UNRISD United Nations Research Institute for Social Development

CONFERENCE NEWS

Contents

Understanding "Informational Developments"

A Reflection on Key Research Issues

Report of the UNRISD Workshop
26–27 September 2003, Geneva

Introduction

This workshop brought together academics from various disciplines, researchers working with civil society, and subject specialists from donor and multilateral agencies in a collaborative effort to begin mapping key research issues relating to "informational developments" and development policy. Key research themes and ideas for future research were discussed in the context of how research findings and evidence were being used in preparation for the then upcoming first session of the World Summit on the Information Society (WSIS, held in Geneva on 10–12 December 2003), as well as in other global information and communication technology (ICT) and development policy forums.

The rationale for the workshop, elaborated in exchanges before it began, was based on recognition of a number of factors. Questions of whether informational developments are provoking fundamental changes in economic and social relationships need to be addressed. In parallel, and almost irrespective of the answers to these questions, the "information society" discourse has acquired an importance in and of itself. This derives in part from the perceptions of the scale of the information "revolution"—and if world leaders talk of an unprecedented revolution, then such perception is significant. More concretely, the role, witnessed in the Group of 8 (G8), WSIS and the United Nations ICT Task Force, of the information society as a serious factor in development policy making has major practical implications for the planning, implementation and budgeting of development assistance. What is less clear is how these factors interact with each other. Logically, they should be closely connected and inform each other, but any such connections are far from transparent. A need to critically examine each factor, and if and how they are connected, lay at the heart of the workshop agenda: that and the potential for theory and empirical research to illuminate the changes taking place and the consequent choices facing development actors.

The focus on how the intellectual agenda should serve development needs is vital but far from straightforward. There are a number of complicating factors. The "information society" is a *political* arena. Changing social relations of production and reproduction are always reflected in politics. One of the arenas for such politics is in the shaping of how such changes are studied, debated and understood—that is, in the struggle for control of discourse. The "information society" is a *contested* arena. Some argue that it does not exist either because they do not perceive information-related change as significant or, like Manuel Castells, the author of the most exhaustive and referred to sociological analysis of the

"information age"[1], because they see the information society as an erroneous way of conceptualizing or describing what is taking place. Others make extravagant claims about the scale, pace and opportunities of change, claims which can have political or commercial overtones. It can be hard to elaborate positive development options without appearing propagandistic. And the "information society" is a *confusing* arena: terms like "ICT revolution" (that is, the assumption of a technology-driven process), "knowledge economy" and "network society" are often used with little reference to their origin or to potentially significant differences between them.

In planning this UNRISD workshop, it was necessary to agree on a conceptual approach that would allow the multiple perspectives of the subject area to be explored without implying a preconceived preference for any one. One notion is common to all approaches to this subject area: those for or against a revolution thesis, those who see change as driven by technology and others who see social or economic drivers, those who perceive common worldwide trends and others focused on local particularities. All agree that information is being handled and, at least sometimes, used in new ways. If we accept this, and label such new ways of handling and using information (which clearly include its communication, reception, response, adaptation and re-use) "informational developments"[2] we have a core phenomenon, the nature and impact of which may be studied and discussed. Informational developments are clearly taking place. They are shaped by and in turn shape sociopolitical, economic, cultural and technological processes. From a study of informational developments, their varying forms in different contexts, and how they lead to action for change and transformation, and from a recognition of what we do not know about them, it should be possible to shape a critical understanding of current discourse and to determine how intellectual work may contribute to the identification and choice of development options.

Three background papers on current discourses, existing research and WSIS, written by Mike Powell, Tommi Inkinen and Cees Hamelink, respectively, served to catalyze the workshop discussions. Participants contributed brief outlines (spoken or written) on what they saw as key issues. In broad terms, the agenda was structured to start with a critical analysis of existing work in the subject area, and then to move on to issues for future research. While the multifaceted discussion did not always fit neatly into such a linear agenda, it was broadly adhered to. Likewise, this report aims to present a summary of the workshop and its surrounding exchanges in a form that structures the various threads of discussion for the reader, rather than according to the actual meeting agenda.

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Analysis of Current Discourses

Environment for research and debate

Even the best research is of little value if it is not read and used. Equally, people must be able to identify and access information that is, in form and content, relevant to their needs. Both processes would benefit from a structured and signposted information environment. In his background paper for the workshop, Mike Powell argued that, for different reasons, both the institutional and the academic environments related to informational

[1] See Manuel Castells, *The Rise of the Network Society, The Information Age: Economy, Society and Culture,* Vol. I. Blackwell, Oxford, 1996 (second edition, 2000); *The Power of Identity, The Information Age: Economy, Society and Culture,* Vol. II. Blackwell, Oxford, 1997 (second edition, 2004); and *End of Millennium, The Information Age: Economy, Society and Culture,* Vol. III. Blackwell, Oxford, 1998 (second edition, 2000). An excellent summary of his thinking at the time is *Information Technology, Globalization and Social Development*. Discussion Paper No. 114, UNRISD, Geneva, 1999, a paper Castells presented at the UNRISD conference, Information Technologies and Social Development, in 1998.

[2] Cees J. Hamelink. 2003. "Human rights for the information society." In Bruce Girard and Seán Ó Siochrú. (eds.), *Communicating in the Information Society*. UNRISD, Geneva, p. 123.

[3] The following sections on institutional discourse, academic discourse and articulation are excerpted from Mike Powell. 2003. *UNRISD Social Impact of Information Technology Programme: Perspectives Past and Present*. Workshop background paper, mimeo, UNRISD, Geneva.

developments are chaotic, as are the linkages between them.[3] Nor, he argued, were the demands of academic research the same as those facing an institute such as UNRISD, which is mandated to carry out research that can be applied by the development community.

Institutional discourse

At the political and policy level it was, for a long time, difficult to attract attention to broad issues of information-related change. To this day, most governments and large development organizations make little or no distinction between ICTs and wider informational developments. Accordingly, up to the late 1990s, they tended to leave all issues relating to informational change, including social and organizational ones, in the hands of their internal ICT experts. Those organizations that were the first to recognize the policy importance of ICT–related issues tended to see this as an area in which they could gain competitive advantage relative to other organizations, a process that required them to become the "expert" on the subject rather than a participant in a collective learning and development process.

The notion began to grow that a revolution was under way—but one that could be "managed" by the powers that be on behalf of society, rather than a social process like every other revolution in history. This top-down approach was characterized by an overemphasis on the need for technical solutions and an erroneous belief that such solutions could only be delivered by the private sector. And in this context, the private sector was, primarily, the multinational corporate sector. It had the resources to participate in the multiplicity of consultative processes where global policy was shaped.

The role, for example, of small and micro businesses, social actors and artists in technology innovation, or the potential for multi-player collaborative development of new products and services, were little understood or supported. As a result, most international policy on the information revolution has evolved from a poorly developed set of options, paying insufficient attention to the complexities of social and economic change or the diversity of local responses. The dominant paradigm has been one of a globally standard and linear process to which countries need either adapt, or fail.

Some acknowledgement has been made of other approaches. The Digital Opportunity Task Force (DOT Force[4]) Plan of Action, in particular, gives some emphasis to the value of local content and technical innovation, and a number of funding schemes exist to promote such activity. But the process of collating such local activity, learning from it, and examining its potential as evidence for developing distinct and appropriate policies—at even a local level—is almost always lacking. The chances of having the lessons of such activities—or the potential impact on them of global policies—considered in the formulation of global policies and agreements are yet more remote. In this, the decision-making process as it relates to ICT and development mirrors that of other development debates. Participatory methodologies are often hindered by political glass ceilings.

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Academic discourse

From the perspective of an outsider wanting to be informed about and make sense of such profound changes allegedly affecting his or her life, academic responses to the information revolution and information society are problematic for different reasons. First, and not surprisingly given the importance of the phenomenon, relevant work is being done in a multitude of disciplines, none of which can offer a holistic interpretation of what is happening. These disciplines range from the very new (infonomics, information society studies, new media studies), through the continuously evolving relatively new (media and communications studies, cultural studies, computer science, information studies, development studies, organizational and business studies) to the more traditional (geography, economics, political and social

[4] The DOT Force, created following the 2000 G8 summit, was to identify concrete ways of bridging the digital divide between industrialized and developing countries, and to ensure that developing countries fully participate in the construction of a truly global information society.

sciences). Second, and beyond interdisciplinary politics, genuine problems exist in effective communication between disciplines: there may be little in the way of common basic knowledge or approaches. Third, and perhaps most importantly, there is little common ground to define exactly what the phenomenon is which needs to be studied: new social relations, new economics, new technology, information systems, networks? And if this is not clear for a discussion of information revolution or information society in general, it is further clouded when a development perspective is added. Approaches range from ICT as an integral facet of capital-led globalization, through a range of "development as catching up" scenarios, to more considered views of informational developments within and between localities, and their implications for local development strategies.

> *To the long-running debates on differing philosophical approaches to knowledge, must be added more modern debates about knowledge as merchandise, commodity or public good.*

Finally, any discussion that includes the concepts of knowledge society or knowledge economy needs an explicit definition of knowledge. Is knowledge the "justified true belief" of traditional post-enlightenment Western science, or is it a more complex, holistic and adaptable entity, as argued increasingly by feminist and other critiques of scientific objectivity? At the very least, the issue of whether the discourse is being limited to Western concepts of knowledge needs to be clarified before talking about knowledge and development or knowledge societies elsewhere in the world. Indeed, to the long-running debates on differing philosophical approaches to knowledge, must be added more modern debates about knowledge as merchandise, commodity or public good.

Articulation

As the multitude of journals and conferences suggests, there is no shortage of research on aspects of the information revolution, or of initiatives aimed at bringing researchers together. But such processes have not yet successfully shaped or articulated the range of relevant academic work on the subject so that it becomes comprehensible and accessible. Shaping and articulating the research does not mean a desire or an expectation of unanimity or consensus. It reflects a need for some topography by which the differing views and debates on offer can be located, and their relationship to each other made visible. It also reflects the advantages of the common use of concepts and terminology—a shared language—or at least of habits of explaining what is meant when alternative uses of a term exist.

Articulation is also developed through networking. Many networks of researchers in these areas exist, although effective multisectoral networks involving practitioners and policy makers as well are less common. Many have a limited life-span, others are either very specific to a certain issue or lack clarity of purpose. In organizing this workshop, UNRISD was aware of a number of networks and listservs relevant to related topics, but of no single one successfully bringing together and articulating an understanding of social actions and reactions in an information society.

Information society research in the social sciences

In comparison with what might be expected in more established fields, knowledge of valuable sources of relevant research and writing on informational developments tends to be specific to individuals, constituted not only by particular disciplinary backgrounds but also by personal experience and networks. Tommi Inkinen's background paper for the workshop aimed to provide a more objective survey of the current body of social science research in this area.

Common themes

The paper outlines certain essential issues and concepts, beginning with "information and knowledge society" and tracing the various uses and understandings of the terms information, knowledge and post-industrial society in sociological research. The value of such descriptions is undermined because the conceptual diversity of the term allows its use to mean an almost infinite variety of issues. A structured answer to the question "Does our societal reality constitute a service, knowledge, information or knowhow society?" remains to be found.

In Inkinen's paper, the term most commonly used is information society, as the focus is on the various actors using ICTs and the relationships between them. According to him, these actors constitute public organizations, companies and citizens, and their

interactions re-form communities and societies. "Social scientific information society research" refers to work assessing the changes introduced by ICTs to societal processes, including aspects of regional development, social stratification, the effect of entrepreneurial activity on communities, and changes in how organizations operate.

Inkinen's paper also surveys the use of the term "digital divide". Although its use to describe divisions within a society is acknowledged, Inkinen primarily uses it to imply disparities in the adoption of and access to technologies between different countries. Inkinen provides an overview of research into the Observatory on the Information Society, an Internet-based gateway to online resources on ethical, legal, sociocultural and policy issues of the information society maintained by the United Nations Educational, Scientific and Cultural Organization (UNESCO).[5] The research cited by Inkinen found that the categories that have elicited the most attention and discussion via the Observatory are the digital divide, e-commerce, freedom of expression, international organizations, "infostructure" and transborder privacy.[6] He notes that the number of items relating to intellectual property issues were less than a fifth of those relating to the digital divide.

The rapid rise in Internet usage and the opportunity to engage in new entrepreneurial activity has brought about the concept of "new economy". The concept does not refer exclusively to companies operating through the Internet, but rather to the new, accelerated production achieved through the development of ICTs. While the new economy has been an important aspect of discussions about the information society, there has been no unanimity as to whether this does or does not relate to broader processes of economic change. There remains, however, no doubt that the emergence of new, more efficient guidance and evaluation systems, novel business arrangements enabled by ICTs and new, lean organizational forms have affected business in many fields. Understanding the economics of these changes remains an important precondition for global information society development.

[5] www.unesco.org/webworld/observatory

[6] Inkinen cites I. Tuomi. 2001. "From periphery to center: Emerging research topics on knowledge society." *Technology Review* No. 116. Sitra, Helsinki.

Gender issues are also at play in the information society. The question of the direction of change is still blurred, and whether ICTs will narrow or exacerbate existing gendered divisions in society remains to be seen. There is evidence, however, that women are not as strongly associated with the "development project of the information society" as are men.

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The late 1990s saw a surge in the number of publications about "virtual communities" at the theoretical level and in the form of edited collections with little empirical grounding in the societal role of ICTs. Both mass and specialized media also gave substantial coverage to these issues. Since the burst of the dot-com bubble in global stock markets in 2000, the idea of "virtual change" has suffered a substantial loss of appeal. According to Inkinen, the effects of the Internet, for example, were in most cases largely overestimated. This is because the empirical data related to ICT usage patterns was limited, and thus most of the writings were theoretical exercises. Yet in the academic world, the concept of virtuality introduced some fresh ideas to social theory.

The virtual community arguments are connected with another popular theme of the mid-1990s: "identity and the Net". This refers to the individual usage of networks, the disembodiment of the user and the possibility of a self-created "network self".

Existing materials

Inkinen's background paper goes on to offer a brief description of some major sociological approaches to the information society, most notably the pioneering work of Frank Webster and Manuel Castells. The paper then considers a number of policy-related reports on the information society such as the Human Development Report 2001, *Making New Technologies Work*

for Human Development.[7] This report contains detailed explanations for why technological development does not necessarily lead to uneven distribution of income in the global economy but acknowledges the following points, in particular (pp. 1–8).

- The market is a powerful engine of technological progress—but it is not powerful enough to create and diffuse the technologies needed to eradicate poverty.
- Developing countries may gain especially high rewards from new technologies, but they also face especially severe challenges in managing the risks.
- National policies will not be sufficient to compensate for global market failures; new international initiatives and the fair use of global rules are needed to channel new technologies toward the most urgent needs of the world's poor people.

Despite these caveats, the tone of the report is that no state, company or other organization will be able to ignore technological development. ICTs are becoming, and in many sectors already have become, an essential part of daily activities or procedures. This constitutes a development process that has already changed the traditional patterns of operation both in governance and in business, and will continue to do so. Indeed, the report concludes, breakthroughs in digital technology enable the information society in much the same way as the steam engine and electricity enabled the emergence of industrial society.

In the case of developing countries, technology as an engine for development may appear as a distant idea. The UNDP report raises a number of challenges that developing countries should meet, including raising the general level of education for a resulting increase in the professional workforce; and securing economic resources. The report recommends, among other things, an increase in direct and indirect investments and the provision of global institutional support.

Inkinen's review of recent reports from United Nations agencies and other multilateral organizations such as the Organisation for Economic Co-operation and Development (OECD) and the European Union found striking similarities between them. Most take a positive view of the potential impact of the information society, despite acknowledging the same structural problems for the information society in developing countries: the nature and credibility of the political system, reform of economic life, and the modernization or creation of physical infrastructure. In general, the reports do not detail how the measures they suggest can be implemented, and they tend to repeat generalizations such as the importance of "investing in education" and "investing in quality"".

Current research

Inkinen's overview also looks at current research and dissemination, based on a survey of researchers working in the field and an assessment of the research agendas of a number of centres specializing in information society research.

His findings include the following:

- the high level of activity in social scientific research on the information society with numerous new series of publications;
- a strong bias toward research on the information society in developed countries;
- a plethora of works that are theoretical and make little use of empirical data to verify the hypotheses presented;
- a parallel lack of research grounded in local realities, and evidence-based comparisons (what significance does technological equipment have for its users; what meanings does the information society harbour for its citizens; do citizens and their opinions differ between different regions?);
- lack of good-quality data sets, and indicators that are unimaginative, too rigid to involve the local context, too technical, and need to be developed in the direction of social sciences;
- the wide range of topics studied at specialist "information society research centres", with a concomitant lack of clear research agendas or of acknowledged expertise in defined areas; and

[7] United Nations Development Programme (UNDP). 2001. *Making New Technologies Work for Human Development*. Oxford University Press, Oxford. www.undp.org/hdr2001/

- the problems of making the necessarily multidisciplinary character of information society research work in practice, despite inadequate resources, differing work habits and diverse areas of scholarly focus.

In conclusion, Inkinen's paper argues strongly for more empirical research, especially on the interaction of local and cultural factors with innovation; for more human-centred approaches to the study of technology; and for better indicators of change. More broadly, he argues, it is impossible to conduct a thorough study on any aspect of society without considering developments in technology and changes in communications.

The WSIS Discourse in the Context of Social Development

In his background paper, Cees Hamelink places the WSIS discourse in the context of social development. While the subject of the summit was the nebulous and contested concept of an information society, and while there was some initial interest in research-based inputs to the summit process, in the end, Hamelink asserts, WSIS did not make formal reference to existing academic work. According to Hamelink, therefore, there is a disturbing lack of clarity in the WSIS documentation—up to and including that produced at the third WSIS preparatory conference (prepcom)—on vital societal issues.[8]

UNRISD and social development

Hamelink assesses the extent to which WSIS discourses address issues of social development, defined by UNRISD as improvements in social relations, social institutions and social welfare.

However, because "improvement" is subjective and may therefore be ambiguous, we need a sense of direction in which this intended improvement should go. Here we can use the two core values that have been important guidelines for UNRISD research:

- that every human being has a right to a decent livelihood; and
- that all people should be allowed to participate on equal terms in decisions that affect their lives.

Thus, Hamelink asked, "Is the currently available WSIS discourse promising for the type of improvement implied by social development? Are the core values of decent livelihood and participation supported or ignored in this discourse?"

The Information Society

The key notion of all the WSIS texts is "the information society", yet the concept is not defined in the documentation, remaining an obscure and contested variable. In various texts one finds formulations like "the information society can" or "the information society will". Apart from his observation that it is rather nonsensical to propose that a society would do something (a classical case of "reification"), Hamelink notes that the texts basically say that the key agent in essential social processes is an undefined actor.

He proposes that it may be more appropriate to use the concept "informational developments". This refers to the growing significance of information products and services, to the increasing volumes of information collected, stored and made available, to the essential role of information as a backbone of many social services and as crucial factor in economic productivity, and to the input of information processing into transactions in trading and finance. Societies are confronted with informational developments in many different ways, at different speeds and in different historical contexts.

Reference to the information society has become routine, and the fact that the validity and usefulness of the term has been challenged by academics as misleading is ignored. Such routine use of the term suggests a consensual understanding of its meaning. In many of the popular, business and political writings on the topic it remains unclear what kind of social arrangement the information society represents. Nebulous concepts lend themselves easily to different purposes, and it makes a great political difference, for example, whether the information society is inspired by a neoliberal politico-economic framework or is driven by "alter-globalist" aspirations. After reading though the official WSIS documentation, the question remains as to what "worldview" stands behind the information society proposition.

[8] The remainder of this section includes lengthy excerpts from Cees J. Hamelink. 2003. *An Analysis of the WSIS Discourse [in the WSIS Draft Declaration* and Supporting Documentation*] in View of Social Development*. Workshop background paper, mimeo, UNRISD, Geneva.

This makes it difficult to assess whether the current WSIS discourse—if implemented—promotes the goals and values of social development.

No structural analysis

In Hamelink's view, a striking feature of the WSIS preparatory documents is the lack of serious and critical structural analysis that takes into account the wide range of political, economic and social environments within which ICTs may be debated in terms of policy or introduced as tools. For example, there are references to the democratic potential of ICTs, both in the sense of a democratic utilization of ICTs and in the sense of the reinforcement of democratic practices though the application of ICTs. Statements about ICTs and democracy make little or no sense, however, if one does not at first analyse whether the modern societies that promote and fund ICT developments represent democracies. In countries where systems of governance can be more adequately described as bureaucratic, "the question is not whether the use of ICTs can reinforce democracy, but whether uses of ICTs can support a fundamental process of change from a bureaucratic structure to a democratic arrangement. In spite of all the participatory potential ICTs may have, this will not be an easy process".[9]

Inclusion

There seems to be strong consensus on the proposal that the information society should be inclusive and accessible to all. Apart from the fact that the notion of inclusion is neither defined nor elaborated in the WSIS documentation, this presumes without further questioning that everyone wants to be included.

Yet Hamelink poses the question: "What does 'inclusion' be? If, for example, an information society implies a societal dependence upon fallible, unreliable or ill-understood technologies which imply great social risks, could it make sense for sensible people to let the opportunity pass by? If an information society means that all included people get more information, but if that information consists mainly of commercial messages and disinformation, propaganda or hate speech, could some people say they would rather be excluded?

What are the real motives behind the drive toward inclusion? Is the anxiety about digital illiteracy fed by the same motive as earlier literacy campaigns in European history? These were often not motivated by a strong desire to empower ordinary people but served to facilitate the functioning of a system that, with too many people unable to read or write, would not operate efficiently.

Moreover, a puzzling question is why the proponents of the inclusion thesis expect—if information is a key resource and if access to such resources has historically always been skewed—that it could be any different today. Are there any socioeconomic and political conditions that, in the early twenty-first century, make universal accessibility to essential resources such as water, for example, a realistic claim?

> *Realistic thinking about future technological impact will have to accept both benefits and risks. ICTs may have some benign effects; they are equally likely to have effects that are not so benign. It seems that*