Access to the media has been considered important for a variety of reasons: for informing citizens, for stimulating community development, and for supporting minority and cultural expression. Policy statements and initiatives related to access dominated media discussions, particularly in the 1970s and early 1980s. Since then, however, scholarly attention to these matters seems to have subsided.

The purpose of this essay, and of this theme issue of *Javnost/The Public* generally, is to re-open discussion of, and concern for, media access. Based on impressions from the Euricom Colloquium recently held on access to the media, there may be value in reviewing some of the established interpretations given to the term. By way of introduction, then, I present a number of illustrations of media access considered for various levels and types of media. Some of these efforts at creating media access have also contributed to defining the concept and relating it to other notions such as participation, pluralism and diversity. These efforts have not, however, produced much cumulative result or been an explicit source of inspiration for further empirical work. For this reason, it is important to sketch this work in order to share a sense of what has been accomplished to date. This review of theoretical progress is found in the second section of the article. Finally, I propose researching current and anticipated access initiatives. To rectify the current ad hoc approach, I suggest directions for the nature and focus of this activity, and creation of a pan-European body to stimulate and co-ordinate such a research programme.

**Illustrations of Access**

Access to the media is but a specific application of a more general concern regarding access to societal institutions and political processes. There is considerable literature treating issues such as access to public institutions as well as to various political decision-making organs (Colebatch 1975; Schaffer 1973). The Access to Information Act in Canada is one example of effort to codify citizen access to information held by government offices (Keane 1991, 133-134). To
the extent that media access refers to the availability of information, however, access is as old as mass communication itself. The early history of newspaper and book publishing is very much the history of groups in societies struggling to gain access to information, often economic or religious in nature (Emery 1962).

**Access to National Broadcasting.** With the advent of electronic media, during the early days of radio and later television, there was again widespread concern for making these media available — accessible — to a large public. Here, concern was partially related to distribution of the technology, but also strongly based on what the technology could mean for people once they owned radio and, later, television sets. Again, access to information was propagated and embedded in concern for general educational development and an informed citizenry (Head and Sterling 1987).

Concern for media access took on particular prominence in the late 1960s and early 1970s in the United States. The opening chapter of a reader compiled by Emery and Smith (1972) during that period is devoted to a series of statements by half dozen of the more prominent scholars and communication specialists of that era. One of the issues discussed in this series was the need for increasing diversity of information and opinion in the media, and in providing more balance in perspectives and presentations. Another issue was examination of the role government should play in insureing access. The Fairness Doctrine, equal time regulations and opportunity to reply are all examples of government interventions into (broadcast) media activities in order to ensure access to the media themselves. One of FCC Commissioner Nicholas Johnson's (1972) proposals — encouraging citizens to become involved in the public hearings for station license renewals — is an example of gaining access to policy-making within media. This issue goes beyond mere access to information and towards access to the machinery of policy.

Perhaps one of the more salient and theoretically driven arguments which came out of Britain in this same period, the early 1970s, was articulated by Groombridge (1972) in *Television for the People: A Programme for Democratic Participation.* He suggests that participation by citizens within western democracies can be stimulated by encouraging involvement in broadcasting, especially television programming. Groombridge goes considerably further in sketching the terrain of access than the Americans noted above who, by and large, envision access within a legal framework related to the First Amendment. Groombridge refers to various elements of access: access to information along with access to the media themselves for the purpose of developing self expression and awareness, and mobilising others. He envisions such media access within a broad, life-long educational perspective.

Also in England, the BBC initiated the first and longest running access television programme in that country — *Open Door.* Launched in 1973, it continued until a decade later when the formula was revised and a new version, *Open Space,* was introduced. The central aspects of the original initiative included allowing non-professionals from outside the BBC to be involved in programming: "editorial control was handed over completely — and this was unique — to allow people 'their own say in their own way'" (Oakley n.d. 2).

This early BBC experience with nationally organised access programming eventually led to the realisation that many of the issues and topics were better suited to smaller geographic units — broadcasting at the regional or local level. The director of the initiative suggested channelling groups and individuals into the most appropriate of three levels which he identified as: video closed circuit and local radio for community use, regional radio and television, and national broadcast television (Bonner 1976a; see also Bonner 1976b).
Another initiative in Britain focused on the regional level — Social Action Broadcasting — and was related to some forms of media access. Basically, the purpose of this broadcasting initiative was to encourage use of television by community action and voluntary groups for the purpose of promoting involvement of residents in community activities. The Independent Broadcasting Authority commissioned a report on this broadcasting form which later served a catalytic role. In that report, Coleman (1975) documents the growing concern among various circles for greater access to broadcasting. He reviews a number of the initiatives and experiments taking place around Europe, and pays particular note to the Dutch programme "Werkwinkel" on recruiting volunteers which served as a model for subsequent British initiatives.

Important contributions were also made by The Media Project in promoting Social Action Broadcasting. One of its recommendations encouraged formation of an alliance between broadcasters and community groups; another stressed need for follow-up after such recruitment broadcasts. In a review of the first year of involvement with Social Action Broadcasting, the distinction between this broadcasting form and access programmes is made explicit: initiatives "which allow individuals or agencies to regularly make their own programmes" is at the heart of access and Social Access Broadcasting (Hodgkinson et al. 1978, 17). Social Action Broadcasting, particularly through the support activities provided by The Media Project, can be considered an important historical effort to increase access to and use of the media by community groups.

Access to Local Broadcasting. The Open Door recommendation, made in 1976, that the BBC initiate access programmes at the local level was in fact already being undertaken by another sector within the media landscape: community television. By the time of that BBC memo an experiment with community television had already been launched in several localities around England, and similar experiments were underway in the Netherlands and Denmark. Further, community television was well on the way to becoming an institutionalised element in the American media landscape.

Several authors (e.g., Wurtzel 1974; Gillispie 1975) have explored the origins and meaning of community television in the United States, also known as public access cable television, but perhaps the most extensively documented and readable historical treatment has been provided by Engelman (1990). He traces the beginnings of the access movement in the United States to initiatives undertaken within the poverty programme in Canada during the mid-1960s which incorporated first film and later video into its work. The objective of this programme was to "encourage dialogue and promote social change" (cited in Hénaut 1991, 49).

The feature which made the Challenge for Change approach to community organising exceptional was its employment of media. Much of the early work performed within the programme drew on techniques taken from documentary film tradition where social reality was portrayed without studios, scripts and professional actors, and with input from persons directly related to the subject of the documentary. Eventually this cooperative effort between film-maker and subject was transformed so that subjects became in actuality the film-makers (Engelman 1990, 11).

There are many examples, recorded in publications of Challenge for Change (Kennedy 1973) and elsewhere (Gillispie 1975, 21-30; Rosen et al. 1977; Engelman 1990, 4-11; Hénaut 1991) as to how this technique was applied. A frequently cited case is the Fogo Island Project where a series of films were made on the living and working conditions of people on that fishing island in Newfoundland. Observers have repeatedly asserted that the films contributed much to community discussions and increased resident awareness of their common problems, and helped strengthen their collective identity.
American filmmaker George Stoney spent a year as guest producer with the Challenge for Change programme in the late 1960s. Afterwards, he returned to New York City and established the Alternate Media Center, designed to promote use of cable and video technology by non-professionals. This Center was highly involved in the debates to reserve channel space on the cable television systems then being negotiated with the New York City government, and later managed one of the prestigious National Science Foundation experiments with interactive television in Reading, Pennsylvania (Moss 1978).

That cable debate, held in the late 1960s and early 1970s, resulted in the New York City cable companies providing free studio space for two public channels and another two for local government use. Although not the first community-operated cable channel in the United States, the experiment in New York is considered the main initiative which later promoted FCC regulations requiring allocation of cable channel space for public, educational and governmental use.

In reflecting on this period, Engelman (1990, 39) suggests the birth of public access can be attributed to co-operative efforts by three forces, or clusters of actors: technological, institutional and ideological. The technological forces included such developments as introduction of portable video equipment by Sony and development of cable television systems. Institutional forces were represented by the “think tanks” and commissions which published reports like that of the Sloan Commission (1971). The ideological forces found reflection in social movements which saw need for media expression outside the established press.

Other observers, commenting about similar alliances elsewhere (Murphy 1983), have argued that promotion of access channels can be seen as no more than a drawing card, a ‘loss leader’, for economically lucrative services — teleshopping, pay television, telebanking. In this respect, the access channels could be seen as easily given “trigger services” enabling cable companies to gain franchises and subscribers.

Independent of such possible economic motivation, community television had reached a degree of acceptance and institutionalisation from the mid-1970s. An organisation of public access stations was established early in 1976 in the United States which eventually provided training and consultation services, held regional and national conferences and undertook lobbying activities. Even in the current climate of deregulation, where the initial FCC access channel requirements have long been nullified, community stations show signs of well-being and establishment.

This community television “fever” was not limited to Anglo-Saxon countries, however. Experiments and pilot projects emerged across Western Europe, and the Council of Europe took upon itself the task of stimulating and monitoring this development. Literally dozens of reports came off the presses of this organisation in Strasbourg (Dubois-Dumée 1973; Ploman and Lewis 1977; Faenza 1977). One of the European countries involved in this phase of development was the Netherlands. In October 1971 a group of residents in a small village in the south of the Netherlands realised that it was relatively easy to “plug into” the cable television net and to distribute their own television programmes to cable subscribers. This group, led by the village mayor, broadcast a city council debate to the 36 households on the cable there.

From this very small beginning, other groups elsewhere in the country “discovered” this use of the cable. Shortly after the above initiative, a group in an Amsterdam housing project did much the same thing, although here the initiative was taken by an action group which had occupied a neighbourhood centre out of protest to a particular government policy. These examples indicate two of the three approaches to using community television which were to manifest themselves during a four-year nationally funded experiment with community television launched later in the decade. In an earlier
From those experimental beginnings with six stations, there are now around 300 in the Netherlands, found in nearly half of the municipalities around the country (Stappers et al. 1992). A majority of these stations, in contrast to the situation during the experimental period two decades earlier, are primarily concerned with radio programming. Since 1988, stations have been allowed to broadcast radio programming with the aid of low power transmitters. Now, almost all of the stations broadcast as well as cablecast their programming. As with the NFLCP in the United States and similar organisational efforts in Britain, the Organisation of Local Broadcasters in the Netherlands (OLON) provides support and lobby services for its members.

We compiled these and other experiences with local broadcasting with the intent to assemble social science research findings on locally based electronic media across western Europe (Jankowski et al. 1992). Although the book has limited theoretical pretentions, it provides a valuable overview of both the development and state of small scale electronic media in the early 1990s. In the final chapter, Prehn (1992) sketches with broad strokes the direction these media seem to be going, reflected in the title of his contribution: “From small scale utopianism to large scale pragmatism.” He suggests that one of the initial aims of community stations was “to establish new programming outlets for contributions from active citizens, where assistance from professional staff was limited or even non-existent” (Prehn 1992, 258). He further considers the development of these small scale media, particularly the aspects of access and participation within them, as “but one of several efforts to reverse the societal trend towards still larger units and concentrations of power” (Prehn 1992, 259). He predicts locally oriented media will be needed to confront oligopolistic and transnational cultural industries, and that these media can continue to “play an important role in strengthening local identity and self-respect” (Prehn 1992, 266).

Access and new communication technologies. Although the topic of this section is not of the same nature as the previous two sections, access to national and local broadcasting, it deserves separate treatment because of the massive public attention being given to the so-called information highway. Concern about access to new communication technologies has been with us for quite some time, actually. The debate regarding who is to benefit from the riches of the information highway is an extension of an earlier debate — held more than two decades ago in the United States and somewhat later in Great Britain — about the nature of, and access by citizens to, services being considered for inclusion on cable television systems (Sloan Commission 1971).

One of the early expressions of concern regarding access and new communication technologies came to be known as social experiments and telematics. The essence of these experiments or projects is that they are intended to broaden the base of actors involved in the decision-making, while such information technologies are being developed. Such involvement is also considered a form of social learning in which diverse and often overlooked groups can contribute to the evolution of the technology. There emerges, it is argued, a form of participatory democracy within social experiments involving communication technology, when the often missing actor in this development process — the end-user — regains a critical role, alongside positions already held by others such as engineers and policy makers.

Social experiments as just described have the distinctive flavour of utopian schemes; this and other difficulties have been signalled elsewhere (Jankowski and Mol 1988). Still, the ideas behind social experiments have remained important to many of us in
directing our work. For example, we (Jankowski and Mendel 1990; 1991) attempted to consider the possible relation between forms of telematics, or interactive media, and the terms public access and public sphere. Both terms, social experiment and public access, are based on the premise that it is valuable to increase the involvement and degree of control by citizens of the media (Jankowski and Mendel 1991, 9). Sometimes there is a difference in emphasis on degree to which individual development is stressed as opposed to increasing awareness and involvement in social issues, or involvement in political actions. Public access, we suggested, places accent on the degree of involvement and control of existing electronic media. Social experiments are particularly directed at involvement during the design and implementation processes of media.

Recently, Williams and Pavlik (1994) published a volume likely to have substantial impact on public discussion around the information highway. Entitled *The People's Right to Know — Media Democracy and the Information Highway*, its stated purpose is to argue why and how a national policy for the promotion of electronic information services can be developed as affordable universally available services, similar to that already provided via the telephone (Williams 1994, 8). The term access appears in virtually every contribution, and one chapter treats citizen access and the information highway directly. In spite of all this attention, the discussion is almost exclusively limited to access to information and, as a precondition, access to the technology necessary to retrieve information.11

### Theorising about Access

Some of the examples of media access noted in the previous section, particularly those related to small scale electronic media, stimulated theoretical contributions. Looking at this work as a whole, however, it is striking how little theoretical development has taken place. Much of it has been limited to definitional exercises and development of classification systems. The publications which have been produced, moreover, have been prepared mainly for small meetings and conferences (Jouet 1977; Webster 1975; Lindblad 1982) and for completion of degree requirements (Heyn 1979; Jankowski 1988). Moreover, this theoretical labour has not produced or served as a framework for further empirical research.

This is reason, then, to examine what has been accomplished regarding conceptual formulations. In an earlier study I reviewed many of the definitional efforts regarding access to and participation in the media (Jankowski 1988). Without repeating that exercise in detail, I would like to outline the highlights of it to provide a basic conceptual review.

Branscomb (1973) was one of the first to consider different forms of access to the media. He suggests that the phrase can refer to programming, ownership and to decision-making within a particular medium. Bretz (1975) points out a difference between access to a public via a medium and access by a public to a particular medium. Often, discussions about access are related to participation in the media; sometimes interchangeably. Berrigan (1977) suggests the two terms are “on the same side of the coin; they are both reflections of a desire to overcome media inertia” (Berrigan 1977, 16). She suggests, further, that participation is concerned with public involvement in media management and programme production; access involves the choices of information available and “the possibility of a genuine dialogue between producer and audience” (Berrigan 1977, 5).

In my own community television study (Jankowski 1988, 15-16) I note that access refers to the regulation of participation within the medium. That regulatory procedure may stem from a legal framework, as was the case with public access channels in the United States; it may also consist of rules and codes permitting participation in the activities of the medium. Access is, thus, a structural prerequisite to media participation.
Such access procedures can vary in degree, and I suggested in the above study three types of access which may be present in community television stations. First, there are stations with very limited regulations or restrictions whereby access seems to be granted on an individual, case-by-case approach. I termed this type ad hoc access. Second, there are stations operating on principles like the FCC regulation “first come, first served” whereby the station is intended to function as a free speech platform for citizens. Not surprisingly, I termed this public access. Finally, there are stations which have rejected the liberal public access approach because of its inherent bias toward established groups in a community (see Bibby et al. 1979). Such stations are committed to supporting particular groups, particularly those lacking a “voice” in the media. I called this form affirmative access.

In that study I eventually related these forms of access to areas in which persons could participate in stations (in production activities, in programming decisions and in overall policy formulation) and two forms of use made of programming (individual or community orientation). These three terms — access, participation and use — were then related to three types of community stations: those involved mainly in community actions, those based on the classical public access principle, and those mainly concerned with providing a public information service.

Although the resulting matrix (Jankowski 1988, 174) containing the terms access, participation and use was intended to indicate the degree of each of these terms for each of the three station types, most stations do not reflect a single ideal type but a mixture. Whether this matrix or some modified form could be at all useful in examining the type of access and amount of participation in particular stations has not, unfortunately, yet been adequately investigated through empirical research.

**Researching Access**

Examples of empirical research and reflective studies have already been alluded to, but I would like to note here efforts directly related to researching electronic media initiatives at the community or local level. In an earlier essay reviewing qualitative research and community media (Jankowski 1991) I suggested that an increase in such investigations coincided with the introduction of cable and video technologies in the late 1960s. In the United States, research components were attached to three National Science Foundation experiments with community and interactive media in the mid-1960s (e.g., Moss 1978). Other community radio and television stations in that country have also received attention by academic researchers (Hardenberg 1985; Schulman 1985; Barlow 1988). And, community related electronic media have been investigated in many other countries and settings: in Indian villages as part of a Satellite-delivered educational programme experiment (Sinha 1985), in Ecuador as a form of participatory radio (Hein 1988) — to name just a couple.

Considerable research has been conducted in the European setting, too, often as part of government-sponsored experiments with local radio and television. The work around the British station Swindon Viewpoint (Croll and Husband 1975; Halloran 1977) is illustrative of this link, as well as publications based on investigations of the Danish (Prehn 1990; Prehn et al. 1992) and Dutch initiatives (Jankowski 1982; Stappers 1978; Stappers et al. 1992). Other studies accompanied similar initiatives elsewhere in Europe, and these are well documented in the volume People's Voice mentioned earlier (Jankowski et al. 1992).

It would be misleading to suggest that all of this work was directly related to issues of media access. Much was, quite understandably, concerned with the general development of these new local media, their organisational structures and constraints, message
production, and audience use and appreciation of programming. Still, aspects of access can be clearly found in studies such as Heyn's (1979) investigation of participation in British local media, Widlok's (1992) comparison of local radio stations in the United States, and my investigation of a community television station in Amsterdam (Jankowski 1988).

The purpose here is not to examine this work in substance, but to demonstrate that the investigation of access to local or community electronic media has been a recognised focus of concern and has often been related to media experiments or initiatives. At the same time, this concern for research has not been institutionalised. At best, these investigations have been no more than a response, sometimes inadequate and belated, to media developments or policy. Lewis (1978), among others, has complained that too little research was initiated during the local cable television experiments in Britain, which meant policy decisions were based on limited and partial information.

Moving from past to future research needs, I would identify four areas which seem important for any new research initiatives. First and foremost, new research initiatives should examine the efforts to create forms of media access within the emerging broadcasting systems in eastern and central European countries. How these systems are transformed under the current political and economic pressures, and what place forms of media access can develop therein, is of central importance.

Second, the increasing attention given to and claimed by ethnic and other minority groups is strikingly evident across Europe. The role of the media in this process, particularly issues related to access to the media by these groups, should also be one of the central foci of future research. Work has, of course, already been accomplished in this general area (Riggens 1992), but specific attention to access-related questions has not received due treatment.

Third, media policies in many western European countries are currently dominated by concern for deregulation. In situations like that found in the Netherlands, this trend has prompted local radio and television stations to often succumb to various commercial pressures, such as networking, commercially oriented programming, and increasing reliance on advertising as source of revenue. This development is also evident in Denmark and has prompted Jauret (1992) to advocate re-regulation in order to save some of the public service components of local broadcasting. Within this arena, research related to access issues could help systematise the 'losses' due to deregulation, as well as elaborate on possible examples of innovations where access is successful, even within a deregulated, commercial environment.

Finally, new communication technologies, particularly those providing for interactive services, should be the focus of further research. There is also a rapid growth in computer bulletin boards, some of which provide forms of computer conferencing and message services with few or no barriers to access and participation. Interactive local teletext services have been developing for some time now (Jankowski and Mendel 1990), and the PENs or virtual communities referred to earlier in this paper are on the upswing among localities already involved in the information highway (Dutton 1994).

In addition to identification of areas for directing research as the above four areas, there are other issues requiring attention. I have made a plea elsewhere (Jankowski 1991) for more research undertaken from an interpretative or qualitative methodological approach. I feel this will contribute more to our theoretical understanding than conventional large-scale surveys conducted mainly to measure audience size and programme assessment. Both quantitative and qualitative research are important, but the current emphasis on the first requires readjustment. Equally important to this matter, though, is attention to the question: research for whom? Although interests almost always differ between the parties involved in research, alliances between practitioners, theoreticians and empirical
researchers provide the most opportunity for developing a research programme capable of delivering findings relevant for a multitude of objectives: for practice, policy, theory and methodology.

**Towards a Research Programme**

To summarise, there is need for further research focusing on the areas noted above, performed from a methodological standpoint taking into consideration the points mentioned to accompany the equally necessary initiatives and experiments with media access. Until now, research related to media access has been sporadic and secondary to other concerns and foci. This situation could be improved through development of a pan-European research programme specifically concerned with media access and participation.

In the past, various institutions have concerned themselves with projects related to access: the Independent Broadcast Authority with its reports on community television (Lewis 1976), Social Action Broadcasting (Coleman 1976) and local radio (Wright 1979/80); the Council of Europe with its series of reports on community radio and television, the British Film Institute with an early report on experiments with community television in that country (Lewis 1978), similar reports on experiments in the Netherlands (Stappers et al. 1992) and a comparative study of small scale media around Europe (Hollander 1982). Unesco has also had a long-standing interest in facets of media access and has published various documents in this regard (Webster 1975; Berrigan 1977).

Most of this work is not of recent vintage. Institutional concern, prominent in the 1970s and early 1980s, has since waned. As I have argued, there are pressing reasons for renewing interest and for launching a concerted research programme. That, quite simply, is the task and challenge awaiting scholars and institutions at this point in time. The contributions to this theme issue of Javnost/The Public can be considered efforts in that direction.

**Notes:**

1. The editors included an abbreviated version of Barron's (1967) landmark article from Harvard Law Review. Barron (1973) later expanded this piece into a book-length essay arguing for a fundamental reordering and reregulating of broadcasting in order to allow more input and access by individuals and groups.

2. Although undated, this internal BBC memo was produced around 1983. The author, programming editor of Open Space, wrote that the division had come "to the view that access needed a re-think". Rethinking access, then, has not only been a concern of this Euricom Colloquium or of this particular moment in time.

3. George Stoney, often considered the 'founding father' of community television in the United States, has been advocating establishment of links between community television stations for the last two decades. In the early 1970s he proposed video banks (see Engelman 1990, 27) using a variety of means and technologies for 'bicycling' tapes between stations. Later, at an international conference on local television held in France in 1992, he organized a satellite link with a community station in Columbus, Ohio, in order to demonstrate how programmes could be exchanged with the aid of such technology.

These efforts to establish a 'global village' of community stations seem to disregard the substantial problems of overcoming cultural, language and contextual specificity of particular programs. One of the strengths of community programming is in its emphasis on local aspects and issues, which is undermined or diluted through such linkage and subsequent concern for a wider audience beyond the community of concern. The frequently cited examples of potential successful programme exchange - such as programmes related to country-wide or pan-national issues like anti-war and environmental movements - are appealing but exceptional.

4. These FCC regulations, enacted in 1972, were rescinded in 1979 in the wake of deregulation fever.
which had taken hold in the United States. And, by the time of the Cable Communications Policy Act of 1985, reference to public access channels had vanished entirely.

5. Some indicators of this are various articles found in NFLCP (National Federation of Local Cable Programmers) publications and in this organization's magazine Community Media Review. See also Dominick et al. (1990, 203) who similarly suggests community television is 'alive and well' in the United States.

6. Prehn suggests yet another station type: "stations attempting to serve a locality with programming designed to attract the largest audience" (Prehn 1992, 260). He correctly points out that these are ideal types, and the activities of most local stations constitute a mixture of these forms.

7. The public access formula of "first come, first served" as developed and codified in the United States has only been adopted in a few Dutch stations: during a brief experiment in Utrecht and as part of the overall station policies in Rotterdam and Amsterdam (Jankowski 1995). Citizen involvement in all phases of station organization and activities, however, is common to virtually all community radio and television stations in the country.

8. In a post-publication critique of the volume I suggested that, although reference is made in the country-oriented chapters to concepts like access and participation, media and democracy, public debate and public sphere...these terms are not developed to any extent or related to the presented research. They are very much presented 'in passing' (Jankowski 1992, 7).

9. The term access has sometimes been used in widely disperse ways in connection with new communication technologies. In the world of telematics, the phrase 'public access terminals' refers to videotex or Internet terminals made available in public places such as libraries and train stations. "Conditional access" refers to offerings on pay television, and the "condition" is ability to pay.

10. When pressed to provide examples of social experiments, proponents have sometimes cited videotex developments like Germany's Bildschermtext by way of illustration (Qvortrup 1984; Ancelin et al. 1986). Videotex as developed across Europe, however, was first and foremost an economic undertaking in which end-users played little or no significant role in its development; see Bouwman and Christoffersen (1992).

11. The exception is Dutton's chapter devoted to 'Free-nets' or PENs (Public Electronic Networks). In his review of empirical research findings related to users of these PENs, he suggests "a sizeable number of PEN users are active in local political discussions by virtue of their access to PEN, when otherwise they would not have been involved in public affairs because their family or work requirements would not permit them to attend regularly scheduled meetings" (Dutton 1994, 125).

References:


London: Routledge.
New Delhi: Concept.