WORKSHOP

Consultation Workshop on Gender and Technology

Monday 28 June 2004

Venue: European Commission – Information Society DG
Avenue de Beaulieu 31   6/30
1160 Brussels

The European Commission Information Society DG is hosting a workshop dedicated to

"Consultation Workshop on Gender and Technology".

The workshop programme is organised by DG INFSO/C with the purpose of preparing a session for the IST event in November.

INFORMATION FORM

To better manage the available space, please send back the registration form no latter than

Monday 28 June 2004

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THE VIRTUAL HAREM- TECHNOPHOBIA OR EXCLUSION?
AN EDUCATIONAL PERSPECTIVE

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Abstract of Presentation in Brussels Workshop 28 June 2004

Despite its bottom-up (egalitarian) development, the Information Society seems to run the risk of bringing forth a new elite. This elite's key objectives are to gain control over technological research, design, development and its applications. There is a real threat that 'digital despotism' may in the end succeed in drawing the boundaries of exclusion for many social groups and women in particular, according to results from international and intercultural gender research. Undoubtedly, technological culture excludes the perspectives of women and other non-mainstream groups.

Many open issues concerning democratic operations and processes in social-state institutions and policies remind us of old and decayed institutions of the past. In Ottoman society, for instance, the fundamental elements of the polyethnic harem-slavery institution, the harem culture in particular, were: exclusion, exploitation, despotism, racism, oppression, alienation, corruption, persecution, conspiracy networks, terrorism, specific 'sexual politics', physical and mental castration, the violation of the personality and the body, 'privileged rape', restricted mobility, etc. Similar characteristics observed in today's Information Society, on a 'virtual' level, in the **'Virtual Harem'**, include: the exclusion of specific groups from technological developments, electronic conspiracy networks, electronic terrorism, the violation of the electronic personality, domination of the imaginary (fantasy), explosion of pornography, the 'slave-trafficking' of women and children, castrated human subjects etc. All these characteristics are the result of the process of exclusion-- the exclusion of many social groups from technological developments and the use of modern technologies-- based on gender, race, socio-economic class etc. Social systems or entire societies that were based on exclusion or non-democratic behaviors towards its members, towards specific social groups eventually collapsed, as was the case of the Ottoman social system which was sustained and supported by the institution of slavery and the dichotomy of the sexes.

In modern Greek society, according to our findings, exclusion based on technophobia, was detected principally in social groups over the age of 35, and primarily women. In addition, technophobia was observed during the further education/training courses given to public school teachers in Primary and Secondary Education.

No technophobia or exclusion was observed in the younger generations-- age groups 17-19. On the contrary they have become accustomed to, or socialized in, the use of new technologies. In their case exclusion is not due to technophobia, but is related to the subjects socio-economic level. Namely, discrimination was evident as far as the technological infrastructure or equipment (computers, etc.) provided in the Greek public school system. Specifically, discrimination was related to the socio-economic level of the school area or the social space. For instance, in the country's less privileged districts, no computers were provided in the public junior high schools, and high schools, but in other more privileged suburbs, students had access to computer training classes, in which an equivalent number of girls and boys participated.

In order to counterbalance these trends affecting less privileged social groups, such as women, the following may be required:

1. The institutionalization of mandatory technological training/education in the public school system's curriculum, beginning in kindergarten and elementary school. Only in this way can the process of exclusion be eradicated and, in the long run, inclusion into Information Society achieved.

2. Education or technological training of specific social groups, and primarily women of the lower socio-economic classes, must be a major priority. In a democratic society exclusion can be abolished only through educational legislation and policies.

3. The formulation of an 'ethical code' for the Information Society (or the virtual environment) is absolutely necessary in order to diminish and eventually eliminate the development of the '**Virtual Harem**'.

Through such policies—in the medium and long term—social stereotypes of demarcation and dichotomy, reproduced primarily in direct relation to socio-economic levels or class, will eventually be wiped out.

THE VIRTUAL HAREM- TECHNOPHOBIA OR EXCLUSION? AN EDUCATIONAL PERSPECTIVE

TECHNOETHOS-TECHNOETHICS: THE 'BODILESS' SOCIETY

I. THE VIRTUAL HAREM- TECHNOPHOBIA OR EXCLUSION? AN EDUCATIONAL PERSPECTIVE

Irene Kamberidou, Nikolaos Patantaras

Today we are witnessing the creation of a pan-European world of communication, a virtual world, an Information Society (IS)--- in view of the explosive, rapid speeds of technological development-- that has not provided the conditions or prerequisites for securing the participation of the average citizen, who is forced to remain a spectator, unable many times to react, respond or participate. Namely, the so-called marginal social classes, non-mainstream groups and nations that are excluded from this virtual internationalization and transformation in the socio-economic production processes of IS such as in the materialization, development and promotion of technology and technological know-how. The technological elite, including the social groups with the know-how, is in a position to determine the speed of developments. Consequently, vulnerable social groups who are unable to keep up will suffer exclusion or 'virtual servitude'. If measures are not taken to broaden or increase the inclusion of the gender subject into the information society, not only digital illiteracy, but digital despotism may in the end succeed in drawing the boundaries of exclusion for many non-mainstream groups, and women in particular.

All-important technological changes and developments have been based on knowledge and know-how. The nucleus of new technologies is in the processing of information and not just providing information. This is the primary distinctive factor of technology. There are naturally significant innovations in commodities, a new wave of products. Furthermore, the products of the technological revolution are in reality services! This has foundational consequences on society. The changes and transformations provoked by developments in new technologies naturally causes arrhythmias and inconsistencies in social interactions, since industries and professions are shrunk down and erased, or in other cases, are expanded, due to technology's capacity to create new professions or make improvements in the existing professions (with a less specialized labor force). The differences in the degree of developments, prospects and possibilities of inclusion or access of specific social groups, unavoidably creates an asymmetry between progress and development in IS and in the democratic achievements of the peoples of Europe. For example,

the explosive appearance of fanatic movements, extreme nationalism, the loss of cultural identity, etc. Noteworthy examples for this loss of cultural identity are current discussions concerning language. For instance, many young people have become accustomed to communicating, not only in brief, but also in incomprehensible forms of language. The computer version of Shakespeare's 'to be or not to be' (i.e. '2B or not 2B') is linguistically destructive and devastating to the English language and culture. The so-called 'greeklish', notably the elimination of the Greek alphabet and language, is another example of this metaphysical/transcendental virtual environment. It leads to a new form of digital illiteracy: illiteracy that is virtually induced, characterized by the bombardment of images and out-of-context informational bits difficult to decipher, interpret or decode by those who have been traditionally educated.

Today there are winners and losers. The consequence is a major social problem, since exclusions create social repercussions for the European Union, that could eventually lead to the collapse of an entire social system. If the technological system does not adopt, as one of its basic operations and functions -in the framework of its logic and reasoning- the active participation of the social subject, (the EU citizen) in the educational processes in order to prepare the subject for integration into Information Society, it places its own viability in danger. It endangers its viability through the gradual reduction of consumers, thus threatening its own existence. Namely, at some point it will have no reason to exist and will collapse. For the realization of this essential operation and function, which is identified with the reflection of the technological system, in other words the socio-methodological formulation of ethos, we must seriously consider the threatening consequences. Namely the results (social exclusions) created by its development-production proceses, as has been confirmed in basic scientific research (the teleological foundation of ethos). The technoethos or technoethics which we propose, can be founded only in this framework, and will close and eliminate the gaps created by the incapacities of the political system and the justice system in the framework of Information Society. An international-intercultural network of experts from various interdisciplinary fields (e.i. gender studies, philosophy, the social sciences, women's studies, technological research and development etc.) must be established in order to formulate a Code of Ethics, a technoethos, including a consultation website that will be made known to all EU citizens. This technoethos could determine the uses of technologies in order to protect human dignity, 'human digital rights'. In this framework, industry, organizations and institutions will be able to impose penalties for improper uses to violators of the specific codes/regulations/rules.

The promotion and support of research in the social sciences and the humantities could provide us with a clearer picture with regard to the topography of the excluded social groups in the European Union, as the more technology develops, the more social exclusions are increased in the EU. A new form of power, namely a virtual world order, a virtual globalization (a new elite) is being created. To reiterate, if the technological system does not adopt, as one of its basic operations and functions -in the framework of its logic and reasoning- active participation in the education processes of the social subject (the EU citizen), in order to prepare the subject for integration or incorporation into Information Society, it places its own viability in danger. It endangers its viability with the gradual reduction in productive-social consumers,

thus threatening its own viability. Namely, at some point it will have no reason to exist and will collapse. For the realization of this essential operation and function, which is identified with the reflection of the technological system, in other words the socio-methodological formulation of ethos, we must seriously consider the threatening consequences.

[Continue with POWER POINT[1] presentation of Greek public school system and discrepancies based on socio-economic level, the role of the family, etc., resulting in technophobia, digital illiteracy and exclusion.]

THE VIRTUAL HAREM

Many open issues concerning democratic operations and processes in social-state institutions and policies remind us of old and decayed institutions of the past. In Ottoman society, for instance, the fundamental elements of the polyethnic harem-slavery institution, the harem culture in particular, were: exclusion, exploitation, servitude, despotism, racism, oppression, alienation, corruption, persecution, conspiracy networks, terrorism, specific 'sexual politics', physical and mental castration, the violation of the personality and the body, 'privileged rape', restricted mobility, etc. Similar characteristics observed in today's Information Society, on a 'virtual' level, in the 'Virtual Harem', include: the exclusion of specific groups from technological participation and developments, electronic conspiracy networks, electronic terrorism, the violation of the electronic personality, domination of the imaginary (fantasy), explosion of pornography, the 'slave-trafficking' of women and children, castrated human subjects etc. All these characteristics are the result of the process of exclusion-- the exclusion of many social groups from access to Education, technological education, the use of modern technologies-- based on gender, race, socio-economic class, etc. Disrespect and exploitation of the (electronic) personality, an exploitation beyond the free-will has been observed in the new social space or boundary of communication of the 'Virtual Harem', as it was in the Ottoman harem. The virtual harem in contrast to the Ottoman harem is <u>degendered</u>. Due to the absence of the natural presence you interpret the other person from characteristics which may be false:

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[1] Education is the place to start. Specifically under the Business Development Programme 'Information Society,' part of the 3rd Community Framework Support Programme for Structural Development in Greece, the Greek Ministry of Education implemented the activity 'Training of Teachers for the Use of ICT in Education', in order to train 76,000 primary and secondary school teachers. [...] However, the Greek public school system's inadequate technological infrastructures, deficiencies in the vocational orientation of students and the continuous techno-education of teachers, including the lack of collaboration of the education system with the employment sector and the ICT industry, have made it impossible for the gender subject to keep up with the accelerated speed of technological developments. Specifically, according to our findings, students continue to demonstrate technophobia or negative attitudes towards computers and information and communication technologies (ICT). Digital illiteracy has also been detected amongst primary and secondary school teachers throughout the country who explicitly express a technophobic unwillingness to use computers in their classrooms, although they claim to agree on their significant educational value and usefulness. Positive attitudes towards computers and technology have been displayed by a restricted percentage of male and female pupils, students and teachers who have had previous out-of-school experience or access to computers at home. Undeniably, many international studies confirm that awareness, familiarity and a change in attitudes have been achieved through regular use, rather than formal training, however, other factors, such as gender, also exercise a dynamic impact. In Greece, as is the case internationally, more male high school pupils and university students use computers at home compared to female pupils and students. Female teachers and students, in contrast to their male counterparts, consistently display technophobia when they have to use computers. Although the use of computers or the internet as a tool is *gender-neutral*, access to and motivation of use is evidently *gender-constrained*. Closing the gender gap in science and technology education requires new ways of educating girls in the computer age. New teaching methods are needed to eliminate technophobia and ensure that girls and women change their attitudes concerning science and technology.

fantasy or the imagination as reference points. Social systems or entire societies that were based on exclusion or non-democratic behaviors towards their members, towards specific social groups eventually collapsed, as was the case of the Ottoman social system which was sustained and reproduced by the institution of slavery- an institution promoted by the Ottoman elite. Despite its bottom-up (egalitarian) development, the Information Society seems to run the risk of bringing forth a new elite. This elite's key objectives are to gain control over technological research, design, development and its applications. There is a real threat that 'digital despotism' may in the end succeed in drawing the boundaries of exclusion for many social groups, and women in particular, according to results from international and intercultural gender research.

Undoubtedly, technological culture excludes the perspectives of not only women, but also many other non-mainstream groups. In order to prevent the establishment of a new virtual elite we must create the educational prerequisites for all social group, so that the democratic principle concerning equal opportunities for EE citizens, does not remain a political opportunistic rhetoric. In the framework of the surviving-remnants of the welfare state, under the pressure of new social needs, the expansion of a new bureaucracy is being promoted, the formulation of units that provide services, and the creation of thousands of specialized job positions in the distribution and use of new technologies, whose hard nucleus is made up of specific knowledge or know-how. However, all this in the absence of the average citizen, since the public school systems, at least in Greece, have been unable to adapt to the modern, new and diverse needs, resulting in social exclusions, primarily of non-mainstream groups, namely the less privileged socio-economic classes. When we speak of Education we do not refer only to the provision of the necessary infrastructure, but simultaneously to a non-discriminatory equitable distribution policy. A large part of the population, that does not only include women, will continue to be rejected or marginalized, if educational reforms are neglected, and access in this sphere of economic activity not secured. The result will be a terrible social regression, and the creation, in the framework of Information Society, of a space that could be defined as "the Virtual Harem", since this excluded part of the population will become the 'servants' of the new 'virtual elite' or at least belong to their lower hierarchy. Specifically, they will not be involved in operational or productive procedures, and as a result display fear, phobia or alienation with regard to the use of technology, technological progress and developments. The digital divide based on gender, socioeconomic class, age, race or cultural 'difference', as opposed to respect for diversity, is increasingly becoming apparent as a social problem. Research on information society related technophobia, digital illiteracy, and today's 'digital exiles', is very scarce. Studies have been focusing on socio-economic research, consumer-related issues, market analyses, the user-friendliness and diversity of technologies and designs, etc. However, very little is known about today's social groups that are progressively becoming excluded from this sphere of economic activity as well as the factors that lie behind human 'digital rights' or the disrespect and exploitation of the electronic personality. If appropriate measures are not taken it may no longer be an issue of technophobia, but one of 'absolute exclusion.'

SOCIO-TECHNOETHICS

Foundation

- **Self-reflection: The Information Society must realize the consequences of exclusion**
  - system doomed to collapse if masses of people are permanently exclude from participation in productive processes, facilitated by Information Society.
  - Development of reflective functioning of the technological system: in order to develop further I.S. needs to incorporate/integrate all social groups

- **IS must act as a self-regulatory system.**
  - Education process to be driven by the techno-system.

THE TECHNOLOGICAL WORLD
A SOCIOLOGICAL PERSPECTIVE

- Objective:
  socioeconomic development
- Basis:
  provision and processing of information
- Participatory condition:
  technological knowledge and skills
- Socioeconomic processes:
  Virtual communication-virtual business, virtual social mobility

Preconditions for Exclusion

- Educational system deficiencies :
  lack of capacity to react to technological progress.
- Political system deficiencies:
  inability to promote and facilitate inclusion.
- Social system deficiencies:
  inability of judicial system to act as regulator

Result: Creation of a techno-elite, and a mass of
unskilled 'technophobians'.

Virtual Harem: Key Characteristics

- Exclusion from productive processes
- Violation of electronic personality
- Marginalization: Castrated human subjects
- discrimination
- alienation
- social isolation
- 'degenderization'
- electronic terrorism
- domination of the imaginary (economic exploitation)
- The virtual harem opium: being 'Lost in Cyberspace'
- manipulation of the social subject

The Virtual Harem
Brussels, 28 June 2004

'SLAVERY OF THE MIND' - 'MENTAL IMPRISONMENT'

**'WOMANITY'- 'IN THE YOKE OF THE HAREM' - 'THE SCIENCE
OF WEAVING NETS'**

The University of Athens

Women travelers

Sample of Powerpoint presentation

THE 'BODILESS' SOCIETY: A DEGENDERED-'GENDER NEUTRAL' EMANCIPATORY SOCIAL SPACE?

Exclusions from knowledge in Information Society are inconsistent with European values. If we want to provide a character of 'emancipation' to the diverse forms of progress and development related to the production processes today, then the exclusion of the social subject, the inequalities in the framework of the democracies of the European Union must be eradicated. How can this be done? Firstly, through Education: By using as a basis or as a starting point a strategy that focuses on securing the elementary, rudimentary and basic principles of social equity and equality of the EU citizens, such as educational reforms: mandatory technological education programs or a technological education program as a nucleus. The promotion of educational programs related to technological know-how, securing and preserving the democratic operation of these programs on a long-term basis, providing long-term continuing education or training programs, etc. And all this resulting from continuous dialogue or collaboration, not only with experts, but also with citizens and non-mainstream groups that have diverse needs. Secondly, through Research, as educational reforms will have a limited use if research is not promoted and considered a venture that requires resources, support, funding, etc. Namely, the promotion of research in the social sciences and the humanities, in collaboration with technological resesearch. In addition, gender research must be promoted, in collaboration with long-term technological education/training.

There are millions of citizens, at least in Greece, who do not have the knowledge or the possibilities for access to technological training, to new technologies or technological developments. In countries, such as Greece-- where university research or research projects are administered, determined and conducted by an elite, established through strong non-academic political connections-- there are many difficulties confronted by researchers. As a result, countries like Greece exhibit a democratic deficiency, as regards the equitable and indiscriminatory distribution of a technological infrastructures and research funding. In order to promote basic research aimed at eliminating social exclusions, indiscriminate cooperation between researchers, the citizen and the state is absolutely necessary. In Greece, technophobia is a result of exclusion, since non-mainstream groups, such as women, are either completely excluded or ignorant of new technologies. And those who are not completely excluded, are forced to deal with an estranged technology, a lack of technological support for their work, namely a technological culture that is not designed for diverse needs and diverse users and thus degrades them to so-called 'dumb users'. This democratic 'deficit' needs to be eliminated. After all, isn't that what the 6th Framework of the European Community Information Society Technology (IST) promotes: a more socially orientated technology, focused on user's needs, designed for diverse users, for diverse needs, for diverse social groups, and should not be only technically and economically determined.

Today's explosive technological developments require a direct and more systematic examination of emerging ethical problems. As human experience with technology has shown us throughout history, its use is directly and primarily connected to the choices and decisions of mainstream groups, followed by, as a

result, the influences and pressures exercised by other social categories or non-mainstream groups who if they are excluded or continue to be excluded, cannot play any role, but that of the spectator, or the 'servant' of the new virtual elite. In the framework of Information Society the gender subject cannot be considered only as a commodity, as a consumer-being, but must be provided with the opportunity to become an active agent. Technology is invented, developed, promoted, exploited and used by specific social forces and the only means of defense and pressure that the excluded social groups can exercise are political pressures through state intermediary mechanisms, independent forms of intervention or absenteeism, such as a technology boycott (credit cards, etc.). If these forms of intervention do not operate drastically then social isolation or alienation is established, resulting in the disempowerment of virtual social mobility and communication (e.i. virtual business) for many social groups, and in particular, the disempowerment of the basic sphere of Information Society's development.

In regard to the gender factor one need point out that Information Society is a potential space for establishing gender equality, IS as a degendered/ gender-neutral emancipatory social space that promotes social justice in all its aspects. Specifically, despite the fact that dominant social groups and mainstream groups are inter-networked in such a way that they compose a 'BODILESS SOCIETY'', a virtual social environment created without any direct personal contact or physical communication, this however could have a positive side. The positive side to this factor, in democracies, is that it could become a pioneering emancipatory element for social groups that had until recently been excluded due to their physical or natural/body characteristics, namely due to gender, race, colour, etc.. A factor that could lead Information Society to a surplus or an overabundance of democracy and not its absence (democratic deficit). This, of course, only if and when the conditions for democratic access/social inclusion to the educational systems of knowledge are developed, established and institutionalized. Gender dichotomy or gender demarcation in Information Society is unrealistic and contradiction in terms of operational advantages. Additionally, new technologies have created completely different views in society concerning 'time and space', namely work hours and the social-work space. In so doing the neutralization of gender may be achieved. In our new virtual social reality the relativisation of the work-space and the work time, can reduce or eliminated causes of exclusion based on gender (as the body is absent), In this relatively new framework, specific social groups can and have made new demands on technology, and are directly affecting the organizational structures of the workspace. For instance, co-existing social roles, the role of the working mother at home through her computer, student on line courses, business transaction etc. The non-stop transformations realized through technological innovations contribute to changes in the structures of production and in the organization of society. For instance, the changes in the forms of work, such as part-time employment, home-based employment, flexible hours, and so on. Although one could argue that they undermine collective job positions, an element of 'emancipation' can been attached to this meaning of technological progress and development. Namely, the electronic personality can have an emancipatory character: 'anonymous users', 'bodiless users', regardless of gender, culture, race, physical disability or handicap. In the 'virtual social system' of the 'bodiless' society (the absence of corporeality or the physical presence)

traditional social characteristics, such as gender, color, national origin, race, religion are losing their significance as criteria for social inclusion. New prototypes, new role models are being produced, which many times, in the absence of the physical presence, are indifferent to the issue of gender. In other words, there is no genetic personification in Information Society, a factor that can inactivate a significant mechanism of exclusion, thereby contributing to inclusion as well as neutralizing the social meaning of gender.

Recommendations

(1) Raise level of techno-competence through education by reforming technological education programmes and providing know how to as large as possible societal groups and ensuring a long term democratic operation of the educational system. The institutionalisation of mandatory technological education in the public school curriculum, beginning in kindergarten and elementary school. Only in this way can exclusion be eradicated.

(2) The provision of a more equitable and non-discriminatory distribution of a technological infrastructure).

(3) Technological education or training of specific social or non-mainstream groups, primarily women of the lower socioeconomic classes, with active involvement by industry, must be a major priority. If technology does not adopt inclusion, it will ultimately endanger its own viability.

(4) It is absolutely necessary to get more women who are working in this field and who are still underrepresented within this field involved—as active agents-- in the processes of technological design and development. They need to be empowered so they can penetrate the higher ranks of decisioin-making positions.

(5) Re-socialization

First stage:

1. A widespread campaign to change attitudes. The obligation of the EU to promote information, to inform, introduce, expose and familiarize the EU citizen of the necessity of technologies and technological tools in the framework of IS, along with the promotion of socioeconomic studies on the currently excluded from IS.

Second stage:

2. The creation of a "natural", "friendly" and accessible environment towards women as far as technology, social space and hours are concerned. Namely, available free public terminals-computer units/areas/social spaces, with a friendly-attractive social environment in every town, city, municipality, prefecture of the EU, adequately staffed, and financed by municipalities, communities and the EU. Although some studies have shown that technical access to the internet does not signify inclusion in the IS, many studies confirm that awareness, familiarity and a change in attitudes have been achieved through regular use, rather than formal training.

3. Continuous promotion campaign, advertising by the towns, municipalities, prefectures, to their citizens, concerning the necessity for basic elementary computer learning (not training, but elementary technological learning).

(6) A pilot study or program in one of the EU states or Greek prefectures.

(7) Continuous dialogue to consolidate diverse needs for diverse users involving actively citizens, experts and marginalized groups.

(8) Need for more and better interdisciplinary research – Social sciences/ technological and gender research.

(9) Develop a "socio-technoethics" (i.e. an 'ethical code' for the Information Society) to act as a driver of future developments towards inclusion and better participation.

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