shaky, but that they where accepted as a foundation for further evaluations. The participants knew that future research would decrease the insecurities and make an adaptation of security measures to match the actually risk possible. However, when the debate went public, the insecurities in the risk

¹⁵ Ostrom & Sedikides, 1992; Hewstone, 1990

¹⁶ Mackie, Worth & Asuncion, 1990

assessment became invisible or they were interpreted as an additional risk. This led to a debate where even hypothetical risk had a large impact on the debate.

When the planned decreases in the security measures came, this was in direct conflict to the risk assessments that had been created in the public. The public lacked the information that the updated risk assessment of the science community was built on, this also led to doubts about the reputation of the science community.

When the hybrid DNA-technology was utilized in Sweden, it led to the public questioning the scientific authority and started a discussion about their role in society. This in turn led to where the temporary regulations were made permanent because of public and political pressure.

The other key interest group in the gene technology debate was mass media. The unchallenged role of the experts as interpreters of truth got unexpected resistance in the rapid rise of mass media as a power factor in Swedish society. The politicians got more and more of their impressions from the media rather than from experts during the 80-ties.

As Bakshi and Fjaestad et al points out, the news stories tended to describe discoveries and progress in gene technology as positive in a majority of the cases. They are however put in a different context in the editorial pages and in the news coverage that followed the initial “new exciting scientific discoveries made” category.

Journalists focus on impartial coverage and thus make an effort to present different views. This means that minority opinions can get much more coverage than what is justified based the numbers of supporters behind it. Even if there is a broad scientific consensus in a question, e.g. on security evaluations surrounding gene technology; the journalist will still hunt down critics who give the impression that there is questions around the security or that the scientific community is split in the question.

The little mans fight against an overwhelming power is a regularly returning theme in our society. Minorities, the loner, the dissident that has been silenced have become the archetype of carriers of truth¹⁷. But this will often be interpreted as the dissident must be right. This is particularly true if she is opposed by a powerful authority; she will then become part of the dramaturgy of exposé where the carrier of truth, often the journalist that is standing up against the establishment (the scientist or the government) that is “lying” or “covering up”. A combination of distrust against authorities, the fact that even very marginal opinions are presented and an interesting discussion that is both financially interesting as well as a credibility builder leads to a tendency where the media outlets tends to focus on conflicts rather than mirroring a consensus or mediating a conclusion.

¹⁷ Brin, 1998

References

- Ann-Sofie Bakshi, Tilltro och misstanke : genteknik och foster-diagnostik i det offentliga samtalet. Diss. Linköping: Universitetet, 2001
- David Brin, The transparent society. New York: Addison-Wesley, 1998
- Guy Ehrling & Inger Ekengard, Genetisk ingenjörskonst : tjuvkoppling eller genväg? Stockholm: LTs Förlag, 1980
- Björn Fjaestad et al, in Bauer, Durant & Gaskell (red), 1998
- D. Mackie, L. Worth & A. Asuncion, "Processing of persuasive in-group messages", in Journal of Personality and Social Psychology, volume 58, 1990, pages 812-822
- J. B. S. Haldane, "Daedlus, or Science and the Future, -a paper read to the Heretics, Cambridge, on February 4th, 1923. (<http://cscs.umich.edu/~crshalizi/Daedalus.html>)
- Vivian Moses, "Biotechnology products and European consumers", in Biotechnology Advances, volume 17, 1999, pages 647-678
- Colin Norman, "Genetic manipulation: guidelines issued", in Nature, volume 262, 1 July 1976, pages 2-4
- Organic Gourmet: <http://www.theorganicgourmet.com/beef.html>
- T. M. Ostrom & C. Sedikides, "Out-group homogeneity effects in natural and minimal groups", in Psychological Bulletin, volume 112, 1992, pages 536-552
- Nils Uddenberg, Prometheus och dryaden. Stockholm: Natur och Kultur, 1990
- Sven Wernström, Bäng bäng. Vikbolandet: Sven & Inga Wernström, 1980, pages 107-108
- Brita Åhman, Hybrid-DNA : etiska och humanitära aspekter på genmanipulationen. Täby: Bokförlaget Robert Larson, 1981, pages 84-85