Strategies for the Present,

Feminist Resistance to New

by Sue Cox

On reproche souvent aux féministes opposées aux nouvelles technologies de reproduction (NTR) d'adopter une approche naïve pour tenter d'arrêter l'évolution technologique. L'auteure du présent article estime qu'une opposition féministe organisée contre les NTR constitue une stratégie viable et importante à l'heure actuelle, si elle est conjuguée à une autre vision d'une technologie plus appropriée.

In early nineteenth century England, a group of skilled workers refused to accept that technological change is unstoppable. These men, who became known as the Luddites, organized against the rapid introduction of new technologies. Because the dominant ways of thinking about technology equate technological change with progress, Luddism is commonly viewed, even by some progressive thinkers, not as a courageous stance, but rather as a sadly mistaken, pathetic, or even dangerous response. This article is about Luddism, not as it existed during the industrial revolution, but as it is now being revived in the form of feminist resistance to the rapid and unfettered proliferation of new reproductive technologies (NRTS).

Ways of thinking about technology

To understand why feminist attempts to halt or redirect the development and use of NRTS represent vital strategies for the present, it is necessary to think about *technology as an inherently political phenomenon.* By this I mean that technology shapes, and is shaped by, existing power relations and dominant social values. Whether we are talking about microwave ovens and cellular phones or embryo transfer and genetic screening, the design, development, and use of many technologies tends to reproduce and exacerbate existing social inequities.

When a society is characterized by a sexual division of labour, the impact of technological change is experienced differently by women and men. Men who predominantly occupy the "design context" of technology, employ the decisions, materials, personnel, and techniques necessary to developing or creating technology. Women typically remain in the "user context" (which includes the motives, intentions, advantages, and adjustments called into play by the use of the tool or technique). Much less is known about the user context, although "most men do not know that they do not know anything about women and the user context." (Bush) Thus women often appear to be the passive recipients of technological innovations which, more often than not, have little affinity for their actual needs and preferences as users. In some cases, such innovations have harmful effects on the health and autonomy of those who use them.

The ways that we think about technology do, however, have an enormous impact on our experiences of, and responses to particular technologies. If we are to actively respond to, rather than passively accept technological change, it is necessary to challenge at least two dominant ways of thinking about technology. On one hand, the ideology of technological determinism—or "the domination of the present by the past"—encourages us to believe that technological change is unstoppable: it proceeds according to its own logic and, we must simply adapt to it or be left behind. On the other hand, the ideology of technological progress—or "the domination of the present by the future"—consistently holds out the promise that it is technology which leads to human progress and technology which can, given sufficient resources and time, resolve all of our problems. Both ways of thinking about technology obscure the here and now, the technological present tense, as the immediate realm for assessment, decision-making, and action. (Noble, 1983a)

Feminist concerns about new reproductive technologies

Rejecting dominant ways of thinking about technology empowers feminist activists to challenge the rosy promise of NRTS. Questioning the way that techniques such as *in vitro* fertilization (IVF) have been presented as purely therapeutic medical interventions designed to "help" the infertile, feminists have initiated an ambitious campaign of research and activism. From the health hazards of fertility drugs (Klein and Rowland) and the traumatic experience of undergoing IVF (Klein) to the commercialization, commodification, and fragmenting of reproduction and motherhood (Corea; Rothman, 1989), feminists have exposed many worrisome social, political and economic dimensions of NRTS and built a strong, although not uncontroversial, case against the development and expanding use of many NRTS.

Against the backdrop of emotionally charged stories about infertile couples' struggles with infertility, the feminist case against NRTS has, however, often been misrepresented by the popular media and,

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consequently, misunderstood by the general public. For instance, following the 1990 public hearings held by the Canadian Royal Commission on New Reproductive Technology, feminist critics of IVF in particular were presented as neo-Luddites, hypocrites, and "Big Sisters" willing to grant women "choice" only with respect to the politically correct technology of abortion.[1] In the context of such disputes about the meanings of "reproductive choice," feminists have struggled to articulate a powerful analysis of how it is that NRTs will erode rather than enhance women's reproductive choices; of how these technologies collectively offer women not more choice, but new and sometimes dangerous choices; of how, in light of fetal rights campaigns and increasing pressures to produce "perfect" babies, NRTs may eventually close off women's abilities to refuse various kinds of technological interventions. (Rothman, 1986)

In the long run, the existing balance of power must be shifted to enable women to have a meaningful voice in designing and developing alternative social and technological responses to reproductive and other health-related decisions. In the short run, everything possible must be done to slow the introduction of technologies which are likely to reproduce or exacerbate existing social inequities. Both strategies are essential components of feminist resistance to NRTs.

Strategies for the present

Strategies for the present are attempts to halt, slow or redirect the process of technological change. They are, therefore, valuable ways of buying time for organizing and strategizing. Such strategies are also effective as tools for mobilizing support and enhancing political consciousness. In the feminist campaign against NRTs, organized and articulate opposition has both aroused public debate and inspired creative new forms of Luddism.

As the largest international feminist organization responding to NRTs, the Feminist International Network of Resistance to Reproductive and Genetic Engineering (FINRRAGE) monitors a wide range of developments in reproductive and genetic engineering.[2] Since it was founded in 1984, FINRRAGE has held numerous conferences, and members around the world have distributed information, organized regional meetings, and expressed their opposition to NRTs. At the 1985 Emergency Conference held in Sweden, representatives from over 20 countries passed a resolution strongly condemning the development and application of reproductive and genetic engineering.

> ...We know that technology cannot solve any problems created by exploitative conditions. We do not need to transcend our biology, we need to transform patriarchal, social, political and economic conditions.... We call on women to resist the take-over of our bodies for male use, for profit making, population control, medical experimentation and misogynous science. (Spallone and Steinberg, 211-212)

This resolution has served as a basis of unity for FINRRAGE and as an affirmation of

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the connections between all forms of technological intervention in reproduction. Responding to the call for organized opposition, feminists have employed a variety of tactics designed to halt or slow down the development and use of NRTs. One of the most widely endorsed has been an educational campaign aimed at deterring women's individual use of NRTs. A second and compatible strategy involves efforts to block the use of public money in the development and application of reproductive and genetic engineering. (Mies) Such campaigns may also focus on the need to ban certain kinds of research or implement a moratorium on the opening of new IVF clinics. Saying no to "progress" in these organized and sustained ways may not bring the development and application of reproductive and genetic engineering to a complete halt, but it does serve to create a critical pause in thinking—a moment in which ordinary people may realize collectively that the course of technological change can be slowed, critically debated and, perhaps, eventually altered.

Feminist scholarship, as well as political activism, has much to contribute to this process. Smashing "the mental machinery" of technological progress empowers people to act and, therefore, it is also a vital strategy for the present. As David Noble argues, there are at least five tasks confronting intellectuals who seek to smash the "mental machinery" of technological progress: "to shift the burden of proof; to create the space to say no; to develop the means of resistance; to develop an alternative future that is moored in the present; and to transcend the myth of the machine, the fetish for technological transcendence." (Noble, 1983b)

To *shift the burden of proof,* feminists must continue to articulate loudly and clearly the case against NRTs. Doing so raises doubts about the certainty of technological progress. Even if the risks, problems and negative social implications of NRTs are not enough to persuade the public and the powers that be, the onus must be placed upon advocates of these technologies to prove, rather than assume, the benefits of their development and application.

To *create the space to say no* and to *develop the means of resistance,* feminist critics of NRTs could focus on other examples of cases in which societies have accepted and implemented restrictions upon the development and use of particular technologies. For instance, widespread opposition to the use of atomic energy as an alternative to the burning of fossil-based fuels provides a good case study of how ordinary people and experts have joined in saying no. Although confronted by a renewed and powerful lobby to reverse restrictions on the operation of nuclear power plants, the anti-nuclear lobby has instilled in people's consciousness the possibility of totally rejecting a particular technology.

To *develop an alternative future which is moored in the present* and to *transcend the myth of the machine,* specific criteria must also be devised for deciding which technologies must be stopped altogether and which may, with some design or use modifications, still be useful. Some technologies are *inflexible*—that is, there are no design features or patterns of use which could be modified in order to eliminate the tendency of a particular technology to reinforce power relations. (Winner) Such technologies are incompatible with the values of a democratic and feminist world and must be opposed. The chastity belt is one simple example of an inflexible technology.

Alternatively, it is possible to devise public interest criteria for new and developing technologies: such criteria would be based on a set of explicitly stated values. For instance, technology should be based on social needs not the creation of profit; technology "should be satisfying and self-fulfilling to work with" not "alienating or socially fragmenting"; technology "must help to increase the power of women over their lives" not "concentrate this power in the hands of men"; and technology should "distribute decision-making power as widely as possible in the community," not concentrate it "in the hands of a narrow elite or powerful sectional interests." (Dickson) While there are many other criteria which might inform decision-making about which technologies to oppose, this minimal list makes a strong case for the rejection of many expert-controlled technologies. Indeed, such criteria suggest the need to create a radically different kind of scientific and technological practice than we now have.

Strategies for the future

Strategies for the future focus on the inclusion of women in the design and development of more appropriate technologies, while at the same time attempting to transform the methods, projects, and aims of science as a whole. As an organizing device, such alternative visions are necessary to "inspire, embolden, raise consciousness about political realities, and provide something to fight for rather than merely against, something to believe in." (Noble, 1983c)

Infertile women, in particular, need a woman-centred debate that is capable of

asking how women want to deal with infertility without being abused by NRTs. (Pappert) Strategies for the future must, therefore, include proposals designed to address problems arising from the ways in which NRTs are currently being used and/or regulated. Such proposals for the modification of existing technologies assume that for the most part, a particular technology is flexible enough to be adapted to democratic and feminist goals.

Alternatively, feminists have also suggested a number of strategies for the long-term re-shaping of science and technology: such strategies address the politics of expertise, the devaluing of lay knowledge, and the need for a more democratic process of determining which technologies will be developed and what goals they will serve. As Margaret Benston has argued, there is much that can be done to shift the existing imbalance of power between lay persons and scientific and technical experts: her three models—science for the people, science with the people, and science by the people—provide useful visions of how progress toward an alternate kind of scientific and technological practice might be achieved.

Working within a *science for the people model,* scientists and technical experts "would try to come up with socially responsible kinds of applications or would make their expertise available where needed." (Benston, 72) This model is an improvement over current practice, although it does not challenge the separation between experts and lay persons. Everyday "non-credentialed" knowledge is devalued while "the institutionalized areas of (white, male) expertise are defined...as the only legitimate areas of concern: areas where nonscientists who have special knowledge are dismissed." (Benston, 71)

A second model, *science with the people,* attempts to overcome the separation between experts and non-experts by valuing lay knowledge, as well as expert knowledge, and by providing lay people with the opportunity, resources, and assistance necessary to learn more about specific areas of scientific and technical expertise. This model reduces the hierarchical relations of expertise and creates a spirit of co-operation. It does, however, assume that non-experts will have the confidence to challenge expertise, and that experts themselves will assume responsibility to work in this way.

A third approach, *science by the people,* attempts to reincorporate science into everyday life. To accomplish this task, it is necessary to discard the social role of the scientific expert and begin to disconnect knowledge from the exercise of power. While this model is perhaps the most desirable long-term objective, scientific and technical experts can certainly begin to change science by working within either of the other two models.

Within the *science for the people* model, there are many opportunities for feminists to draw upon the credentialed expertise of scientists and technical experts. Clinicians could be whistle-blowers for the worst abuses of fertility drugs, physicians could publicize the low IVF success rates and the ethical problems related to embryo experimentation; medical researchers could refuse to conduct further research into the development of techniques in reproductive and genetic engineering.[3]

Building upon the *science with the people* model, feminist scientists and researchers as well as physicians and clinical support staff could pool knowledge, experience, and resources to revise the design and use of NRTs. Such shared efforts would incorporate women's needs and interests into decision-making about which technologies are to be developed, and how they will be designed and used. In particular, improved safety standards and a concern for women's experiences of techniques such as IVF might prove to be important focal points for modifying the use of existing NRTs. (Stanworth)

Conclusions

Strategies for the future are important elements of feminist resistance to NRTs. Public interest criteria for new technologies and alternative visions of a more woman-friendly approach to science and technology create the desire to work for, as well as against, something. *Strategies for the future are not, however, a substitute for responding to technology in the present tense.*

Without a *strategy for the present* (i.e., a slow down in the process of technological change), feminist critics of NRTs have little chance of developing, let alone implementing, proposals for more appropriate technologies. To do nothing now is to abdicate responsibility for the future—alternative visions, while important, will always remain just visions. Moreover, to assume that alternative technologies will, in and of themselves, shift existing power relations is to fall back on a version of technological determinism: roughly stated, it is alternative or appropriate technology which can liberate us, just as it is capitalist patriarchy's technology which oppresses us.

Understanding technology as a inherently political phenomenon requires that we create a critical pause in thinking: a space in which people may collectively realize that *it is possible to say "no" to technological "progress."* Feminist resistance to NRTs is, in the true spirit of Luddism, a viable way of going about this task.

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[1]See editorial comments by Thomas Hurka in *The Globe and Mail* (May 1991). This editorial was written in response to recommendations presented by the National Action Committee on the Status of Women to the Canadian Royal Commission on New Reproductive Technologies. In their brief, NAC called for a moratorium on the opening of any new IVF clinics.

[2]The journal *Reproductive and Genetic Engineering* (established in 1988) is devoted to feminist research on NRTs and is edited by many of the founding members of FINRRAGE.

[3]For instance, Jacques Testard, a French biologist world-renowned for his expertise in IVF and the freezing of human embryos, has called a halt to some of his own research in the hopes that there will be limits set on the "most worrisome" aspects of such investigation. (Conseil du Statut de la Femme)

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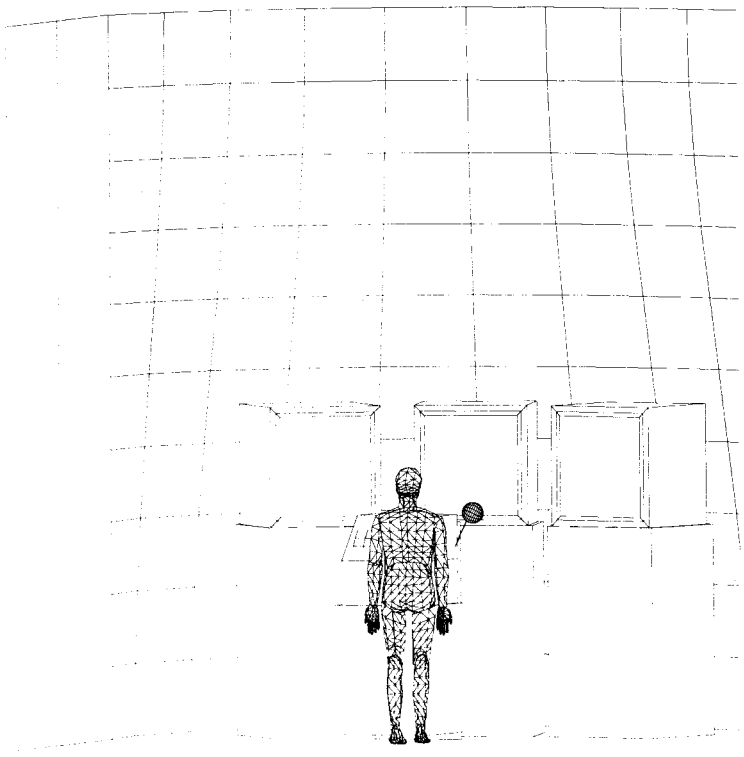

Nancy Paterson, "The Machine in the Garden"

This is an AutoCad drawing of Nancy Paterson's most recent work. Based on the design of the casino slot machine, video from three thematic areas (war, talking heads and commercials/childrens' programming) 'spins' on three monitors and stops on the 'jackpot,' the buddhist motif of "hear no evil, see no evil, speak no evil."