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ABOUT THE CULTURAL TEXTURE OF THE DIGITAL DIVIDE

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1 Cf. http://europa.eu.int/information_society

2 Porter, David (Ed.): Internet Culture. New York: Routledge 1996; Shields, Rob (Ed.): Cultures of Internet. London : Sage 1996.

3 Castells, Manuel: The Information Age. Vol. 1. Oxford: Blackwell 1996.

4 Amato, Joe: Bookend: Anatomies of Virtual Self. New York: State Univ. of New York Pr. 1997; Joinson, Adam N.: Understanding the Psychology of Internet Behaviour: Virtual Worlds, Real Lives. Zed Books 2003.

Currently one of the most severe problems of the information technology industry seems to be the uncertainty about the available markets for 3rd generation mobile phones (3G) – *Universal Mobile Telecommunications System*, the official name for 3G. The risk is particularly high for those companies that made high investments in concession fees of governments during a first wave of bidding. Under such circumstances they should be highly interested in discovering the factors which could guide the adoption of 3G technologies. The usual approach is to emphasize the necessity of deregulation and market prices. Connected with this is aggressive marketing and the hope that eventually the customer will be persuaded. However, more and more actors seem to have become aware that there are also more tacit factors at work in influencing information technology (IT) absorption rates in general and the fate of 3G appliances in particular. This becomes visible in the European Union, where despite converging market regimes certain IT penetration rates between countries remained remarkably different.[1] Hence, it is plausible to assume that it is not sufficient to look at economic or legal factors, whereas factors from the cultural and social realm attract more and more attention. But here, interestingly, questions like what impact IT has on society are much more common than those looking the other way round: What impact do culture and certain social fabrics have on the diffusion of certain IT products.[2] An approach suggested here is to investigate the socio-cultural affinity of technologies such as the ›mobile phone‹ and the ›Internet‹ which are central for the definition of information society (IS).[3] After all, at the Lisbon European Council meeting in March 2000 the European Union set itself the ambitious goal of becoming not only »the most competitive and dynamic knowledge-based economy in the world« by 2010, but also a fully fledged »information society«. The latter can be understood as a society based on »telecommunication and the Internet«.

Situation vs. Identity Based Technologies

For my purposes here I would like to pay particular attention to the organization of the social Self which varies according to different cultures from society to society.

If in a first attempt the ›information society‹ (IS) is defined by the presence of mobile phones and the ›Internet‹ respectively, and computer mediated communication (CMC) in a wider sense, we will have to ask what concepts besides economics could be the keys to understanding the different success of these technologies in individual societies. One possibility suggested here is to look at the organization of the ›social Self‹ and how this is related to key IS technologies.[4] After having inquired into this relationship we can develop in a next step some ideas of how members of individual societies might respond to the commercial effort to position technologies like the 3G mobile phone. As a working hypothesis, it can be assumed that in general companies implicitly have the picture of a rather homogeneous social Self across countries and explain statistical differences in IT absorption rates mainly with economic factors. Other than that, the basic question of how different IT are related to the social Self are widely ignored.

However, comparing the ›mobile phone‹ and the ›Internet‹ as key IS technologies from a sociological point of view, one will immediately realize that the two have a completely different social quality or aura. The ›mobile phone‹ is first of all a telephone which can be used independently of the local position of the individual. It has the traditional functions of a telephone: enabling voice based communication with people (organisations) whose address (phone number) we can identify or who can identify our address. As a rule these will be first of all people whom we already know (e.g. family, friends) or who are of a professional (e.g. customers, colleagues, clients) or practical (e.g. physicians, bureaucrats) importance for us. The technical ability of the mobile phone to transmit text (e.g. SMS) or to apply simple programmes does not significantly change its character as a telephone. SMS could be seen as the endeavour to incorporate the functions of the old telegraph. How much this will change with the third generation mobile phones and the planned convergence with the Internet remains to be seen. Having said this, I suggest defining the ›mobile phone‹ as a ›situation-based‹ technology similar to the fixed telephone. This means that it derives its social significance first of all

5 Jones, Steven G.: Virtual Culture. London: Sage 1997; Jordan, Tim: Cyberpower. London: Routledge 2000.

6 Engel, Christoph / Keller, Kenneth H. (Eds.): Understanding the Impact of Global Networks on Local Social, Political and Cultural Values. Baden-Baden: Nomos 2000.

from the situation in which it is used. For the fixed telephone, typical situations are those in the office, the private home or the telephone booth at the street corner. In the case of the mobile phone, the situations are theoretically infinite.

Hence, the main sociological questions with respect to the mobile phone must concern the social regulations of the situation in their impact on the assimilation of this technology. Or the other way round: How does the Self perceive the situation and in which ways does it incorporate the mobile phone.

When reflecting on the convergence of mobile phone and the Internet in 3G technologies, it is important to recognize that the Internet has a rather different social characteristic or aura than the mobile phone. To understand this, it is useful to remember the personal computer before the introduction of the Internet. It was a more or less sophisticated combination of a typewriter and a calculator. In contrast to the telephone it had barely any interactive dimensions in the social sense. With the introduction of the Internet this has fundamentally changed. Now the screen of a computer provides the individual with access to a complete new space and society – we get used to calling this cyber space and cyber society. Anybody who enters this virtual world can expect an almost infinite number of possibilities to retrieve information, engage in social interactions and build up lasting relations. There, with the exception of the physical body, the individual can encounter almost everything that can also be found in »real« society: membership, role playing, emotions, work, commodities, discussions etc. No doubt, like the conventional reality the cyber experience can also form identity.[5] But also vice versa: it is the existing identity which determines whether or not the offers of the Internet have a chance to be accepted in a society. Hence, I suggest defining the ›Internet‹ in contrast to the mobile phone as an ›identity based‹ technology.

Now, what can be concluded from this for the question about the future of the information society in general and the 3G technologies in particular? From what has been said about the ›mobile phone‹ and the ›Internet›, two propositions can be drawn:

a. Due to its conventional social character the adoption of the ›mobile phone‹ in a society is mainly a question of affordability and availability. Like the fixed telephone it easily assimilates into existing social structures. Therefore the distribution of the mobile pho ne in a society will first of all depend on its availability and affordability for the indivi dual. Apart from this, the adoption of the mobile phone can be influenced by social norms, in particular those which regulate situations. But these situational norms will have more impact on the use of the mobile phone than on its distribution. Values and norms[6] might have a limited influence on the latter in the introductory phase (e.g. conspicuous consumption) and for smaller groups (e.g. techno-critics).

b. The adoption of the› Internet‹ is significantly related to the character of the Self in the respective society. The more a society individualizes and mobilizes the Self the more it will be ready to assimilate this technology. The more detached the individual is from space, family, kinship, relatives and friends the more it is prone to associate with the internet. The main achievement of the ›Internet‹ is its potential to replace conventional social relations by virtual relations. As most of the communication which constitutes the Self is symbolic anyway the virtual reality of the Internet can potentially substitute conventional relations. Therefore, given the availability and affordability of the Internet in a society its assimilation will strongly depend on the demand of the Self for virtuality. The more deficient the social reality appears to the Self the more it will grasp offers of virtual alternatives.

Digital Divide and the Self

What conclusions can be drawn from this about the adoption of 3G technologies? Before I turn to this, a few words about what is meant with ›digital divide‹. In a first understanding the term simply means that there are two groups in society: the one which has access to the new information technologies and the other which has not. In every day use, however, it rests on a number of more or less hidden assumptions. One is the conviction that having access to IT is better than not having it, that IT is such an essential part of life that nobody should be excluded. In the extreme case even the political right to have access is deduced from this conviction. This can lead to a situation where, for example, the status of homelessness remains un-

7 Norris, Pippa: Digital Divide? Civic Engagement, Information Poverty, and the Internet World Wide. Cambridge: Cambridge UP 2001.

questioned as long as the individual has guaranteed access to public Internet stations. Here the right to information gets more appreciation than the right not to starve. Another implicit assumption is the idea that the digital divide is simply an economic question: the rich have, the poor have not. Hence the demand that the state provides free IT infrastructure to everybody and, on a global level, the demand for special programmes to make IT and particularly the Internet available in Third World countries.7

However, scrutiny of empirical distributions of IT point to a reality where the adoption of devices like the ›mobile phone‹ or the ›Internet‹ is much more than only a question of affordability or progress. Whereas purchasing power is without doubt important, the mode and degree of adoption of different IT seem to be highly dependent on specific cultures of communication inside as well as between societies. Otherwise it could not be explained why the digital divide exists not only between the economically developed and underdeveloped societies but significant deviations exist inside the developed World as well. Who is not familiar with statements conjuring the lag of Internet adoption between the European Union and the US, two quite similar economic units when compared in total GDP. A closer look shows that this divide is in no way homogenous but diverges inside the respective societies. Scandinavia, for example, surpasses the US average in Internet penetration. Again, inside the US there are considerable differences of Internet use between the races/ethnicities – for example among children of Caucasian descent it is twice as common as among African-American children. Inside Europe experts speak of a ›digital divide‹ between the North and the South which is in no way unequivocally related to income level (ESIS Report). Finland and Italy are good examples. Whereas both countries have a comparable per capita income, the latter has a much lower Internet penetration rate. However, when we take the mobile phone – another key Information Society technology – we get a completely different picture. Finland and Italy are both world leaders in this technology whereas the US is lagging behind.

It is obvious that anybody wanting to figure out the prospects of 3G technologies will first have to recognise these complicated absorption patterns of modern IT in general. Then it is necessary to look for theoretical tools to interpret and explain the differences. The suggested approach to borrow from a cultural theory of the Self and assume for each technology a characteristic social affinity can help to discover important questions and answers. Take the claim of the promotor of 3G technologies to converge the mobile phone with the Internet. The suggested distinction between ›situation based‹ and ›identity based‹ technologies should help to generate questions how and to what extent a convergence of two technologies so differently grounded in the social is possible. Although both the ›mobile phone‹ and the ›Internet‹ respond to three central values of modern society – the values of mobility, communication and individualisation – their potential to do so is not the same across the three values. Recognising this difference is probably vital when trying to assess the likelihood of the success of the two technologies in 3G mobile phones.

Communication and Definition of Situation

Here we have to recall that the classical situation of human communication combines social and physical elements in a holistic way. In this situation, the physical co-presence of those who wanted to communicate was a necessary precondition for communication. To leave the physical situation had to result inevitably in interrupting communication or at least a considerable time lag when trying to bridge it by voyagers or mail. Even the introduction of the fixed phone lead to a time-space convergence in communication, at the same time separating social space (interacting over distance) and physical location (including the human body). What remained, were certain situational restrictions given by the location of the fixed phone (at home, in the office or public places). The main achievement of the ›mobile phone‹ is that it did away with these remaining spatial restrictions in favour of a universal mobility. Theoretically, the individual can now initiate communication or be reached by others anywhere at any time. The restrictions that remain are those of the social and cultural definition of the situation. Although in practice the number of situations where mobile phones could be used is not infinite, there are many more than with the fixed telephone. Hence, to understand the distribution and use of mobile phones in a society, it is necessary to investigate the respective definitions of situations. This leads to two general questions:

8 Burkart, Günter: Mobile Kommuni-
kation – Zur Kulturbedeutung des
»Handy«. In: Soziale Welt 51 (2000),
pp. 209-232.

1) How do different societies define situations relevant for the use of mobile phones?
2) How does an identity based technology like the ›Internet‹ comply with definitions of situations of actual or potential mobile phone use – something which appears to be a precondition for 3G?

To proceed with the latter question it seems to be useful to build a typology of situations for conventional mobile phone use and then to look for possible restrictions for 3G applications. A first distinction could be between at home, office and public situations. Although each of these categories of situations have their own definitions and regulations, it is the situations in the public space that from the point of mobility should attract the greatest attention.[8] It is here, that the ›mobile phone‹ on the one hand has its specific potentials (mobility of the individual) but on the other hand meets significant risks of disturbance by breaking conventional rules of communication. A rough classification of such situations could be to distinguish between a) specific situations like concerts, seminars, elegant restaurants etc. which are usually strongly regulated, b) situations of waiting, transport and transition (mobility corridors) like train compartment, waiting room, airport check in etc. which are less regulated and c) multifunctional situations like town square, railway station, university campus etc. with a low degree of regulation. Each of these situations will already respond differently to the conventional mobile phone, not to mention their potentials for 3G applications. Last but not least, this also depends on the kind of society in which the situations are embedded.

3G – from Utility to Identity

9 Katz, E. James / Rice, Ronald E.: So-
cial Consequences of *Internet* Use :
Access, Involvement, and Interac-
tion. Cambridge/Mass.: MIT Pr. 2002.

From this point of view, the question is not so much how the ›mobile phone‹ and the ›Internet‹ can converge technically but rather under which circumstances socially and culturally acceptable solutions can be achieved. It appears that the »market« is slowly responding in a more appropriate way to the ambiguities rooted in the different socio-cultural characteristics (›situation‹ versus ›identity based‹) of the two technologies that are supposed to converge. Whereas until recently the response was preferably to escape towards one of two competing philosophies: the one imagine 3G still as primarily a mobile phone with some Internet functions and the other trying to realise the idea of a wireless online computer (e.g. personal communicator) rather than that of a ›mobile phone‹. Both strategies practically surrender to the challenge of converging two technologies of different social shape. However, recently the emergence of a new strategy could be observed, where the ambition to enrich the mobile phone with as many Internet functions as possible is being replaced by changing it more and more from a utilitarian device to a cultural object promising social identity. Not only is the industry trying to rediscover the status function of the early era of the mobile phone by differentiating the products and improving their artistic design, making it prone to conspicuous consumption, but the mobile phone is also being developed to become a technology for producing (and sending) pictures (*Multimedia Messaging Service*; in short: MMS), enjoying music and playing games (see the products displayed at the latest CeBIT exhibition in Hannover, Germany).

All this turns the 3G mobile phone into something much more than a device for wireless voice communication but not yet a wireless Internet station. It is obvious that the industry has opted for an intermediary phase in which the mobile phone is supposed to be armed with elements appealing to the Self more in its desire for identity than for utility. In German these new mobile phones are already called »*Spass-Handys*« which defines them as a source of fun and joy. Nokia has even announced that making phone calls is not the main function of their mobiles anymore. As most of these new functions have the characteristics of being usable online as well as offline they can be considered as something to lure customers into the age of wireless Internet (UMTS). In this way »pay-for« and »free« interactions with the device will become blurred for the individual. Instead, its potential to serve as a »partner« for interaction will move into the foreground.[9] It is at this point where it meets the identity enabling functions of the ›Internet‹ without needing to provide the full capacity of that technology. The little thing of a mobile phone will turn into a permanently available artificial »other« for the individual, something obviously unavoidable in the long term trend of capitalist society – to replace face-to-face with virtual relations. Still, although business is pushing hard, many questions remain open as to whether 3G really can succeed in becoming a life style normality.

First, we have to remember that like the fixed telephone the mobile phone has so far not been able to substitute face-to-face communication but to bridge the time-space gap created by mobility demands of modern society. Its central function is to keep people in touch who are spatially separated mainly due to an extreme division of labour, whereas the attractiveness of the Internet comes from its ability to offer virtual communication. This is underlined by the observation that pornography is the number one business in the World Wide Web, a key element of the Internet. Although the Internet has many practical advantages (data transfer, mail, etc.) for the individual it has first of all the potential to compensate for a lack of »real« communication. This leads, secondly, to the conclusion that the diffusion of 3G technologies will depend on the demand for virtual communication in a society. Therefore, existing digital divides as measured in the proportion of Internet users can provide rough information for the chances for 3G penetration.

Thirdly, 3G technologies will have to cope with the heritage that mobile phones are a ›situation-based‹ technology. It can be assumed that definitions of situations that accept conventional mobile phones will not necessarily do the same with 3G technologies. On the other hand, 3G could give the ›mobile phone‹ an edge in situations where it is in competition with other media (e.g. the fixed phone). Generally speaking, fully-fledged 3G mobile phones certainly belong to the most fascinating media technology projects in history, although their dissemination, due to the reasons given, remain restricted to circles of population much smaller than those which adopted the conventional ›identity based‹.

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