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EuroNets – EuroChannels – EuroVi- sions

***Towards a History of European Telecommunication in the
20th Century. Thesis on a Research Strategy***

Intention, aim of the paper

- Suggest a framework for future research on European Telecommunication in the 20th Century (this framework doesn't refer to specific objects, technologies etc. but suggests a more theoretical orientation). Integrated in this research paper are an outline of the hitherto done work in the communication section and important references to literature on communications.
- The core question is two fold: a) how to find a systematical way to the specific European format, the specific European dimension of developments in the Telecommunication sector; b) how and in what specific way is Europe constituted and structured by these developments.
- Systematical approach in three dimensions: EuroNets referring to the networking of Europe by telecommunication in a more technological sense; EuroChannels referring to the structuring of social action by those technologies; EuroVisions referring to the imaginations, which drive the process of medialization, the social adaption and the social shaping of telecommunications.

I. EuroNets: European Space from a technological perspective

With the notion of EuroNets the main thesis guiding our systematical approach to the History of European Communication are developed. With nets we refer to the more technological aspect of telecommunication, to the development, production, differentiation, and adaptation of infrastructures of communication, to the genesis of material, formal, and spatial standards and rules, being involved in the implementation of networks. EuroNets especially focuses on the historical transformation of the spatial dimensions and structures implied by technological developments.

1. *European Space: Networks are superimposing "containers"*

- Following sociological analysis there is a significant shift in the dominant form how social space is structured: from (geo)political entities down to communal neighbourhoods, nowadays, social bounds are more constituted by and in form of networks than in form of "containers" (which means e.g. the constitution of societies within the frame of national boundaries or the constitution of social networks within the circles of spatial neighbourhoods). Network Society is the morphological, the structural order of the Information society based on the (tele)communicational surmount of space (Castells 1998, Faßler 2001, Löw 2002)
- "Network society" is an emergent level of social (political, economical, cultural) order. Older forms don't disappear, they are shaped by this new form of order or become totally reorganized. Speaking in terms of (tele-)communications: The net is an emergent level of the growth of channels of communication.
- These statements implicate two thoughts which could guide empirical research: first the transformation of the more homogeneous correlation of social and physical space into a network order is driven by the differentiation of media within the evolution of media. Secondly, not only new media are appearing within this evolutionary process, there is also a changing role of existing media within their technological, organizational and programmatic change (e.g. with the digitalization of telecommunication).

(Mitchell 1995; Graham/Marvin 1996, 2001; Rötzer 1997; Faßler/Halbach 1998; Ostwald 2000)

2. Standards: a first layer of Europe within telecommunication

- Supposing the basic role of communication in the shaping of social space, the first layer to look at in search for specific kinds of Europeaness are the standards which communication networks are based on. These standards for interconnectivity and interoperability are basic instances in the process of linking and de-linking a European space. (On standards: Parizeau 1978; Schmidt/Werle 1998; Antonelli 2000; Slaton/Abbate 2001)
- European space can be found at first sight by looking at the politics, interests and procedures guiding international standardization committees and the community of engineers. Some observations could serve as a first guideline: first, European regulation committees are a forerunner of a coherent space, their activity would or should create. Secondly, a specific European space could be addressed as segregation out of a larger whole (in most cases: “non-American”) or an integration of smaller parts (e.g. integration between two or more European nations). Thirdly, European space could be considered as an extension of national space (e.g. the case of the PAL-SECAM controversy: Europe is addressed as a consumer market for national standards, which includes whole technological systems). Fourthly, Europe could be considered as an integral platform for networks (e.g. the case of GSM: a basic standard which allows modular superstructures and upgrades – i.e. operators, providers, manufacturers, equipments and devices – a standard which integrates different players with heterogeneous national and functional backgrounds (Laborie 2003; Kaiser 2003; Kammer 2003; Bender 1999; Bekkers/Smith 1999; Bekkers 2001)

3. Organizational Standards: socio-technological compatibilities

- In order to develop, implement and maintain standards, technological procedures or devices need specific knowledge, know-how and organizational procedures. What could Europeaness refer to and may change it, supposing an undergoing change in addressing European space? The following two observations may guideline the research.
- The possible importance of (national) styles in organizational structures and behaviour is superimposed by a fundamental change in new network-philosophies and organizational philosophies. There are obvious homeomorphisms between the new philosophies. The principal topics are the end of monopolies, of centralization and of mass products in favour of decentralisation, liberalisation, modularization and differentiation of products (Ischer 2003; Gagliardi 1982; Esser/Lüthje/Noppe 1997; Natalicchi 2002; Gugerli 2002).
- Standardization is not only to be seen as a process of European homogenization. Complex standards with higher demands in maintenance may perpetuate political, socio-spatial and technological gradients in a new form. The differentiation within media-evolution may open ways for the development of “fine differences” in devices, designs, applications etc. There may appear new forms of inequality in developments when media-evolution allows to skip evolutionary steps (e.g. lacking fixed networks attracts mobile systems). (Tympas 2003; Silva 2003; Schneider 1989; Fischer 1992; King/Grinter et al 1997;)

II. EuroChannels: Structuring the social by technology

With the notion of Channels, we stress telecommunication as a means of structuring social life. Telecommunication is seen as a condition of chance for social action, thereby bundling, constraining and controlling social action. It is a constitutive element regulating and normalizing social order. Referring to transformations of public and private space in Europe within a broader social context, we first want to explain some general reflections on processes of normalization and homogenization in economy and ways of living within Europe. For further research on this topic we suggest to differentiating between the effects of and the transformations within mass medias on the one side, on the other side the developments of individual communication and the merging of public and private space within the media since the 1980s. In all empirical questions we have to admit that the findings are preliminary because comparative international studies are rare and focussing on few items.

1. *(Tele)Communications as a means of structuring social life*

- On structural dimensions the knowledge about the spread and the handling with telecommunications in itself implies a process of homogenisation (e.g. how to use the telephone, to start telephone conversation, to adapt the e-mail between formal and informal communication, to “read” internet-pages, etc.). Also the extension of communication with all its implications in political, economical and cultural terms tends to equalize living conditions (e.g. the converging of money and communication with the EC-Card: institutionalising a European space for money transaction which sets a whole range of standards, including a change in behaviour of customers). Within this general process there is a lot of contradiction, ambivalence and resistance. Homogenisation by means of telecommunication may also provoke the enforcement of frontiers (such as the denial or hesitation to use specific technologies like the mobile phone or e-mail within specific social, professional or national contexts) (Flichy 1991; Bakardjieva 1992; Robertson 1998; De Wit, de la Bruhèze, et al. 2001)

To analyse the European dimension of the spread of communication in this way, the question arises what could be the specific Europeaness of such processes of homogenisation or the development of “fine differences” (e.g. in difference as compared to developments in the USA)?

- Ways of socio-technological learning in a broader social context: *e.g.*, the notion of the network itself (also important for our own analysis) could be considered as a metaphor we live by (originating in technological sectors). Organisations in business or government are now built like and around their new kinds of decentralized, polycentric, multidimensional communication networks. As already introduced, network is the metaphor by which whole contemporary societies are described and understood (Kaufmann 2003; Hermans 2003; Cohen et al. 1996; Guy/Graham 1999; Latour 1994; Sydow 1999; Yates/Van Maanen 2000)

2. *Media spaces: Mass media*

- To list some preliminary findings on the radio: a) originally a media primarily for ship or military communication World War I released the three essentials to transform radio communication into broadcasting: demobilized radio operators, mass production of radio tubes and social, political, and spatial disavowals creating the

specific space in which the upcoming media could operate; b) radio broadcasting functioned as a “*Distributionsapparat*” (distribution device, Bertold Brecht) for creating an integral national society. Radio plays experimented with its specific aesthetic qualities for creating a virtual community, qualities that were also used as a political instrument; c) technologically a media crossing national borders, this power was used especially in war times for propaganda campaigns abroad (Dahl 1983; Biocca 1988; Kahn/Whitehead 1992; Schrage 2001)

- To list the preliminary findings on television: a) TV replaced the radio as the leading media of public communication after World War II; b) with its thematic structure (programmes), it follows up the radio; c) television programmes focused on families and sought to reorganize the nations by means of its families (Jeunesse 1984; Richner 1987; Lange 1993; Drummund et al. 1993; Morley/Robins 1995; Morales/Maria 1996; Levy 1998; Steinmaurer 1999)
- How did radio and television organize public space? How did they express or effect some kind of “Europeaness”? Hitherto analysis on radio broadcasting and television suggests that both, the first before World War II, the second after it, functioned primarily as a kind of integration machines within national contexts. But there are important counter-movements (like the radio amateurs using it as a politically subversive media) and paradoxes. Referring to Europe in the form of national homogenization not only expressed and perpetuated national differences via TV. The form itself could be considered a specific way of homogenising European life styles.

3. *Media spaces: individual communication merging public and private space*

- Like the telegraph and telephone, the classical media of individual communication, don't operate within the same space-creating logic and aesthetics of mass media. The linking and de-linking of European space is mainly prearranged by net structures and their formal and technological changes (see Points I.2 and I.3). Even so, the question of historical shifts in use remains. Historical analysis suggests two transformations in usage bound to spatial, technological, organisational, and economical structures of telecommunicational systems. First, use of new communication technologies usually starts within the business sector and then tends to be extended into private life. Secondly, there is historical transformation from usage in local contexts to international contexts. The movement from business to personal use can be observed within “classical” telecommunications like the telegraph or the telephone (with notable historical differences and shifts in spreading within Western European countries) It can also be seen in use of telefax, teletex, videoconferencing, etc. (which has only reached private homes recently) and in use of technological upgrades (e.g., ISDN connection). But there is a notable shift with new technologies, namely the mobile phone and Internet, referring to the speed of private adaptation (Rammert 1990; Flichy 1991; Mattelard 1991; Noam 1992; Winston 1998).
- Two developments led to merging public and private space: First, the transformations of mass media since the 1980s. With new legal orders (dual order), new technological devices (such as satellites), new program structures (subject channels) the public sphere created by TV lost its homogeneity. The public space created by TV tends to a network structure: the space of a national community addressed by it gets lost. The way to connect to public sphere depends more and more on private selection. Second, the Internet, with services like e-mail shows up as a more and more important form combining privacy and publicity. To be sure, the appearing communities are communities of private selection (Turkle 1995; Hauben/Hauben 1997; Rötzer 1997)

- How does individual communication – that is the merging of public and private space – refer to European space or some kind of “Europeaness”? First of all, research strategies are needed to answer this question. Only some scattered observations can be mentioned: “Privatisation” and “individualisation” seems to become a media-based format of European life. New standards are needed. In TV, *e.g.*, programmes like “Big Brother”, “Superstar”, flourish. On the Internet the dominance of the English language probably defines standards (without or with little reference to local settings). On the other hand, how does Europe differ specifically to the USA in this? How does one deal with all these different communities of taste, interest, political, or religious conviction emerging in individual communication and privatised public space?

III. EuroVisions: Expectations, Adaptation, Programme

EuroVision focuses on expectations and promises, fears and warnings, surprises and unexpected results accompanying the steps of implementing telecommunications. Here the shaping of technology as a social and cultural process is stressed. It refers specially to varying directions of developments and to technical devices and variations in the way technology is integrated in public and everyday life. Here we take up the turn to the consumer, who is more and more stressed by economical considerations raised by developers as well as by cultural aspects raised by social or historical researchers. Following a systematic approach, we will refer to three different aspects. First we point out some general reflections on expectations referring to the development and shaping of (tele-)communications. Secondly, we not only presume that technology is shaped by the users; we also ask how users are adapting themselves actively to technological processes by their specific use of technology. Thirdly, we refer to two empirical cases of how European space was addressed by specific expectations guiding technological projects.

1. *The Horizons of Expectations: Adaptation of Technology*

- First it seems useful to distinguish two types of expectations associated with communications. General visions cover social, economic, or political developments linked to specific technologies on one side and concrete scenarios of use. At a general level since the first implementations of electronic telegraphy, the media evolution could be successfully encoded by a social utopian discourse on the universalizing and peaceful power of communications. Maybe this is why (tele-)communicational developments – in contrast to other technological advancements – are rarely subjects of public resistance, even though there was criticism from the beginning that telecommunication is more a means of power and war than of peace. This reference still guides adaptation of the Internet. In some parts of Eastern Europe like Estonia social, political and economic modernisation is foremost associated with communication networks; “Europeaness” in this reference may consist in modernity or modern communication technology as a factor pushing for societal advance (Mattelard 1991).
- At the level of concrete expectations, use scenarios (whether projected or accepted only by developers and producers or by a more or less greater part of society) may imply only promising applications or comprehensive visions referring to socio-technical scenarios or techno-economical potentials. As social expectations, they motivate and direct developers and consumers (Konrad 2003; Akrich 1992; Kubicek et al 1997). How may Europe be addressed? First of all, one may look at economic and political rivalries within Europe (especially important in the use in war; also in case of

economic development); secondly, Europe (or societies within Europe) may be addressed as the technologically most advanced society or societies within Europe – especially in the context of gradual development; thirdly, Europe may be addressed as a single competitor in a global market; fourthly, it may be viewed as a community of consumers ready to take up new devices in communication.

2. *Adaptation to technology: producing the self of the user*

- Users seldom behave exactly in the way scenarios of usage project it. Technology is often adapted in ways totally different than foreseen (*e.g.*, in case of the telephone there were a lot of ways to use it). Historic change as well as social or cultural differences have changed and will continue to change the meaning of media through transformation of change (*e.g.*, when the telephone is converted from a media of information to one of interaction). Users discover many applications *e.g.*, for recent developments the spread of the Internet, the importance of SMS) (Hickethier 1994; Edwards 1994).

Referring to “Europeaness”: Surely one can look at specific national characteristics in adapting technology and ask how users applying the specific adaptation of technology produce their specific national self (*e.g.*, the “German” way to answer a telephone call is by announcing your last name); but supposed media evolution leads to finer differences within national societies, another type of “Europeaness” is appearing: users produce their specific self (referring to social stratum, age, sex, different lifestyle groups) by specific use of SMS, use of technologies like video, DVD, specific designs, applications, etc. So different consumer groups and consumer behaviour appears within individual media use and appears similar in many European states: another layer of homogenization appears within the stress on social differences.

- The observations referring to this new group have their analogy in the new differentiations in media use: the more social groups, communities, and entire societies shape themselves by and via communications, the more forms of media-related self-control begin to appear – especially by a face-to-screen relation (TV, web-cams, photos per mobile phone, etc.) (Turkle 1995; Knorr-Cetina/Brügger 2002; Regener 2002)

Maybe an anecdote can show how Europe may function in a society that self-regulates and produces itself by communications: Web-cams, by which Internet-users putting themselves under permanent observation, are up-to-date. The surveillance and control society (Deleuze 1992; Link 2000; Lyon 2001;)produces itself on stage. While millions of people are on the screen, psychologist aided by computers, have found that the more faces are laid over others and merged with their traits, the more beautiful the face appears. The most beautiful is the average. A lot of teenagers and especially non-Europeans (but not only young people) have a specific image of the optimal appearance they wish for themselves: an average European one (Regener 2004)

3. *Eurovision: Programmes and missions addressing European space*

As final remarks, we will compare outline and compare the main findings of two research projects presented within one of our workshops projecting European space and community in specific ways: The case of Eurovision and the case of the EC Card.

- One year after its start, 23 countries participated in the Eurovision Programme, a trans-national exchange of television programmes, transmitting specific life events. Eurovision succeeded in addressing Europe as a common space of entertainment (from crowning ceremonies, song contests to sport events). It failed with a more pretentious cultural programme, which intended to create some kind of common education and culture. (De Witt2003)
- Another attempt trying to create a common level of European space succeeded: Even if introduction of the EC Card depended on transformation of the whole finance system (from the way money is distributed till the client, who needs a bank account, has to trust the banks etc.) (Bonhage 2003)

What actually succeeded in the 1960s and 1970s is a European Community as a common market for a consumer realized by a sort of universal money. A little bit earlier, Europe was build up as common platform for entertainment. In contrast, TV failed to build a kind of European Identity based on "higher" cultural values of middle classes. The question is: are consumers - especially today's users of media - going to find new expressions of European identities? How does it work, and in it what does it consist?

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