The social aspects of the information society: transmogrifying issues and approaches to social policy

Dr. Jan Steyaert & Dr. Nick Gould

1. Introduction

Words are a wonderful object for scientific research. They have a dynamic history from when they are conceived (by intention or pure luck) until they disappear in the memories of elderly persons or archives. As such they offer us a mirror of society and reflect social reality. The words 'information society', unheard of until some twenty years ago, are certainly going through a growth phase these days. One can hardly open a newspaper or listen to the news without having it mentioned.

Does the existence of the words 'information society' imply that there also is such a thing as an information society? Or that we are living in one? Or that we are developing towards one? And if so, what is the precise meaning of 'an information society'? What do the words stand for? When and if we become an information society, what will be the social aspects of such a situation and what effect will it have on the social quality of our lives?

Within the context of a common fin-de-siécle feeling of entering a new era, this background paper wishes to wonder whether the information society indeed presents a quantum leap from the past, or is merely a rhetorical representation of a long-standing process of social change. Moreover, this background paper aims to introduce the discussion on the social aspects of the information society, and enable constructive discussion on what has to be taken into account when planning Europe of the future and its social quality.

As such, this background paper includes the following sections:
- The information society, concept or chimera?
- ICT developments underlying the information society
- ICT application domains shaping the future
- New social issues
- New approaches to social policy
- Revisiting the 'information society'

2. The information society, concept or chimera?

From industrialism to post-industrialism

The conception of the label 'information society' can be traced back to social research in the late sixties and early seventies, more precisely to Alain Touraine and his American counterpart Daniel Bell (Bell 1973, Touraine 1969). Both analysed the social and economic changes in the society at the time and used the label 'post-industrialism' to indicate that a new era was oozing into our lives.

In his analysis, Touraine was focusing very much on the shifts in power relations between social classes, and the emergence of a new social class of technocrats, which he believed would become dominant.

Bell analyses economic and industrial developments in Western (American) society as pathing the way to the sequel of the pre-industrial and industrial society. Within the pre-industrial society, the main focus of economy was on harvesting the fruits of Mother Nature, mainly through mining, fishing and agriculture. In industrial society, this focus changed to the manufacture of commodities. In the coming post-industrial society, Bell predicts information in all its forms to be the core focus of economy: "in capitalist society the axial institution has been private property and in the post-industrial society it is the centrality of theoretical knowledge" (Bell 1973, p. 113).

Both Touraine and Bell identified information as being a key-ingredient of the post industrialist society. As Negroponte phrased it, the central locus of economy was no longer to be found in transformation of atoms, but in processing bits (Negroponte 1995).

From post-industrialism to information society

The concept of 'information society' does not feature in the early work of neither Alain Touraine nor Daniel Bell. Both referred to the societal changes as being post-industrialistic. It would require some archaeology in the archives of scientific publications to determine who can take credit of launching the concept of 'information society'. A strong candidate is without any doubt Yoneji Masuda, one of the persons who developed the Japanese policy 'the plan for an information society: Japan's national goal toward the year 2000' (Masuda 1983).

The concept of the information society and the futuristic scenario's of the Japanese policy were eagerly taken up by Western visionaries such as Alvin Toffler, John Naisbitt and more recently Nicholas Negroponte (Naisbitt 1982, Negroponte 1995, Toffler 1981). All contributed to the popularisation of Touraine's and Bell's ideas and the dissemination of the concept of the information society and its synonyms such as the digital society, the wired society (lately transformed into the wireless society), the electronic cottage, the global village and the like.

Although no concrete and operational definition of the 'information society' is available, the use of the label has turned into a hype over the last few years. And although it is consequently still impossible to exactly determine which societies or countries have already achieved the status 'information society' or to what extent, there seems to be a common understanding of the core ingredients of the label. These ingredients are threefold: more information, more technology and more third sector economy:

- Western societies have seen a significant *increase in information* over the past decades. Since Price charted the exponential growth of scientific information products (Price 1963), many other social domains have seen a similar development. We now have more books, more telephones, more television sets, more television channels, more radio channels, more internet connections, more…. than ever before.
- Western societies have also seen an even more significant *increase in information technology*. The present information and communication technology (ICT) differs qualitatively

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

from the technology we had five or ten years ago. It is common to state that the current personal computer has more capacity than the computer of an average university computer centre a decade earlier. Additionally, current ICT is characterised by a wide dissemination across large proportions of Western population.

- Finally, Western societies have seen, basically since the end of the previous century, a shift in *economical focus from first to third sector*. Both in terms of absolute and relative labour force as well as in terms of contributions to nations' GNPs, the third sector sits on the forefront. Hence, the occupational structure of our society has changed considerably (Esping-Andersen 1993, Gershuny & Miles 1983). While the generation of our grandfathers and – mothers predominantly consisted of farmers and industrial workers, the current labour force consists to a large extent of white-collar workers. This reflects the increased importance of information-intensive economic sectors such as media, banking/insurances/social security, government administration and education.

Notwithstanding these illustrating statistics, assessing to what extent a society is an information society, using operational/measurable indicators is still not manageable, nor is stating when exactly a society passes some thresholds and can be rightly called an information society (Miles 1990, Williams 1988).

Information society, a concept scrutinised

The concept of the information society has many worshippers, those who applaud the thrilling effects of the new developments and those who launch warnings for negative effects. Both groups actually share the believe that our society is indeed (moving towards) an information society. Some however scrutinise the very notion of there being or coming something that can be labelled information society and entitle it a hype, joining the other hypes so frequently found in informatics or management literature. This group has serious questions regarding the (absence of) methodology underlying some of the researches that forecast the information society and dispute the qualitative shift from industrial to information society.

Methodology

Relatively few quantitative researches are available regarding the information society. Within those that are available, measuring the number of organisations in economic sectors or their contribution to national GNPs are common approaches for validation of the economic shift towards the third sector, an important ingredient of the information society. This is most often done by relying on official statistics. However, apart from questioning their reliability and the fuzziness of conceptual boundaries (Miles 1990, p. 17-21, Miles 1991), one can wonder whether data on the level of organisations offer a detailed enough platform for analysis. A newspaper company will be allocated to the third sector because it deals with information processing and includes white-collar workers such as journalists. Describing a newspaper company as third sector however disguises the nature of the manual labour of printers, delivery boys and similar activities within these organisations. Assuming one can rightly categorise an organisation as third sector, would that be equivalent to the information society? Would Disneyland Paris be third sector? Beyond doubt. Would it be the information society?

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

Taking this argument further, one also needs to question whether an analysis on the level of jobs rather than organisations would solve the issue, as also each individual job is constituted of a curious mixture of 'informational' and 'non-informational' tasks.

Quantum leap?

The ingredients of the 'information society' not being well defined and not being measurable, there is amble room for interpretation in overlooking the developments that currently take place. As such, the dominant interpretation currently certainly declares we have or are about to enter the information society. Such an interpretation is certainly backed up by policy developments, with international organisations such as G7 or European Union as well as many individual countries shuffling considerable policy activity on a myriad of societal domains under the label 'information society'.

Contradicting this perspective (which Miles labels the 'transformist perspective') is the interpretation that information technology is merely the current stage in a long-term process which will not change any of the main features of society (Miles et al. 1988). "There is no novel, 'post-industrial' society: the growth of service occupations and associated developments highlight the continuities of the present with the past" (Webster 1995, p. 50).

3. ICT developments underlying the information society

Beyond much doubt, the significant progress of information and communication technology, both in quantity as in quality, has contributed much to the popularity of the concept of the 'information society'. Far more than its other aspects, it is the technology that is the most tangible, visible characteristic.

These information technologies come in many forms from the chip in our washing machine or microwave to the small computer that controls the smooth running of our car. Most noticeably, it is represented in the form of the personal computer. Innovations include increased computer power for less money, but also new products/services such as CD-ROMs, multimedia and GSM telephones. The increased power of personal and other computers and their wide dissemination have increased the information processing capacity of (Western) society beyond foregoing.

Computers not only become stronger and cheaper, but they also have lost their individuality. Only five years ago it was rare to find a computer that was connected to anything else but a printer, unless you worked in a university or defence. Currently this picture has changed drastically, as most computers have modems and are connected to internet, CompuServe or other major networks. The telecommunication aspect of technology has gained importance. Technological progress in this area is just around the corner, with ISDN lines becoming more democratic in prices and other high-speed telecommunication media being developed and installed, e.g. ATM and symmetric broadband. High expectations lie on the developments in the area of the interactivity of the existing television cable network, in some countries such as Belgium and the Netherlands already reaching more than 90 % of all households. Once this network becomes interactive, it allows households not only to receive information (television programmes) but also to send information back enabling value added network services to be provided, such as telephone services, internet or video-on-demand.

A recent study on behalf of the UK Department of Trade and Industry identified four strands along which the technological dimension of the information society seems to be developing. A

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

distinction was made between the 'IT path' (number of PC's per inhabitants), the 'mobile path' (uptake of cellular telephony), the 'content path' (number of internet hosts) and the 'television path' (cable coverage). On each of these strands, only statistics pointing upwards can be shown. Moreover, all of them are converging creating a platform for synergy in developments.

The advances of information technology and the equally fast moving developments of communication technology could result in society's housing infrastructure not only being served by a network of water, gas and electricity supply, but also by a similar network of information supply. "The 'information grid' is seen as analogous to the electrical supply. As the electricity grid links every home, office, factory and shop to provide energy, so the information grid offers information wherever it is needed. This is, of course, an evolutionary process, but with the spread of ISDN we have the foundational elements of an 'information society'" (Webster 1995, p. 7). Although there are currently a myriad of stakeholders in these developments (users, information providers,…), there are considerably less stockholders involved (basically only those providing the infrastructure, that is telephone companies and service providers).

4. ICT application domains shaping the future

The development of technical applications finds utilisation in a range of domains to which the concept of social quality is relevant. This section gives an overview of some of those domains that are most significant in the daily lives of European citizens: political participation; the home; health and education.

Political participation: Teledemocracy

ICT will extend the reach of conventional representative politics but also has the potential to support new forms of political participation, at local and state levels, through various forms of electronic participation. Conventional forms of political activism supported by ICT include outreach work (newsletters, broadcasting, videos), networking (e-mail, bulletin boards, access to databases), internal organisation (collection of membership lists, finance), decision-making (expertise, technical information, aids to co-operative working). At the same time administrative and political information can be made readily accessible to individuals and groups; the world wide web is also a forum at the service of local and national governments. Users of government services can be empowered, examples being welfare advocacy using expert systems to give advice, prepare legal documents and ascertain benefit entitlements. We have yet to see, but the technical possibilities exist, for extension of political participation, sampling public opinion, conducting referenda, particularly at the local level (Percy-Smith 1995).

These are all generally seen as benign or productive effects of the Information Society - but there also concerns. The political environment could become more volatile in various ways. Pressure groups are able to mobilise more rapidly through electronic networks. This level of reactivity can already be seen in the organisation of some neo-fascist groups who are using the internet as a medium for organisation (Eatwell 1996). ICT also increases the pressure and volume of information, which potentially diverts the focus from key issues (Experts 1996). Not least, the maintenance and extension of pluralism is not supported by dependence on technologies which

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

disenfranchise people who are non-ICT users, exacerbated by the potential deterioration of traditional non-electronic media.

Whether ICT capacities will be utilised to widen democratic processes, sometimes referred to as the creation of 'teledemocracy' is likely to be further influenced by anxieties about the increased level of volatility which may result. Etzioni expresses concerns that extensions to decision-making such as through electronic referenda need to be matched by opportunity for consideration and reflection (Etzioni, 1992). Abramson similarly warns against a form of politics, which is the instant registration of preferences unmediated by discussion of the common good (Abramson et al, 1988).

Home informatics

Home informatics - the application of ICT products for use within the private household - has tended to be a 'poor relation' in intellectual terms to medical, industrial and defence spheres (Miles, 1988). However, in both economic and social terms this is an area worthy of attention, often a by product of more 'serious' industrial research and development which directly impacts on daily social quality, and has the potentiality to assist independent living for disabled or elderly people who would otherwise be reliant upon external support services.   The level of informatisation of the home depends on demand levels for new technology - the reduction of price levels of existing services or products and the creation of new, affordable products (Miles et al, 1987). Whether the digital home contributes to the creation of a sometimes hypothesised 'leisure society' will also depend on the extent to which hours saved by technology are redistributed, but the digital home also becomes a more integrated base for a range of activities including work, education, health care as well as traditional domestic activity. The home has become not just a site of consumption but also of informal production including information production (word processing, video and camrecording), storage and retrieval of information (CD-ROMS, audio and video tapes), communication of information (e.g., telephony and e-mail), messaging, relating and displaying information and acting on information. Although the recent creation by leading hardware and software producers of 'Cyberhome 2000' (see *Independent 26 April 1997)* still has connotations of gimmickry and ostentatious consumption, most European homes will contain varying levels and combinations of these technologies. With technological convergence these applications and systems will become more interactive creating the possibility of the 'smart home'. One of the most powerful developments for social quality can be the emergence for vulnerable people of smart systems combining alarms with integrated systems for the delivery of domiciliary-based care (Moran 1993). Whether these and assistive technologies for disabled people will be provided for people in their own homes depends not only upon technological innovation and budgetary capacity of welfare services, but also the willingness of welfare bureaucracies to develop the flexibility necessary to agree standards and networking procedures, and to incorporate user perspectives in the development and implementation stages. Culture also remains a key determinant of the uptake of home informatics, teleshopping being an example where societies with a tradition of mail-order shopping may adapt to on-line services such as the French Minitel, but fail in others, such as Prestel in the UK. Similarly, potential consumers remain cautious about 'future-proofing', that is commiting themselves to an application which does not establish a market position and becomes obsolete.
.

Health care

The social aspects of the information society   Background paper to the conference
Transmogrifing issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

The delivery of health care has always been an information-intensive activity but ICT both increases the informational capacities of health systems and also transforms the technologies of health care. This provides a potentiality to deliver better coverage of services, more effective diagnostics and intervention, and more cost-efficiency (High Level Group of Experts, 1996). Most sectors of the health delivery services are rapidly changing to electronic forms of patient care information. In the United Kingdom 90% of general practitioners own PC's, in Denmark 65%, the Netherlands 80% with implementation of electronic patient recording systems closely following hardware implementation (de Maesseneer & Beolchi 1995), with these figures rising rapidly. Similarly, in most major hospitals there are distributed systems for the maintenance of clinical information. The combination of ICTs, especially with broadband and ISDN networks, creates the potential to move forward on various fronts, including the exchange and combination of digitised information obtained from a range of diagnostic procedures such as radiology, clinical biochemistry and electrophysiological examinations; to extend the availability of expert clinicians to patients through remote, telematically conducted examinations, and the combination of medical expertise by on-line consultation between clinicians in separate locations. Health gains and cost-efficiency effects can thus be produced not only by the combination and transfer of information but by the reduction of need to move patients to centres of excellence, or for expert clinicians to visit patients' localities. Whether and the pace at which these opportunities can be exploited depends upon a range of organisational and professional factors. These include the development of standards to make compatible the diversity of technologies incorporated with health informatics, and the reorganisation of systems to take best advantage of information processing and sharing. As with most ICT domains, human resources development will need to be continuous to keep pace with technical change. There will need to be vigilance to see that improvement and innovation are not restricted to high status, high technology areas of clinical practice. Not least there are ethical challenges relating to new scenarios such as of telematic patient-doctor consultation and intervention, not to mention more long-standing concerns about the protection of confidentiality of electronic care records (Experts 1996).

Education

For many people the concept of the Information Society is synonymous with that of the Learning Society, the belief that adaptation to the pervasive effect of ICT requires both a lifelong commitment to education and retraining, but also inculcation of 'informacy', alongside numeracy and literacy, to prevent some social groups being unable to take advantage of new technological opportunities. Informacy involves both an understanding of new technology both as a substantive subject area but also the use of multimedia, on-line services, electronic libraries etc as means to learning in other curriculum areas. ICT both increases the availability of information to learners but also enhances the opportunity for interaction with teachers and fellow-learners who are geographically distant.

The most developed sector in relation to the implementation of ICT assisted learning is the tertiary higher education level, where electronic mail via the Internet is a long-established medium for research collaboration and networking. More recently, the world wide web also enables extensive academic sharing of resources and data. Nearly all European universities are connected to the internet and usage has spread beyond professional academics to students who are able to access electronic library services and use e-mail. Many European states are now seeking to extend these capabilities to schools and further education institutions, often through initiatives combining private and public finance. An often-cited instance is the German 'Schulen ans Netz'

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

scheme, which over three years will give access by 20% of schools to national and international networks, and multimedia services, and numerous other countries have similar or even more ambitious schemes.

Ironically, the widest access to learning technologies remains in the home, through ownership of PC's and telecommunications tools, with home-purchased educational multimedia a fast-rising percentage of the overall market (ISPO, 1996). Whether these technologies can be fully exploited as educational tools depends on the continuing evolution of an understanding of the pedagogic dynamics of distance learning and learning via electronic media. Many of the earlier naïve expectations of computer assisted learning are being moderated to acknowledge the influence of social interactions as reinforcers of learning (Gould & Wright 1995) if the ICT-based benefits of self-directed and autonomous learning are to be fully utilised.

5. New social issues

The coming of the information society not only needs to be analysed in terms of technical innovations, information technology applications or economic changes. There are also social aspects relating to the societal changes. Daniel Bell, grand old man of those analysing the information society, already indicated the significance of the social aspects in his seminal work in 1973, making the distinction between the economising and sociologising modes of post-industrialism (Bell 1973, chapter 4). In his forecasting, the information society would include companies moving along a continuum from the economising polar extreme to the sociologising one. The main difference between both is the extent towards which commercial companies take social issues into account.

Bell's hopes and analysis have not resulted in reality. Currently technological advancement is looked upon with a mixture of gratitude for the scientific achievements and societal progress it symbolises, but equally with a sense of uneasiness as to the social implications it might bring. A doom scenario of the information society predicts gloomy futures for our employment, cultural diversity, equality and privacy.

Employment

Employment and unemployment are likely to remain issues of strong concern in relation to new technologies because of their impact on social cohesion and political stability. The more optimistic view is that on balance ICT is creating more jobs than are lost, although conceding that the capacity to capitalise upon change will be largely dependent upon the wider social policy environment, such as education, labour mobility and social security. The United States are sometimes cited as a country which is under-capitalising upon its technological advantages because of skills shortages and absence of supportive social programmes - but the assumption is that the resolution of these would result in jobs growth. The counter-claim to the 'balance of job creation and loss' thesis is that ICT underpins jobless growth.

Whatever the merit of either the optimistic or pessimistic view, it has become a truism that through technology newly created jobs or modified ones will be different both in terms of the conditions of service which ensue, but also as a consequence of their content. With respect to the former, jobs are more likely to be fixed-term contracts, making demands upon families and individuals to manage the transitions required by 'flexibility' in the employment market. Secondly, the new jobs will require higher cognitive skills to accomplish them creating a need for individuals to maintain a

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

lifelong commitment to training and education, and redundancy or uncertainty of employment for those who are unable to climb onto the new technology bandwagon.

ICT also reconfigures the spatial nature of work, with many people able to capitalise upon combinations of computer and telecommunication technology to work primarily from their place of residence. The initial view that teleworking was a form of Utopian liberation has more recently been tempered by the recognition that many people who work at home with ICT tools are traditional professionals - such as academics or consultants - exercising a choice to work at home occasionally (Qvortrup 1994). Secondly, for the genuine cottage teleworker there can be psychological stress factors associated with removal of the traditional routines and structure of attending the workplace, and the removal of the social relationships.

The question needs to be raised whether the combination of these influences (short-term contracts, flexibility, teleworking) does not result in a development that could take us back to a situation bearing resemblance to a nineteenth century pre-industrial situation (the independent, home-based consultant replacing the independent, home-based weaver) with its economic instability and large scale family poverty.

Cultural diversity endangered?

The globalisation of our lives through information and communication technology has had remarkable positive effects. The erosion of time and space has brought people across the globe closer together, if not in living conditions or political views, at least in communications. Television and newspapers provide us since several decades with provision of information about distant places, internet currently allows us to communicate interactively with people living there.

Three different concerns are expressed regarding the globalisation aspect of the information society, all of them overlapping and interacting with each other. Firstly, there is concern that the globalisation of the economy, thanks to the efficient processing of information on a world wide scale, results in the consolidation and re-enforcement of multinational conglomerates that have a substantial impact on our lives. The example of Renault in Brussels recently offers a sad example, but it is equally puzzling to consider the power a single company as Microsoft has on our living environment.

Secondly, given this globalisation and the strength of some multinationals, a reduction of cultural diversity could emerge in the form of societal standardisation. In the global village we live in, McDonald hamburger shops can be found everywhere, as can be Hilton hotels or as programmes like Miami Vice are on television everywhere. The local flavour of different cultural has a hard time surviving. The language imperialism of English (and variations thereof) on the internet is another example.

Finally, applying the previous concerns to the news media, one can only wonder at the concentration of capital and power in a few media consortia controlling what we read in our newspapers and watch on the television news. "The bulk of international news – actually 90 per cent – published by the world's press comes from just four Western news agencies" (Webster 1995, p. 79). Herbert Schiller uses the term 'private ministry of information and culture' to refer to the small number of persons controlling the overwhelming majority of our cultural activities (Schiller 1987). Recent developments and the dissemination of internet might well prove to change this latest concern, by enabling minority groups (Chomsky refers to the case of the indigenous population of Chiapas) a global audience at the cost of a local call.

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

Inequality

Employment and unemployment are intimately related to the distribution of resources and wider questions of inequality. The benefits of ICT also bring with them the dangers of reinforcement of social exclusion of social groups, localities and regions. For many people there remain problems of the affordability of appliances. National statistics instantly show the variations of market penetration of personal computers, mobile phones, modems and other ICT tools. This is compounded by the affordability of access to on-line services, that even if people have the hardware in their homes, subscription fees and rentals are beyond the means of many. Additionally, familiarity with technology ('informacy') remains a barrier for many people to utilisation, let alone ownership, of the paraphernalia of new technologies. These exclusions are patterned by the same variables that underpin other dimensions of inequality, such as income, ethnicity, disability and geographical isolation. Furthermore, a question rises whether inequality to information technology is simply a question of access to and knowledge about the technology (solved by provision of technology and training), or not also a complex cultural issue related to different ways of utilising the same technology - whether the home PC is used for word-processing or games. This would provide links between the issue of equality in the information society and the work of Basil Bernstein on equality towards language and his approaches to sociolinguistics and strategies for remediation.

The need to search for creative solutions to promote universality of electronic information services is likely to mean partnerships bringing together public and private initiatives. Examples of some of the conceivable outcomes from such partnerships have been identified within the first annual report to the European Commission from the Information Society Forum. One possibility would be to make interactive facilities provided through human services (health, education, social services, public information) available to all, irrespective of geography or personal economic resources, probably through local access points in public places. As the Forum identifies, the provision of universal access may involve a cultural shift to replicate the ethic of public service broadcasting in relation to some aspects of electronic information services. For some groups of people this includes the exercise of positive action to create equality of access, for instance in relation to assistive technologies which enable people with disabilities to use computer-based and on-line services.

Gender remains one of the principal axes of inequality although ICT has the capacity to change the balance between family and working life, which, of course, carries significant gender implications (Miles et al. 1988). The various changes within employment are occurring within a segregated labour market so that change has differential impact on men and women. These developments will have implications for: education and training which challenge conventional assumptions about gender and career choices, equal opportunities policies to challenge 'glass ceilings' in technology-related work, working patterns which are compatible with family responsibilities, and greater involvement of women at design and specification stages of hardware and software development (Commission 1996). Above all, there is a need for gender equality issues to be mainstream in employment policies to maximise gains both for reasons of social justice, but also for commercial maximisation of human resource potential.

Privacy

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

The emphasis on market exploitation and deregulation currently found in information society policy statements can result in inadequate attention to public anxieties about privacy and freedom from intrusion. There are at least two major areas of unease: unauthorised access to files by agencies, and the combining of data from diverse sources to give a composite profile (Webster 1995, p. 68). Social theorists have identified the ambiguity between positive connotations of the information society, and the possibility of reframing the same technologies as negative characteristics of a surveillance society.

As discussed above, positive effects of ICT include the wider plurality of opinion represented within political debate, enhanced access to public opinion, a greater scrutiny of government, citizens producing as well as consuming information, and enhanced privacy and anonymity of personal communications. An unexpected positive effect of widespread dissemination of technology is also that most Western countries now have well elaborated privacy regulations. But for all these gains there are also potential losses. Pluralism is constrained by access issues, scrutiny of government is bound by willingness to provide access to official information, production of information is dependent upon adequate resources, anonymity also carries risks of lack of accountability for information, and privacy and security are compromised by continuing technical limitations of security, particularly over the internet.

The issue of privacy inevitably overlaps with that of surveillance. Data entrepreneurs increasingly operate by combining data sources (for instance consumer purchasing patterns as tracked via store or credit cards) with other personal databases to produce new levels of intimacy in the profiling of families and individuals to create marketing opportunities. Lyon cites the extreme examples of the targeting of advertising and promotional material to customers whose family structure can be reconstructed from the purchase of items such as nappies: "questions of social division, both between consumers and non-consumers and along the fault lines of gender and ethnicity, provide critical analysis in terms of justice and social participation." (Lyon 1994, p. 157).

6. New approaches to social policy

The substantial changes in the societal context determining social quality not only give ground to new or reinforced social issues, but equally provide openings to new approaches. These include several social developments that have a positive effect on the social quality of our lives as well as new organisational frameworks and general increase of effectiveness/efficiency of social policy (Steyaert et al. 1996), the main instrument to address low social quality.

On the level of social issues, the information society has to be considered as a (potential) producer of improved social quality through citizens' increased empowerment and autonomy. This includes e.g. the broad area of assistive technology enabling disabled and/or elderly people to more fully enjoy daily life and participate in society, hence reducing social exclusion. Social quality can be further nourished by education ensuring no single citizen misses his 'point of entry' onto the information highway, as is done in e.g. the Danish 'info-society for all' policy and other national developments.

The information society as producer of social quality also refers to citizens having increased access to on-line information platforms, both a consumer and provider of information. The latter is illustrated by numerous examples of minority groups having a strong voice on the internet or by

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

the SeniorWeb world wide web project in the Netherlands, specifically aimed to introduce elderly persons on the information highway and to reduce social isolation. The former is linked to developments in the area of teledemocracy and open government, as illustrated e.g. by European Union's green paper, which was the hub of a 'virtual' democracy platform.

These challenges for improving social quality by making use of information society developments will be explored both on an individual and on a human service organisation level by the two presentations at the conference workshop.

The evolving information society not only offers opportunities to improve social quality on the level of social issues. It equally introduces new horizons for the organisational structure of the myriad of institutions that embody Western welfare states. The capacity to manage large 'rivers of information' through intensive use of ICT e.g. drastically changes the relationships between government and service providers. Overt central control gives way to closely monitored tasks seconded to quangos. The concepts of 'social indicators' and 'performance indicators' take on a whole new meaning as they become determinants in the distribution of devolved budgets (Bebbington & Davies 1980, Vaarama 1996) although not all agree on the extent to which geographical information systems have or should rationalise resource allocation (Berman 1992). A development towards a cashless society and its social policy equivalent in social policy (in Swindon, UK, recipients of cash benefits would be issued a 'social credit card') seemed farfetched and futuristic only two years ago. With coincards or electronic wallets rapidly being taken onboard by shopkeepers, this future seems less remote. Still, the Swindon scenario walks a tight rope between social care by surveillance and policing on the one hand and proper social policy on the other hand. It illustrates that with good intentions and proper safeguards against abuse, the information society has the capacity to enhance social quality, without both ingredients it can substantially turn social quality into an endangered species.

Probably the most substantial and structured challenge to improve social service provision through organisational change and use of information technology relates to developments such as the community care act in the UK. Most social service provision processes in Western countries are eagerly being redesigned to reflect neo-liberal approaches and be more market-oriented. Traditional organisations covering intake, assessment, care planning, care provision and evaluation now find themselves being disentangled into separate units buying or selling services in a mixed economy of welfare. New information needs emerge in the area of more formal client assessment and elaborate client information systems (Gould 1996, Lewis & Glennerster 1996, Steyaert 1997). Re-assembly of the ingredients of former welfare organisations results in one-stop services relying on intensive information traffic between front-offices and back-offices, as e.g. in the loket 2000 initiative in the Netherlands.

On a more modest level, the information society offers plentiful points of impact to increase efficiency and effectiveness of social service provision. This not only includes use of office informatics such as word-processing and databases but also more extensive applications. As such, e.g. outreaching approaches to reduce non-take up of welfare benefits can counterbalance the threat of a surveillance society and reduced privacy (Morgan & van Oorschot 1996). Availability of large datasets with personal information provides increased opportunity for epidemiological research, be it medical or social, through the use of secondary analysis or data-mining techniques (Hakim 1983). The introduction of national personal identification numbers and large-scale information systems such as the crossroads databank of the Belgian social security organisations substantially reduce the bureaucracy for citizens. The widespread dissemination of

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

information pillars allowing access to labour market and job information aims to reduce unemployment by matching demand and supply of labour, an example of which is provided by the Flemish WIS-system.

It is fair to recognise here, in a comfortable situation allowing hindsight, that there have also been some blind alleys and some erroneous predictions of the role new technology would play in service delivery. In part this derives from a mistaken assumption that there was a correspondence between the capabilities of the technology and the work and organisational requirements of the human services. Some of the dead-ends have been the development of expert systems in complex areas of risk assessment and intervention where it has not proved possible to codify the rule base of expert judgement (or agree on what constitutes expertise) in domains which are complex and multidimensional (Berg 1997).

These examples serve to illustrate the challenge that the information society is including regarding the enhancement of social quality in Europe. Developments not only put new or reinforced social issues on the agenda, but also provide the necessary context to develop and implement innovative approaches to social policy.

7. Revisiting the Information Society

We have argued that the information society remains in the literature a contested concept, although certain pathways can be identified by which the informatisation of society occurs. Some quantitative benchmarks can be put down to measure the expansion of usage of ICT although clustering them into quantitative thresholds or scales remains problematic.

The concept of social quality equally remains problematic, but we have suggested that the scope of the relationship between information society development and social quality can be considered under three headings - applications, social issues and approaches to social policy - although it is evident that all three interact with one another. We have subsequently argued that the developments underlying the information society bring both threats and opportunities regarding social quality. The balance between positive and negative effects is not technologically determined but to be influenced by policy actions. New approaches to social policy taking into account the achievements of the information society can substantially influence this balance. They currently do not call for increased technological progress, rather for action in the field of applications and dissemination of results.

In this way we have suggested a broadly sketched context within which the two substantive papers to be tabled in the workshop can be located. It has not been our brief to argue a categorical empirical or theoretical position, indeed we would argue that informatisation is such a dynamic process that any such closure would be premature.

In the spirit of an open inquiry we are presenting this paper in two media, paper and as a cyberdocument (to be found at http://www.fz.hse.nl/causa/amsterdam/). The latter is in turn linked to a series of relevant cyberdocuments, which have informed the creation of this document. Both serve as an invitation to invited members of the conference to make their own exploration towards the 'Information Society' and seek ways how the information society might improve the social quality of Europe.

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

References

ISPO, the Information Society Project Office of the European Union, provides a gateway between the European Union and European citizens regarding the information society. It does so by providing easy access to information about the subject.

You can contact ISPO on the world wide web at http://www.ispo.cec.be/ They provide several links to other sites with information on the information society.

- Bebbington, Andrew, and Bleddyn Davies. 1980. "Territorial need indicators: a new approach." *Journal of social policy* 9(2):145-168
- 433-462.
- Bell, Daniel. 1973. *The coming of post industrial society, a venture in social forecasting*. Basic books.
- Berg, Marc. 1997. *Rationalizing medical work, decision support techniques and medical practices*. MIT press.
- Berman, Yitzhak. 1992. "A Decision Support System in Resource Allocation: The Political Process in Rational Decision Making." *New technology in the human services* 6(1):8-19.
- Commission, European. 1996. "Green paper: living and working in the information society: people first." .
- de Maesseneer, J., and L. Beolchi. 1995. *Telematics Primary Care in Europe*. IOS Press.
- Eatwell. 1996. "Surfing the Great White Wave: the internet, extremism and the problem of control." *Patterns of Prejudice* 30(1):61-71.
- Esping-Andersen, Goesta (ed.). 1993. *Changing classes: stratification and mobility in post-industrial societies*. Sage.
- Experts, High Level Group of. 1996. "Building the European Information Society for Us All: First Reflections of the High Level Group of Experts." Pp. 85 . European Commission.
- Gershuny, Jonathan I. , and Ian D. Miles. 1983. *The new service economy: the transformation of employment in industrial societies*. Frances Pinter.
- Gould, Nick. 1996. "Care management and information technology: science or reading the tea leaves?" Pp. 85-99 in *Information technology and human services, more than computers ?*, edited by Jan Steyaert. NIZW.
- Gould, Nick, and Judy Wright. 1995. "'Unlocking Care Management': developing computer assisted learning materials for care management." *New technology in the human services* 8(2):16-21.
- Hakim, Catherine. 1983. "Research based on administrative records." *Sociological review* 31:498-513.
- Lewis, Jane, and Howard Glennerster. 1996. *Implementing the new community care*. Open university press.
- Lyon, David. 1994. *The Electronic Eye: The Rise of Surveillance Society*. Polity Press.
- Masuda, Yoneji. 1983. *The information society as post-industrial society*. World Future Society.
- Miles, Ian. 1990. *Mapping and measuring the information economy*. British Library.
- Miles, Ian. 1991. "Measuring the future, statistics and the information age." *Futures* (November):915-934.
- Miles, I., Rush, K. H. Turner, and J. Bessant. 1988. *Information Horizons: The long-term implications of new information technologies*. Edward Elgar.

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997

- Moran, Rosalyn. 1993. "The electronic home: Social and spatial aspects." Pp. 86 . European Foundation for the Improvement of Living and Working Conditions.
- Morgan, Gareth, and Wim van Oorschot. 1996. "Do Welfare Benefit Programs Reduce Non-Take Up?" *New technology in the human services* 9(1):20-25.
- Naisbitt, John. 1982. *Megatrends, ten new directions transforming our lives*. Warner Books.
- Negroponte, Nicholas. 1995. *Being digital*. Vintage books.
- Percy-Smith, J. 1995. "Digital Democracy: Information and communication technologies in local politics." . Commission for Local Democracy.
- Price, Derek J. De Solla. 1963. *Little science, big science*. Columbia university press.
- Qvortrup, Lars. 1994. "Telework: the trend towards networking." Pp. http in *Telework '94*.
- Schiller, Herbert. 1987. "Old foundations for a new (information) age." Pp. 23-31 in *Competing visions, complex realities: social aspects of the information society*, edited by Jorge Reina Schement, and Leah Lievrouw. Ablex Publishing.
- Steyaert, Jan. 1997. "Peeling the client information systems onion." Pp. 27-47 in *Effective policy, planning and implementation: information management in social services*, edited by Nick Gould, and Keith Moultrie. Avebury.
- Steyaert, Jan, David Colombi, and Jackie Rafferty. 1996. *Human Services and Information Technology: An International Perspective*. Arena.
- Toffler, A. 1981. *The third wave*. Pan.
- Touraine, Alain. 1969. *La société post-industrielle*. Editions Denoël.
- Vaarama, Marja. 1996. "PLANEC: A European Project for Developing an Intelligent Decision Support System for the Care of Older People." Pp. 174-189 in *Dreams and Realities: Information Technology in the Human Services*, edited by Bryan Glastonbury. STAKES.
- Webster, Frank. 1995. *Theories of the information society*. Routledge.
- Williams, Frederick (ed.). 1988. *Measuring the information society*. Sage.

The social aspects of the information society   Background paper to the conference
Transmogrifying issues and approaches to social policy   The social quality of Europe
Dr. Jan Steyaert & Dr. Nick Gould   Amsterdam, 8-10 June 1997