PART 10: MODERN SCIENCE AND HUMAN RIGHTS EDUCATION

a) SCIENTISM AND ITS EFFECTS ON HUMAN RIGHTS PHILOSOPHY
   By Upendra Baxi

Specialization and Authenticity
The languages of science and technology heavily mediate our understanding and experience of the rampantly globalizing world and impact our understanding and practice of human rights. Activists and educators need to understand that their work, even their political being, operates within the ideological paradigms and practices of science and technology. Scientism dethrones sacred notions of nature and reconstitutes our concepts of the meaning of terms such as:

NATURE.... SOCIAL... HUMAN....

NATURE

First: The Death of God. This contains several related ideas.
- physical /material nature is no longer divinely/cosmologically ordained
- laws of nature are not divine laws
- nature is not immutable or impervious to transformation by human efforts

Second: Nature becomes a resource for human beings just as human beings become resources for society. Thus we speak of natural resources and human capital.
- Resources have to be used and developed
- Some resources are renewable, some not
- Finite resources pose a problem that must be met by science and technology, by constructing nature in vitro through experimental invention
- Nature can be reproduced
Third: Nature is at times a liability, which science and technology must improve for human well-being.

- natural disasters can now be forecast and considerable human harm avoided by advance planning
- the causes of these natural disasters are now better understood and explained in terms of collective human action and responsibility

Fourth: Nature is conceived as a storehouse of raw materials which science and technology may use, exploit, or artificially reproduce for the benefit of humankind.

- Non-human beings must therefore be subjected to suffering since their right to exist is subject to the needs of discovery and invention for human purposes, such as medicine and food.
- The animal rights movement is not yet thought of as an aspect of the human rights movement. This itself shows how anthropomorphic our concepts of human rights remain.

The instrumental concept of nature - as opposed to the sacred - carries many a human rights implication, vividly illustrated in the poignant discourse concerning the human rights of indigenous peoples, for whom the human-nature relationship is defined not in terms of aggressive usage but in those of intertwined cosmic harmony. To them, land is not a commodity to be sold under market conditions but a land to be respected, and made intergenerationally holy, by ancestor spirits. The languages of contemporary and modern human rights have no place for this worldview. Human rights resistance has led to the development of frameworks of cooperation in the context of civilizational conflict. HRE has yet another task defined for it in terms of its authentic self-positioning in this discourse. An inter-civilizational discourse on HRE is yet to be borne.

How far may science and technology proceed by way of the appropriation, modification and commodification of nature? The problem of limits emerges centrally for the politics for human rights. The struggle to enunciate, protect, and promote environmental rights is directed to setting such limits.

The domain of expanding reproductive technologies furnishes a crucial human rights battlefield in terms of right to life versus women's secular autonomy over their bodies. HRE is rife with contention on this issue, as well as related arenas opened up by medical, pharmaceutical, and agricultural bio-technologies.
HOW IS THE PROBLEM OF SUCH LIMITS TO BE ADDRESSED?

Issues of the regulation and prohibition of certain kinds of research and their applications remain grounded in human rights values, norms, and standards. The prohibition of certain kinds of research for moral reasons emerges in the human rights idiom as a form of unallowable pre-censorship. The human right to freedom of speech and expression, for example, means for the scientist the right to experimentation and the dissemination of results. If forbidden, this may amount to unjustified interference with their human right to work, to livelihood, and to a just measure of reward proportionate to their potential contribution to social and human development.

Human rights oriented regulation may provide the best possible answer. The Civil and Political Rights Covenant addresses the issue of a possible human right to informed consent, thus restricting the sway of scientific experimentation with human subjects.

WHAT CONSTITUTES EXPERIMENT?
WHAT DO WE MEAN BY INFORMED CONSENT?
SHOULD WE SET SOME HUMAN RIGHTS LIMITS EVEN TO INFORMED CONSENT?

An experiment, at least from human rights perspectives, includes more than events that occur through the scientific protocols of laboratory research. Because their proponents usually hail from communities of lay people, concepts of human rights oriented regulation of experiments remain both fuzzy and problematic. Many activists do not understand scientific/technocratic languages in ways that empower us to conduct reasoned dialogue with scientists. This weakens our ability to propose the human rights oriented regulation of experimentation.
SOCIAL

Our understanding and experience of the “social” remains heavily influenced by scientism. Because scientism is an ideology produced by practitioners who remain historically situated in the matrix of bourgeois capitalism, it is understandable that:

...a whole new view of society has arisen, one in which the individual is primary and independent, a kind of autonomous social atom that can move from place to place and role to role. Society is now thought to be the consequence, not the cause, of individual properties. It is individuals who make society. Modern economics is grounded in the theory of consumer preference. Individual autonomous firms compete with each other and replace each other. Individuals have power over their bodies and labor power, in what MacPherson described as “possessive individualism.” This atomized view is matched by a new view of nature, the reductionist view. Now it is believed that the whole is to be understood only by taking into account that the individual bits and pieces, the atoms, molecules, cells, and genes, are the causes of the properties of whole objects and must be separately studied if we are to understand their complex nature.

Genes make individuals and individuals make society and so genes make society. Genes make individuals, individuals have particular preferences and behaviors, the collection of preferences and behaviors make culture, and so genes make culture. That is why molecular biologists urge us to spend as much money as necessary to discover the sequence of the DNA of a human being. They say that when we know the sequence of the molecule that makes up all our genes, we will know what it is to be human. When we know what our DNA looks like, we will know why some of us are rich and some poor, some healthy and some sick, some powerful and some weak. We will also know why some societies are powerful and rich and others are weak and poor, why one sex, one nation, one race dominates another.

(Lewontin, 1991: 11-12, 14.)
The response that dictates a return to a description of the world as an indissoluble whole” because in trying to break anything down to into parts we inevitably loose the essence, now emerges as simply another form of mysticism, a kind of obscurantist holism. Our world is not one huge organism that regulates itself to some good end as the proponents of the Gaia hypothesis believe. The anti-reductionist stance on life sciences carries important messages for human rights activism in constructing the place of human rights in the social context.

HUMAN

In rather stunning ways, human is continually being redefined by digitalization and biotechnology. Human rights movements increasingly mobilize human solidarity through, and across, cyberspace. This, as activists well know, is a mixed blessing. Cyber solidarity in human rights activism poses some acute problems for its authenticity in terms of the Seven Sisters. The awesome power of the World Wide Web and the cell phone now replace earlier forms of social movements that thrived through direct mass social action. They promote activist efficiency at the cost of the immense richness of face-to-face communication. They also promote hitherto unimaginable forms of state surveillance over activist communication in a post 9/11 world. The emancipative power of modes of production of HRE remains thus both facilitated and structurally adjusted.

Scientism redefines the very notion of being and remaining human

- Am I fully human when I am required to regard my body as property?
- Can experiments with my body parts be construed as a patented corporate invention?
- If so, am I entitled to royalties from sales?
- How should we approach the rights of the surrogate mother in relation to the birth mother?
- How can human rights activism help adjudicate the right to know paternity or maternity, claimed by beings produced by artificial insemination?
- How may we understand a xenotransplanted human being as being fully human?

All this furnishes an agenda of authenticity for HRE as yet barely addressed.
b) HUMAN RIGHTS EDUCATION FOR STUDENTS OF SCIENCE AND TECHNOLOGY
By Richard Pierre Claude

As science and technology make ever more rapid advances, we seem to have more to worry about. Cyberspace threats to personal privacy are no longer matters of science fiction as corporate and government intelligence are equipped to monitor electronic mail. Incautious steps toward human cloning raise fears about the revival of the pseudo-science of eugenics, presuming to tell us who is fit to live. Daily news reports present serious ethical questions.

- Did China violate the human rights of prison inmates in 2001 by harvesting their kidneys and other human organs without their informed consent, in turn selling them to overseas buyers?

- Do the victims of HIV/AIDS in sub-Saharan Africa have a human right to benefit from pharmaceutical treatments proved effective but beyond the financial means of most of those otherwise facing certain death?

- Did the United States violate the human rights of American mathematicians by restricting them from traveling to a conference of the International Mathematical Union in Havana based on Washington’s ban on travel to Fidel Castro’s Cuba?

These questions cannot be answered simply, but more significantly, they cannot be answered fully, and perhaps not at all, without some understanding of internationally defined human rights. People interested in science policy are at a disadvantage for making critical judgments when they are not familiar with human rights. What is generally missing in HRE is attention to the many intersection points between human rights and science. College courses on environmental policy are rapidly proliferating, but largely without perspectives drawn from the often allied field of human rights. Scientists, like everyone else, need an environment of fundamental rights and liberties so that they are no mere puppets of political authorities, while at the same time, they should be aware that Article 27 of the Universal Declaration of Human Rights proclaims:

Everyone has the right freely to share in scientific advancement and its benefits
A GOOD BOOK

*Science in the Service of Human Rights* by Richard Pierre Claude (University of Pennsylvania Press, 2002) takes into account disparate reading publics: some concerned with science and society on a technological fast track occasionally begetting Frankenstinian misapplications of technology; some beset with the pressures weighing on people's human rights because of economic and political globalization; others troubled by questions about technological advances outstripping moral progress in public affairs; and others alarmed by human rights violations to members of the science community. Such people may fall in many categories--scientists and students of science, human rights activists, scholars, policy makers, and the general public. They are the intended audiences for this book, designed to promote HRE for students of science, technology and health professions.
**c) USING INFORMATION TECHNOLOGIES FOR HUMAN RIGHTS EDUCATION**

By Frank Elbers and Felisa Tibbitts

**Introduction**

It was only ten years ago that the fax machine was a revolutionary addition to our office communication tools, which consisted of regular mail, express mail, and the telephone. Today, we use a fax machine only when we cannot send something via e-mail or inexpensively through regular "snail" mail. Organizations conduct most correspondence through e-mail and the Internet, conduct research on the Web, and post publications on our organization's web site. Some of us even organize distance learning courses via the Internet.

The human rights field needs to address the technology gaps that separate IT capabilities within the field. HRE groups in the so-called North generally have access to higher quality and affordable services, especially those involving access to the Internet as well as e-mail. Many human rights organizations in other parts of the world have to deal with conditions where dedicated telephone lines are not always a realistic option, Internet services are expensive, modems are slow and computer-literate personnel are not readily available or affordable. Since part of our work is inherently global, then we all need at least a minimum of capability. This includes regular access to e-mail and the Internet, and the opportunity to share our work through a website.

Regardless of the quality and quantity of educational materials available over the Internet, these resources can never be a substitute for face-to-face interaction. Similarly teaching does not guarantee that learning will take place. This comment may be particularly relevant for the emerging practice of distance learning in the HRE field.

This article focuses on the current applications of new information technologies to HRE, loosely grouped into three general categories: information-sharing, information-gathering, distance learning.
**Information Sharing**

*Listservs, Mailing Lists, Electronic Newsletters*

**Listservs**

Listservs are generally organized around a theme, and membership numbers can range from six to six thousand. Members must subscribe, and have the option to make textual contributions, which are then circulated on the listserv. Moderated listservs have a single person or team that receives, edits (if necessary) and posts messages sent by members. Unmoderated listservs have no such gateway. Listservs are a way to facilitate sharing across subscribers.

Through a listserv, successful programs and guidelines for working in particular educational settings can be shared, such as an evaluation of a training program for community leaders in Peru, an assessment of HRE programs in Cambodia, research results of a study on implementing human rights principles in a 7th and 8th grade civics curriculum in Romania and principles for HRE as empowerment in informal education settings.

HREA hosts the Global HRE listserv, which had 3400 subscribers from approximately 165 countries as of June 2004. This listserv provides an international platform for publicizing new projects; announcing trainings and publications; describing lessons learned and sharing valuable information to enhance the capacity of individuals and organizations working in the field. Enabling networking is probably one of the main features of this listserv. The Global HRE listserv has provided a new medium for timely announcements, requests and suggestions within the HRE field in English, French, Russian and Spanish. These messages are archived on the HREA website and are accessible through a local search engine.

In the Summer of 2000 the listserv was a platform for the Mid-term review of the United Nations Decade for Human Rights Education, at the request of the UN High Commissioner for Human Rights, which was preparing an analytical report on accomplishments, remaining shortcomings and needs, and recommendations for action in the five remaining years. A total of over 1800 organizations and individuals from approximately 140 countries participated in the forum via the Global Human Rights Education listserv.

HREA works regionally with human rights organizations to develop regional listserv which facilitate information-sharing among educators and other human rights workers, for example, lawyers engaged in human rights-related litigation.
**Mailing Lists and Electronic Newsletters**

Mailing lists and electronic newsletters are electronic versions of mass mailings that are remarkably quick and inexpensive to execute and thus are excellent tools for calling people to action. Amnesty International, Human Rights Watch and the International Helsinki Federation for Human Rights have used mailing lists for urgent action appeals and to highlight situations of human rights abuses requiring immediate response from the international community.

Messages for mailing lists may be brief and factual, or take the form of the more journalistic newsletter. For example, the Croatian women’s human rights organization B.a.B.e. (*Be active, Be emancipated*) regularly distributes a newsletter that contains updates on the position of women in Croatia and the Balkans, and the organization’s activities and campaigns. Since 1999 HREA has published a monthly newsletter called ERC-L that includes an opening article with lessons learned in HRE; new tools for HRE; and a listing of all new documents added to HREA’s on-line HRE Library.

**Information Gathering**

**Internet-based Resources**

Resources on the World Wide Web can be categorized in three ways:

**WHAT’S THERE**

**HOW YOU GET IT**

**HOW YOU CAN CONTRIBUTE TO IT**

**What’s on the World Wide Web (WWW)**

Many HRE organizations and others actively involved in the human rights movement post information about their materials on the World Wide Web (WWW), usually through their organizational website. Sometimes, full text resources are available for downloading and use, such as training and teaching materials, original human rights treaties, research and case law.
HREA posts our materials on our website, and has an Electronic Resource Center (ERC) at:
http://www.hrea.org/erc. The ERC contains over 2,000 documents for the HRE field, for use by trainers and teachers working with a variety of learners. The categories include: curriculum and lesson materials, research and evaluation; training materials; newsletters and periodicals; and key human rights treaties and reference materials. Some of the materials have been posted by HREA directly and others are listed through links with the websites of other organizations. The language group is predominantly English, but also includes Arabic, Chinese, French, Russian, Portuguese, Spanish and other languages.

Since many fine materials are being developed by local NGOs, HREA is actively recruiting these organizations to share their resources over the Internet. In return, HREA provides the group with a simple homepage on our other web server, Human Rights Net (http://www.human-rights.net).

**Search engines**

**INFORMATION IS ONLY HELPFUL IF YOU CAN OBTAIN IT**

It is essential that human rights groups using IT organize their information so that it can be readily accessed by visitors to websites. Our knowledge about these means of access is improving every day. Fortunately, a great deal can be learned simply by visiting websites that have been well designed by colleagues.

Websites containing information intended for research purposes often have their own local search engine, such as the Canadian-based Human Rights Internet at http://www.hri.ca. The new HURISEARCH search engine (www.hurisearch.org) allows searching sites of non-governmental human rights organizations in 58 different languages.

**How to Contribute to Internet-based Resources**

Organizational web sites can contain basic background information about an organization, such as mission, staffing, and activities. Homepages are an opportunity to share educational materials that have been developed and proven to be effective in the field. The HRE field, which continues to grow, is still hungry for materials that are robust and effective.
HRE organizations that envision their website as a general resource for the field might include internal links with other organizations and documents. Those working closely on a regional or thematic basis might also organize a webpage for their network, with perhaps a related internal listserv or electronic newsletter. Essentially, the way that IT is integrated into the work of a HRE group should reflect their central communication needs: internally, within a known network of colleagues and stakeholders; and with yet unknown "consumers" of their materials.

**Distance Learning**

Until recently, distance learning technology relied exclusively on television broadcasts and radio programming preserved on videos and audio cassettes. These media typically complemented in-person tutoring and class work; television and telephone were combined to enable teleconferencing.

Distance learning is not a new phenomenon (think of the century-old correspondence courses and those educational radio broadcasts), yet the emergence of the personal computer and the rapid expansion of the Internet have given this field a new dimension and created **e-learning**, which is particularly useful for the continuing education of professional groups in the human rights field. Web technologies lend themselves to certain pedagogical approaches like case studies, simulations and quizzes.

An important distinction to make in distance learning is whether the learning takes place **synchronously**, i.e. the student receives instruction at the same time that the teacher is delivering instruction, or **asynchronously**, i.e., the instruction is received at a different time than it was delivered. These different modes of delivery require different technologies.

Synchronous learning incorporates simultaneous two-way communication as in a traditional classroom or training setting. Some applications are two-way radio, chat, audio and video-conferencing. Most systems require expensive equipment and high-speed Internet connections. Currently synchronous learning is usually limited to very resource-rich organizations such as international corporations, UN agencies and universities in the United States. An example is Teaching Human Rights Online (http://oz.uc.edu/thro/), an initiative of the Morgan Institute for Human Rights, in which (under)graduate student teams use video-conferencing to develop critical thinking and problem solving skills while working on case studies of international human rights problems and human rights law. Most distance learning, however, takes place asynchronously.

Distance learning courses are often offered using a mix of technologies like Web pages, file transfers, e-mail, listservs, bulletin boards, audio and video. One example is HREA’s Distance Learning Program for human rights and development professionals.
These courses take place with minimal costs, no travel requirements, and at the convenience of the participants and are lead by practitioners who understand the conditions faced by professionals in these fields.

Unlike most distance learning courses, HREA’s courses are not exclusively Web-based. HREA uses a dual system that makes it possible to participate in the distance learning courses via the Web or via e-mail only. Course literature can also be distributed in hard copy via regular mail, according to the needs of participants. These qualities make the courses particularly suitable for participants in environments where Internet connections are slow, unreliable or costly.

Whereas a distance education/learning course is based on interaction of groups in the context of a course, various Internet technologies allow for individual, self-paced learning without a tutor or other classmates. These Web tutorials can be integrated with various technologies such as audio and video, links to source materials, case studies and multiple-choice questions that allow learners to test their acquired knowledge and skills. HREA has developed interactive tutorials on the rights of refugees, women’s human rights, and the African, European and United Nations’ human rights systems, which are available on CD-ROM. Another example is the Human Rights Correspondence School, an initiative of the Asian Human Rights Commission in Hong Kong, which has produced lessons on different themes/issues or human rights principles. They have been regularly sent out to a wide network of NGOs, educators and professionals in Asia, to be freely adapted and used in their own education, and are also available on-line (http://www.hrschoo.org/).

CD-ROMs are an excellent medium through which to distribute self-paced learning materials as they can store large amounts of data, are easy to produce, can be reproduced very cheaply and there is no need for an Internet connection. The police training modules developed by the Constitutional and Legal Policy Institute (COLPI) in Hungary uses CD-ROMS most successfully. They include simulations of situations that police face in their daily work (appropriate use of force, assistance to victims, etc.) and are based on a combination of video and audio and readings.

Distance learning can also be used as a supplement to an existing course or training, either as a pre-course or post-course component. For example, the International Summer University of Human Rights offers an on-line introduction to the UN human rights system on the Web, which participants have to study before they arrive in Geneva for their two-week course.
**Quantity and quality of information**

Soon the HRE field will face a new problem: access to too much information. As yet, there are no formal criteria for evaluating the quality of HRE materials. Specialists and non-specialists alike use their own methods of assessment. Perhaps this is how it should be. However, it might also be important at some point to "flip" the guidelines that already exist for the development of effective and learner-centered HRE materials into suggested criteria or review guidelines. These should never be dogmatic, but they might help the field formalize its (perhaps multiple) understandings of what approaches facilitate human rights learning and activism.

**Language issues**

The language barriers within the HRE field have two aspects. First: communicating in different languages is difficult, sometimes impossible, and impedes worldwide use of various resources. The solution is to translate select materials into major language groups, which many HRE groups already do. However, certain scripts require special software. You can send me a manuscript in Russian, but if my computer does not have special software to read Russian, then your material will look as though a cyclone hit the keyboard. These linguistic and technical challenges impede sharing information using IT, although no more than sharing across languages the old-fashioned way. Certain software performs automatic translation that needs to be checked by an experienced translator.

**Security**

A genuine concern within the human rights field is the intrusion of those who want to disrupt the work of human rights organizations. In some countries, government agencies have restricted access to the Internet or monitored or interfered with websites or electronic communications. The international community is becoming more and more aware of these infringements of the fundamental rights of the freedom of expression and the right to information. Although there is little an individual organization can do about influencing such hostile conditions, there are some tools that can be used to ensure the integrity of electronic communication.

Encryption and so-called remailers are ways to ensure that governments or other third parties cannot read private or life-threatening information that human rights organizations send. The Human Rights Program of the American Association for the Advancement of Science (AAAS), the Association of Progressive Communication (APC), HURIDOCs, and the Martus project, among others, have been providing tools and assistance in this area.
Conclusion

We conclude our enthusiastic treatise on IT and HRE by reminding the reader of its inherent limitations. Although new technologies are particularly useful in transferring knowledge and skills, they are not as conducive to other aspects of the learning process, i.e. values, attitudes and behavior. Since learning is very much an emotional process, IT have their limitations as learning tools. It is also important to consider the cultural implications of the use of new information and communication technologies.

I. Although new technologies are particularly useful in transferring knowledge and skills, they are not as conducive to other aspects of the learning process, i.e. values, attitudes and behavior. Since learning is very much an emotional process, IT have their limitations as learning tools. It is also important to consider the cultural implications of the use of new information and communication technologies.

II. Managing and transferring information systematically and securely is a tremendous challenge for human rights workers, considering the sometimes sensitive nature of our work and the possibility of governments monitoring data traffic and communication.

III. How will those who cannot read and write benefit from IT? There is some potential in using audio/video tools yet often those who are illiterate also lack the infrastructure to access these technologies.

IV. The access to technology is a major challenge. Only more infrastructures will allow for faster, reliable and cheaper Internet connections in order for all people to exercise their rights to information and education. In order to be truly empowering and in the spirit of HRE, IT will have to be democratized.

New information technologies have helped create virtual communities of activists, educators and other professional groups, allowing them to share information and lessons learned, and consequently to improve the quality of their work. IT has also allowed HRE to reach out to learners who have not been reached before. However, one should always be mindful of the need to reach those who do not have access to current information technologies. The evolution of information technologies will continue to present opportunities and challenges to the global HRE field. Robert MacIver wrote that technology is the most subtle and the most effective engineer of enduring social change. It is incumbent upon all of us to remain informed about these developments and to creatively seek ways to improve our collective work in HRE.