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Cultural Aspects and Digital Divide in Europe

This paper aims to make a contribution toward an improvement of European e-policy practice. It is inspired by the conviction that successful e-policy strategies can lead to balanced chances for all members in certain societies to acquire the absolutely indispensable capabilities for decision-making in the context of Information and Communication Technologies (ICTs). Following the path of the development of e-policy papers it has to be stated that many goals have not yet been achieved. The techno-deterministic concepts 'access' and 'usage' seem not to reach far enough to get people really involved and informed. Many more aspects have to be considered in order to create a climate for innovation where different choices made by different individuals according to their different social, economic or cultural backgrounds do not lead automatically to the well known either or not, connected or not-connected, haves or have-nots, but to a variety of patterns of involvement. In this paper, we argue for different e-policy strategies according to cultural aspects in certain societies. And hereby we will focus on the cultural aspects of information itself, on the notion of information in different information cultures. It also seems important to mention at this stage that we believe that getting all members of society involved in the ICT-innovation process in order to provide the basis for informed decisions by each individual member is the most important task of e-policy.¹

1. E-policy

Most governments around the globe emphasize the diffusion and implementation of ICTs in their countries as one - if not the only - major opportunity for economic competitiveness and as a chance to overcome social and economic divides within their states. In numerous policy-papers - most are derivatives from the original "National Information Infrastructure: Agenda for Action" introduced in 1993 by the then new US Clinton-Gore Administration- these are unquestioned assumptions. Concepts like universal access and computer literacy form the guidelines for most of the so-called e-policy-papers. In principle, e-policy is the strategy for the introduction of ICT in a certain social environment. This strategy can be applied on different levels from organizational to global. This paper focuses on e-policy on a national and supra-national (EU) level.

¹ This paper was presented and discussed in a Team 3 – Meeting of the Research Program "Changing Media – Changing Europe" of the European Research Foundation (ESF) and will be further developed within this project and eventually published in a common Team 3 – Publication. <http://www.changing-media.org>.

Until now "access" to ICTs is the major goal of this kind of politics, whereby the concept of access meanwhile embraces the technical access as well as the training-based access. By means of e-policy strategies, governments aim to overcome the "Digital Divide" within their societies. The objectives of these initiatives mostly strive for economic growth and development in the first place followed by measures in order to raise democratic participation. As a result of growing wealth through competitiveness and therefore more jobs, a more inclusive society is expected, where inequalities between rich and poor, between men and woman, young and old, urban and rural, decline.

Today, almost 10 years after the introduction of the first e-policy-paper in the United States, not many of these ambitious goals have been achieved. In contrary, the gap between the so-called "information-haves" and "information-haves-not" is still widening, as the report of the NTIA in 1999 indicated.

This paper argues that the simple techno-deterministic approaches of most of the e-policy papers are not sufficient to solve the targeted issues. This demand is shared by most critical e-policy-studies (Golding/Murdock 2001; Light 2001; Burgelman 2001, Cammaerts/Burgelman 2000; Warschauer 2002), Aichholzer, for example is argues for consideration of socio-cultural (attitudes, motivation, social supportive networks, education, media literacy), economic (costs for basic investments and operating expenses, costs for education, training and consultancy), technical (network infrastructure, end-user-devices) and physical (handicapped) factors (Aichholzer 2002). Going beyond the techno-deterministic critique, we join Robin Mansell arguing "for a rights-based approach to new media policy. [...] Because of the power of the new networks, it is essential to move beyond concerns about issues like media and Internet access and social inclusion. We need to link discussions about the new media and the power of networks with discussions about human rights".(Mansell 2001,.2) Drawing from a capabilities approach to e-policy strategies, Mansell argues, more than technical access and technical skills are needed if we strive for an inclusive society on the basis of capable individuals.

We can expect that the existing inequalities in terms of digital network infrastructure and access to this infrastructure will decline throughout the coming years not least encouraged by the commercial sector. What we cannot expect to develop more or less by itself is what Mansell called "capabilities" drawing from the work of Amartya Sen (1999). According to Sen, the acquisition of capabilities should be treated as a basic human right. E-Policy must ensure equal chances to acquire capabilities in the context of ICT.

A successful European ICT-policy must provide equal chances for all citizens in all existing and future member states to acquire the essential capabilities to make informed decisions in the context of ICTs. Therefore different policies and different political strategies according to different cultures of information and communication have to be applied. If access to ICTs and

the Internet as well as the acquisition of sense-making capabilities are treated as a human right, the cultural embeddedness of e-policy becomes crystal clear.

1.1 e-Policy Concepts - a historical overview

In fall 1993, the new U.S. Clinton-Gore-Administration introduced the policy-paper "The National Information Infrastructure: Agenda for Action". In early 1993 the World Wide Web started to become the dominating access-platform to the Internet and the popularization of the Internet began. Until then, the Internet was just simple e-mail, file transfer and sharing of server resources. The vision of competitive advantages through the Internet in the emerging information society was clearly recognized and articulated by Al Gore, the leading spirit of the policy-paper: „The benefits of the NII for the nation are immense. An advanced information infrastructure will enable U.S. firms to compete and win in the global economy, generating good jobs for the American people and economic growth for the nation. “(The White House 1993, 2)

This program was based on the assumption of government action complementing and enhancing the efforts of the private sector. It strongly followed the US historic principles of the Universal Service concept². But the Agenda also emphasized the importance of appropriate tax and regulatory policies vitalizing technological innovation processes in their own economy and the idea of networking to ensure information flows between all levels of government and the private sector. The desire for technological leadership in the US should be supported by information security and network reliability and by tightened domestic copyright laws. On an international level, intellectual property treaties should prevent piracy. At the meeting of the European Council in June 1994 in Corfu, Greece, the report "Europe's Way to the Information Society" was launched. It was submitted by the IT-commissioner Martin Bangemann and therefore known as the "Bangemann-Report". At first glance the report seemed very similar to the US-report. It followed more or less the same structure and proposed the same areas of action. At second glance the "Europeanness" showed in a stronger emphasis of the private sector and in the preference of measures of liberalization rather than regulation. The unmistakable message of Martin Bangemann to the European Member-States: "The first countries to enter the information society will reap the greatest

² "Extend the "universal service" concept to ensure that information resources are available to all at affordable prices. Because information means empowerment--and employment—the government has a duty to ensure that all Americans have access to the resources and job creation potential of the Information Age." (The White House, 1993, p 2).

rewards. They will set the agenda for all who must follow. By contrast, countries which temporize, or favor half-hearted solutions, could, in less than a decade, face disastrous declines in investment and a squeeze on jobs” (Bangemann 1994,.5), was not only targeting European issues but already anticipating global competition.

As a result of those early e-Policy papers, national European Governments were confronted with concepts like “universal service” in the telecommunication sector or with issues of private-public-partnerships. Not all countries shared the US-goals of access for all at affordable costs, or free flow of information between government or authorities and citizens. Such differences relate to different cultures of information and communication between certain European Countries and the EU itself and the United States. Besides others, but not at least, these cultural differences explain, for example, the different paces of the implementation of certain measures in the context of ICT in different member states. They might also be responsible for different degrees of commitment to some measures of European ICT policies.

In 1996 the release of the National Access Strategy of the Canadian Government brought a shift from techno-economic driven strategies to a social-inclusive policy. The term Social Inclusion was first mentioned in the Canadian “Information Policy Research Program” (IPRP 1998).

At the meeting of the European Council in Lisbon, Portugal in the year 2000, eEurope, the latest European initiative targeting ICT development, was launched. The initiative focuses on an EU-wide strategy to define a framework for political and economic actions in order to bring Europe to the forefront of global competition in the knowledge based economy. Besides the focus on strengthening the technological infrastructure in Europe, the strategy targets to encourage the development of European applications for economic success and to boost a digitally literate Europe. (European Commission 2000¹). The ambitious goal of eEurope is to catch-up in the globalized economy by the means of intelligent applications and eContent, both produced by a skilled and computerliterate workforce. In order to achieve these goals, there have been two action plans so far: the Action Plan 2002 endorsed by the EU leaders at their Feira summit in June 2000 and the Action Plan 2005 approved by EU leaders in Seville in June 2002. (European Commission 2000²).

What is new in the eEurope concept compared to earlier papers is the emphasis of the individual and the focus on social inclusion. “eEurope 2005 puts users at the centre. At all levels and in all implementing measures it emphasises e-inclusion, including e-accessibility for people with special needs.” (European Commission 2002^{3,6})

1.2 e-policy Critique

The outcome of e-policy strategies over the last decade in most countries do not relate to the importance the issue is given by governments or other governing institutions, like the European Union. In most of the industrialized countries the diffusion rate with new media or the Internet is below 50%, not to speak of the vast majority of the world population. In Africa south the Sahara the diffusion rate is below 1 percent, in East Asia it is between 2 and 3 percent. (Norris 2000; Voykowitsch 2002)

Although investments in the development of the technological infrastructure are important preconditions, they should no longer constitute the dominating field of political action of e-policy. Especially social and cultural factors must constitute the future theoretical framework of e-Policy. Additionally, e-Policy should embrace the supply-side of information and communication technology and support strategies for the creation of demanded content (Preston 1998). For a radical change of e-Policy stands the postulation of a rights-based approach by Robin Mansell. If we consider access to and use of information and communication technologies as a basic human right, e-Policy shifts from governmental generosity to empowerment of citizen and businesses. The duty of e-Policy is then to ensure that people have the right to acquire the capabilities to access and use ICTs (Mansell 2001). Independent of the special direction of the critique of the current e-policy, all concepts are deeply intertwined with basic cultural conditions. From this perspective e-policy has to be criticized for not taking into account the different cultural environments within the special field of action. Depending on existing cultural environments the consideration of socio-cultural factors, the definition of demanded content and especially the notion of human rights will be interpreted differently.

2. Digital Divide

The term "digital divide" refers to inequalities as a result of unequal access to information and communication technologies. The term 'digital divide' has been coined in the NTIA-report "Falling through the Net" in 1994 and has "quickly become as popular as an instant sound bite that it has entered everyday speech as shorthand for any and every disparity within the online community." (Norris 2000, 1)

Besides the shared view that Digital Divide refers to inequalities as a result of ICTs, there is no universally valid definition. Depending on the context in which the concept occurs, it refers either to inequalities between countries regarding the diffusion of new information and communication technologies or between individuals regarding technical access to ICTs and technical training in the use of ICTs.

Overcoming social and economic inequalities in order to achieve inclusive societies and competitive advantages is the sublime goal of all social politics in Europe and beyond. Therefore 'bridging the digital divide' as major task is stated in most e-policy-papers. Equal access to ICT for all groups/members of the society is seen as the most important precondition for economic growth and competitive advantages. This will lead to more wealth, social inclusion and prosperity. "To date, the digital divide debate has turned on the concept of access, that is, providing access to those who have no computer or telephone and, thus, cannot enter the Internet realm at school or home. Lack of access to networked technology will result in a substantial segment of society having neither the skills nor the means to participate in the progressively more "knowledge-based" [...] economy[ies]" (Ba 2001).

2.1 Digital Divide in Europe

In the Western Europe countries vary to some great extent regarding ICT access and usage. In many countries more than the half of the population does not use the Internet. There are countries where two-third of the people does not see a possibility or a need to use it. This means that also in developed Western European countries, which count together with North America to the most advanced societies in terms of Internet access and usage, the Internet is still an infrastructure for the economic elite.

According to digital divide figures, such as the Internet penetration rate (Carveth / Kretchmer 2002), we can differentiate between several distinct groups or clusters of European countries. First, and not surprisingly, are the Scandinavian countries, where more than the half of the population has access to the Internet. This group has to be extended for parts of the Benelux countries, especially the Netherlands. If there would be a divided statistic for Belgium, the Flemish part would also count to this "Nordic cluster". Culturally, most of these countries share an information-friendly culture based on the values of long-standing traditions welfare-state policy, enlightenment and Protestantism.

In the U.K. also more than 50 % use the Internet. In this special case, the Anglo-American sphere of the Internet, which embraces more than just the common language, is considered to be the moving force behind the relatively high penetration rate.

Switzerland with almost 47% shows after the Netherlands the second strongest Internet penetration in the so-called continental Europe. The relatively high GNP of the Switzerland may not explain the complete picture. The special political system of an elaborated direct democracy which depends on broad access to information may provide additional explanations.

In the next cluster, which assembles Austria, Germany and Italy, more than one third of the population is online. In these countries, remains of absolutistic, feudalistic and catholic traditions lead to a tendency towards information-restrictive attitudes and practices compared

with the Nordic cluster. We have to state here that this cluster shows the weakness of nation-state based statistics. In Germany, for example, strong differences exist between North-Germany and South-Germany concerning information culture. The same is true for Italy. Ireland (32,54%), which would actually belong to the 'one-third-cluster', has to be treated as a single cluster. It still lags behind due to previous economic conditions but is expected to meet the U.K. and the "Nordic" figures not far in the future. Culturally it shows strong connections with the Anglo-American sphere as well as with the Nordic countries.

The members of the Mediterranean cluster show Internet-usage-rates below 20%. France and Belgium, Spain, Portugal, share the disadvantage in terms of language and show information-restrictive practices. Greece marks with 12% the least connected member state of the EU. Besides disadvantaged in term of language, its special religious and political traditions, the economic conditions in Greece are considered as responsible for the low penetration rate.

This short illustration and the given explanations of European clusters following the lines of Internet penetration must not be taken as an established fact. It was done merely to point out the underpinning facts for European ePolicy, which could possibly be responsible for different paces and patterns of diffusion and different degrees of commitment. We assume that these underpinnings are in the one or other way culturally biased. We are well aware that nation-state-based statistics and cultural values do not go together, but the figures indicate in an impressive way that there are still amazing differences within the European Union. The fact, that Scandinavia is far ahead of the Mediterranean Region or that economically leading countries like Germany are not among the top ranked states, fuels hypotheses of embedded cultural factors in addition to economic and political ones.

2.2 Digital Divide Critique

The critique of the digital divide concept focuses mainly on the simple technology-determined "have" - "have-not" dichotomy and on the untheoretical use of concepts like ICT, access or usage.

Political and popular conceptualizations of the digital divide have tended to be strictly dichotomous – you either have access to ICT or you do not, you are either connected or not connected. From this perspective the "digital divide is easily defined and, as a result, is easily closed, bridged, and overcome given a political will to provide for those without". (Selwyn Neil 2002). (Edwards-Johnson 2000, Devine 2001).

Although we use the concept of the digital divide ourselves in this paper³, we share the critique, that the 'digital divide' notion places an exaggerated emphasis on the inherent

³ The concept of the digital divide is used in this paper in the sense of indicating inequalities in access, usage and social diffusion of the Internet, New Media, or ICTs in our society. In this sense digital divide serves as a

technical characteristics and benefits of new ICTs and that it involves a very particular and technocratic vision of society and the processes of change. This view leads to the predominance of the techno-deterministic orientation of ePolicy strategies, which in most cases base upon the digital divide concept. It is more or less a shared opinion by researchers, politicians and representatives of the economy that the digital divide, in whichever form, has to be overcome. But it is not enough simply to provide technical access and training how to operate and maintain the technology (computer literacy). In his fundamental critique on e-Policy Selwyn states that "whilst substantial policies are being put into place to combat the 'digital divide', much of the surrounding debate remains conceptually over-simplified and theoretically under-developed." (Selwyn 2002).

Little has been done by policy makers and community organizations to foster the development of comprehensive theoretical frameworks and to support research aiming at the understanding of the nature of inequalities in access and usage of the Internet or New Media beyond technological and economic barriers. This means a shift from infrastructure-based approaches to cognition-orientated and individual-centered concepts.

3. From Access to Knowledge

3.1 Knowledge Gap Theory

It is assumed in almost all e-Policy concepts that the new information and communication technologies will add greatly to the public flow of information and that they will help to modify differences of knowledge resulting from inequalities of education and social position. This assumption is not new. It was more or less the same assumption applied to mass media which led to the concept of the 'knowledge gap hypotheses' by Tichenor et al. in 1970. Higher educated have higher communication skills and media competence, are able to resort to previous knowledge, maintain more social contacts, are more information-orientated and have a higher degree of utilization of mass media in general. As a result, the existing knowledge gap is further ascending. (Wirth 1999, 3-4)

Over time the knowledge gap hypothesis was refined and elaborated. It has been argued that different media may work in different ways, that there is a class bias in attention to 'information-rich' sources, and that motivation and perceived utility influence information seeking. (McQuail 2000, 457)

Related to the Internet, the knowledge gap hypothesis would assume that universal access to the Internet would increase the knowledge gap between socio-economic classes in society. "There is certainly a class bias in attention to 'information-rich' sources, and strong

brandname for the indication of inequalities. But this does not mean that we share the techno-deterministic paradigm of most of the digital divide research. More on the notion of equity and inequalities see Lievrouw / Farb,

correlations are persistently found between social class, attention to these sources and being able to answer information questions on political, social or economic matters" (McQuail 2000, 457).

Further work showed that the knowledge gap is composed of different gaps which could be considered as sub-theses to the knowledge gap hypotheses (Wirth 1999, 7). According to Bonfadelli (1994) there are gaps resulting from the variety and heterogeneity of media offer and information supply. Especially in the context of the new information and communication technologies people are only aware of a small range of media products and media offers. Especially the Internet provides a whole new spectrum of information channels which is likely to be perceived by the more highly educated segment of society. Consequently this will lead to an information gap on a first level preceding the utilization gap. Mass media consumption, like reading a newspaper, watching TV or listening to the radio follow highly habitualized utilization patterns. The chance to be exposed to information by accident is higher in such a context than in the individualized and personalized sphere of new media / Internet. The chance to miss relevant public information raises due to the decline of common patterns of mass media usage. The utilization gap on a second level precedes the reception gap. If a certain media program or special information is consumed likewise by all groups or classes of a society a reception gap will result as a consequence of different media and reception competences.

Knowledge gap research is still mostly related to mass media. The challenges through new media or the Internet are not yet tackled in a satisfactory manner. A main problem is that in most cases the Internet is treated as a mass medium, which covers just a very small part of Internet communication. In the context of ICTs/Internet, the knowledge gap hypothesis research does not yet provide exciting new insights. What's about knowledge gap through e-mail? Is online shopping a media competence? What about the active utilization of the Internet, e.g. provide information instead of pure consumption? If we consider the internet as an infrastructure and as a production technology as well as a medium (Maier-Rabler 1995), we have to reconceptualize the notion of information gap, utilization gap and reception gap. The knowledge gap hypothesis tells us that technical access and utilization skills are not enough. Besides techno-economic factors, socio-economic factors like education or psychological factors like motivation play an important role in the diffusion of ICT or the Internet. The techno-deterministic strategies of e-policy have to be enhanced with individual-orientated psycho-social factors. We have to put the individual, its needs and its capabilities, at the center of e-policy.

Following Mansell (2001) and adopting Amartya Sen's concept of capabilities to e-policy is a promising step towards reconceptualizing e-policy.

3.2 Capabilities approach to e-policy

Capabilities are acquired capacities and the ability to discriminate between alternative choices. They are the essential underpinning of the freedom to achieve whatever lifestyle people want. (Sen 1999) Sen argues for capabilities as a basic human right and that people are entitled to acquire capabilities.

Therefore, e-Policy must ensure equal chances to acquire capabilities in the context of ICT. This rights-based approach to new media politics, as it was laid out by Robin Mansell in her inaugural speech, stands for a complete rethinking of e-policy.

The responsibility of the state does not end with making technical infrastructure available to the people and with the promotion of preparatory training courses. The state has to ensure equal chances to acquire capabilities for all people. To qualify people to acquire capabilities in the context of ICT means empowerment instead of simply teaching skills. It revolutionizes most of the existing plans for introducing new media and the Internet in our education system, from schools and universities to adult education and life-long-learning concepts in general. Aiming at people's cognition requires for less standardized but broader and more individualized concepts to make them familiar with all consequences of ICTs for their personal lives as well as for the society as a whole. This embraces knowledge of abstract consequences on the one hand and knowledge of options of utilization on the other hand.

Therefore, the capabilities-approach to e-policy is a matter of power between the involved institutions of society. It bears the threat of capable people making unintended and unwanted choices. Mansell states that Sen's work offers a very helpful way of thinking about issues of rights and entitlements in this context. She is concerned how much human potential is lost, because of people unable to use the new media networks. Whereby usage in her definition is not simply about acquiring skills to get on the Net or use the diverse net services. (Mansell 2001, 3). A capabilities approach to e-policy aims to ensure that people can acquire and expend their cognitive capacities and their ability to discriminate between alternative choices offered by new media and the Internet.

"These capabilities are the foundations of the freedom which allows individuals' needs to be met." (Mansell 2001, 3) Mansell demands the public obligation to develop new media spaces in ways that augment people's capabilities in this sense and argues that more policies to reduce the so-called digital divide are not the answer in this case. "We have to consider questions about new media policy, democracy, social development and distributional equity together." (Mansell 2001, 7)

The capabilities-approach is also a matter of culture. As mentioned earlier we state that the predominance of a certain cultural environment in a certain society leads to different political preferences, concepts and practices. Especially in the context of information and communication, a rights-based approach scatters long-standing traditions and practices of the patterns of information flows. Access to the relevant information for all and transparency of available information are vital preconditions to the capabilities-approach. The predominating information-culture will influence to a great extent the chances for the postulated reform of e-policy concepts in certain countries / societies.

Additionally, culture contributes to the frame of reference in the all decision-making processes. The ability to discriminate between alternative choices offered plus the ability to ask the relevant questions in the ongoing quest for knowledge through the new media requires cognitive capacities. And relevance is not only an individual concept. It determines the individual discrimination between alternative choices and is strongly influenced also by societies and their underpinning cultural values and attitudes. Cultural values and attitudes are written into the mental map of every single member of society and therefore constitute the unconscious filter within choices are made. Cultural values and attitudes influence our ability to value information.

The future challenge for every society will be to find answers to the following questions: Do we encourage a preservative culture or a learning culture? Do we have the capability as a society to consciously register our values and are we able to question our attitudes? This could be the first step towards a cultural change which is necessary to adapt to the new framework of an information society and even of a so-called knowledge society.

4. Culture and e-policy

4.1. Cultures and Networks

Information Cultures refer to the basic notion of information and knowledge in a certain society. It refers to the relationship between those who have access to information and those who don't. Thus it refers to the distribution of power of control over flows of information within society. It is assumed that in societies with a strong hierarchical structure only a few control the flows and the dissemination of public information, while in more liberal societies a broader basis for direct access to public information has been established. It is further assumed that more hierarchically structured societies are less likely to adopt to ICT than liberal societies with a flatter hierarchy. The Internet is basically a network with a flat hierarchy which does not depend on defined centers. Every node in such a network has the same chance to become a center or a hub, if the node decides to provide access to its

services or information. If we stick to the network metaphor, we can assume that the more a society is structured as a network with distributed power, the higher is the probability that the members of this society benefit from the implementation and usage of ICT. In other words, the more a society matches the basic structure of an open information and communication network, the more it will benefit from the new information and communication technologies. The patterns of Western European countries according to the figures of simple digital divide measures, as we have presented earlier in this paper, follow these lines to some extent. We assume that differences between the Scandinavian / Nordic cluster and the Mediterranean cluster have something to do with the openness and the flat hierarchy of information networks in Scandinavia compared with Greece, for example. We still face significant differences in terms of access and literacy in Western/EU Europe. What is even more interesting are the differences in the degree of awareness of the potential of ICTs for societies and for individuals. This different awareness does not necessarily show on the political/state level. Most governments of all Western/EU European Countries share more or less the same view with respect to the importance of ICTs. The differences show in the everyday practice in different countries according to the degree of freedom to choose from different options of ICT utilization the special information-culture is providing to them. And this degree of freedom depends to a great extent on the openness of societies and on flat access-hierarchies to relevant information for all. We are well aware that the personal freedom to acquire capabilities and to make informed choices is not limited to national boundaries. The educational elite in Greece is much more similar to the educational elite in Sweden than the results of the direct comparison of the two countries shows. (Castells 2000) On the other hand, we have to acknowledge that European policy is still made on a national level and that special national conditions, e.g. information-cultures, influence the outcome of a common European policy, like e-Europe, in the specific countries.

From a capabilities approach perspective, we need a different theoretical and empirical framework to measure the outcome of e-policy. The question to be answered is no longer how many are connected. What interests now is actually to what extent people benefit from ICTs and which are the influencing parameters to foster those benefits. Simple economic and technological measurements do not satisfactorily explain why certain countries benefit more from ICT than others, even if they have the same penetration and usage rates.

We argue that information-culture plays an important role for the outcome of e-policy. On the one hand, it provides the underpinning environment in which the concrete national strategies of e-policy are developed and applied. On the other hand it affects the readiness of people to inform themselves about different options in the context of ICTs and to develop their individual New Media-Lifestyle. Countries with a higher rate of capable citizens engaged in ICT have competitive advantages because of more social inclusion and stability within its

society and a more elaborated innovation culture compared to other countries. The reconceptualization of e-policy towards more individual-centered and cognition-oriented concepts must be aware of the cultural embeddedness of ICTs in different countries and societies. Therefore the targets of e-policy must change from predominately supporting infrastructure to the development of ICT-Identities throughout societies.

4.2 Information-Culture

How people deal with information, how important access to information is, the notion of knowledge in general, and many more attitudes in the context of information and communication are deeply rooted in existing traditions of the cultural-social framework. Especially concerning the new information and communication technologies, the overall attitude towards information, communication, and knowledge in a society is crucial for the understanding of diffusion processes.

The cultural-social framework is mainly composed by the predominating ethical-religious values, by the given social- political structures and by the legislative system. It is assumed that these three dimensions form a sequence where the basic ethical-religious set of values determine the predominating social- political system which in turn determines the legislative system. Regarding the concept of information-cultures, we see them in a continuum between the poles of information-friendly versus information-restrictive cultures. (Maier-Rabler/Sutterlütli 1992; Maier-Rabler 1995)

Information-friendly societies foster the development of knowledge throughout all groups of the society by providing equal and universal access to all available public information. Information-policy in such societies is a rights-based policy where people are entitled to have access to public information. In information-friendly societies the freedom of speech guarantees all individuals and institutions to express their opinion and the concept of universal access is understood as the equitable and affordable access by all citizens to information infrastructure and to information and knowledge essential to collective and individual human development. (UNESCO 2001)

In information-friendly societies, the education system encourages curiosity and teaches first and foremost skills of information retrieval rather than information itself. Questions count more than answers. (Maier-Rabler 2000)

The political system in information-friendly cultures is likely to be a form of communicative democracy with a developed system of civil society. Direct democratic participation is a living practice throughout all groups in society. The legal system is likely to be an information-rich case-based system where access to information is vital to practice law.

The economic system in an information-friendly environment strongly depends on access to and on the dissemination of information too. Success is good and has to be mediated to customers, shareholders, stock markets, and all other relevant groups in society.

Especially by the means of the new information and communication technologies, information-friendly societies and economies experienced and still experience a boost of their possibilities. At the same time it became clear that without a capable citizenship and without capable institutions, unintended and even unwanted consequences take place. The pure availability of information without proven quality lead to the current crises of the stock markets. On a political level we face a threat to well established forms of representative democratic systems through populist political trends. The characteristics of new information and communication technologies to promote new and better ways for direct democratic participation, turn into the opposite if utilized by people who did not get the chance to acquire the needed capabilities.

However, in information-friendly societies the chances to successfully implement programs to provide equal chances for all members of society to acquire capabilities in the context of ICT are higher than in information-restrictive societies.

At the other end of the scale, information-restrictive societies are characterized by a strong hierarchical order throughout society with fewer chances for social, economic, and cultural movement. In these environments people get access to relevant public information at the time needed. Whereby the definition, which information is needed when, comes mostly from authorities or other higher-ranking institutions or persons in the hierarchical system. In such societies people are accustomed that information is provided and does not have to be retrieved by oneself. This attitude characterizes the relationship between citizens and authorities, customers and businesses, the public and the media, students and teacher.

The education system in information-restrictive cultures does not aim for curiosity and for question-based learning. The 'right' answer is the measure of success. Whereby what is right and what is wrong is again defined by authorities in the education system.

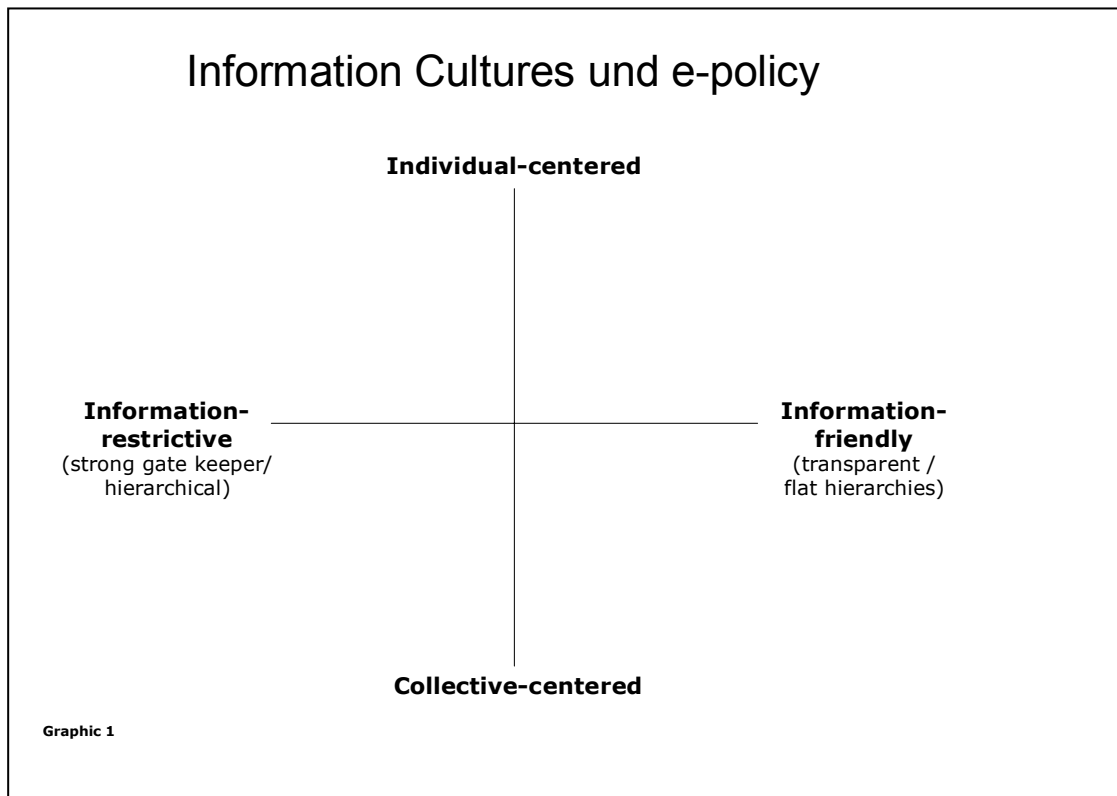
People are not trained to address critically their environment and to pose questions. These answer-orientated societies are an obstacle for utilizing the new information and communication technologies in an optimal way. Digital communication networks like the Internet work best with a question-orientated approach which leads to a variety of plausible answers in different contexts. Expecting the right and only answer – as people in information-restrictive societies are trained to – leads to predictable disappointments and therefore less motivation to get engaged with new media.

In information-restrictive cultures, the flow of information between authorities and citizens as well as between businesses and customers follows the push-principle, whereby authorities and businesses decide which information is being given away. In such cultures the Internet is perceived as a new and additional (mass)medium to get information across to a mass audience. The utilization of the Internet in this way covers just a very small part of its information and communication capacities. Since in digital communication networks no geographical, national or cultural boundaries can be drawn, information and applications from information-friendly cultural environments compete with those from information-restrictive cultures on a global stage.

We assume that information-friendly cultures provide a competitive advantage for their members in the global information society.

Although there is no chance to elaborate more on the following assumption within this paper, we would like to introduce the idea of a strong relationship between information-cultures and ethical-religious values. In Europe – and this paper deals with Europe in the first place – the predominating ethical-religious values are derived from the Christian doctrine. It was not at least the fight about the freedom of access to information for all citizens which led eventually to the separation in the Protestant and the Catholic Church in Europe. We can assume, and the presented figures about the digital divide in Europe support this assumption, that European countries with longstanding protestant traditions are more likely to have developed an information-friendly culture than countries with longstanding catholic traditions. We cannot affirm a linear relationship between religious traditions and information-cultures. The longstanding political traditions (feudalistic-absolutistic versus democratic systems), the degree of the diffusion of the ideas of Enlightenment within certain societies, and the predominating rights of law all together molded the specific information cultures. But in the very end, they all derived from basic religious foundations.

In *Diagram 1* we would like to provide a matrix-space for the analysis of e-policy concepts in light of information cultures. One axis of the matrix represents the ethical-religious values from information-friendly to information-restrictive. The second axis allows the allocation of e-policy papers according to the predominating political paradigm from individual-centered to community-centered politics. This distinction is the result of the analysis of different e-policy papers as we discussed previous in this paper. It characterizes especially the differences between US-American concepts and those of single European countries.

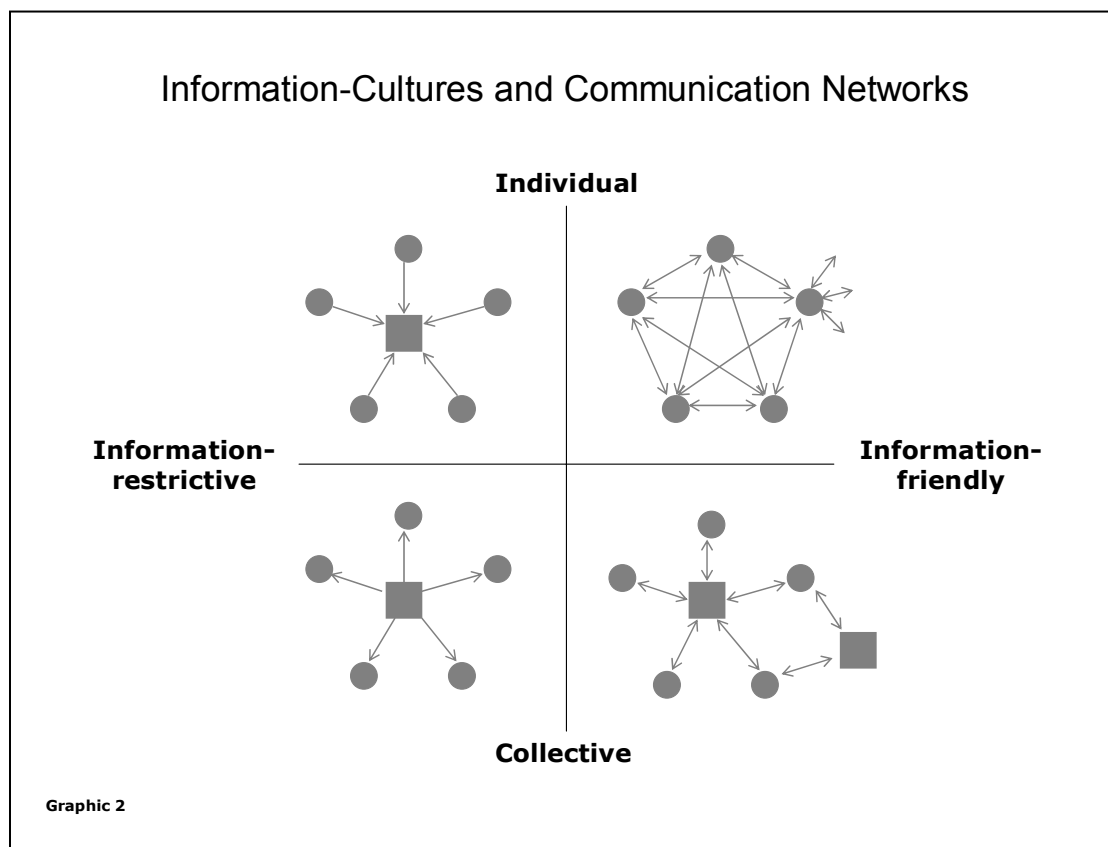


Taking the initial discussed e-policy papers into this analysis, we could put Al Gores NII-paper in the upper-right field of the matrix, half-way towards information-friendly and half-way towards individual-centered, while the Bangemann-paper has to be positioned more to the left, somewhere between information-friendly and information restrictive. Scandinavian countries have to be positioned in the bottom-right field. We can observe that the EU moved from the Bangemann-Paper in 1994 more towards bottom-right with its e-Europe 2002 and e-Europe 2005. These suggestions should give a basic idea how this analytical framework could possibly contribute to a reconceptualization of e-policy.

The same framework is used in *Diagram 2* to illustrate the relationship between patterns of information-flows and information-cultures. As laid out earlier, the network metaphor assumes that the more the pattern of communication networks in a certain society equals the pattern of the digital information and communication network, the more the society benefits from ICTs. This assumption should become clearer if we look *Diagram 2*. The patterns of the flow of information in information-restrictive cultures are dependent on a strong center. The center defines whether to 'collect' information from individual sources or to 'push' it out to its addressees. In both cases the implementation of a strong center which is in control contradicts the way in which new information and communication technologies work. Therefore these systems are threatened by the means of ICTs or the Internet. This can lead to a change of the behaviour of the center in the best case or to repressive measures concerning the implementation and utilization of new media in the worst case.

In information-friendly cultures, the applications of a broader range of the information and communication features of digital networks increase. In collective-centered policies, the state or other authorized sources, still play a strong role in distributing and evaluating information. The single user is not dependent on one center-source only. Several centers offer information and the user has a choice. This pattern still treats the new information and communication technologies as a sort of new mass/specialized medium. There are still centers which have a certain control over the distributed information and there is still a clear separation of sender and receiver.

This dichotomy does not exist anymore in the last pattern of information-flow. Information-friendly cultures which put the rights of the individual in first place give each individual the right to obtain information from whichever source and to act as a source him/herself. Therefore, former centers are relegated to individual sources that compete with all other sources. Each node/source in the network has the same chance to become a center for the moment of information retrieval through a certain user. The value of information depends on its usefulness for a certain purpose for a certain user. The value of sources depends on the degree of demand. Nodes that want to increase their importance have to increase their relevance for information-seekers by providing useful information. Not the availability of information is the benchmark but its usefulness.



5. A model for reconceptualizing e-policy - Conclusion

This paper wants to make a contribution towards the reconceptualization of e-policy. Starting from an analysis of existing e-policy concepts, which are all more or less based upon the techno-economic assumptions of the digital divide, we state that it is time for a substantial new orientation in e-policy.

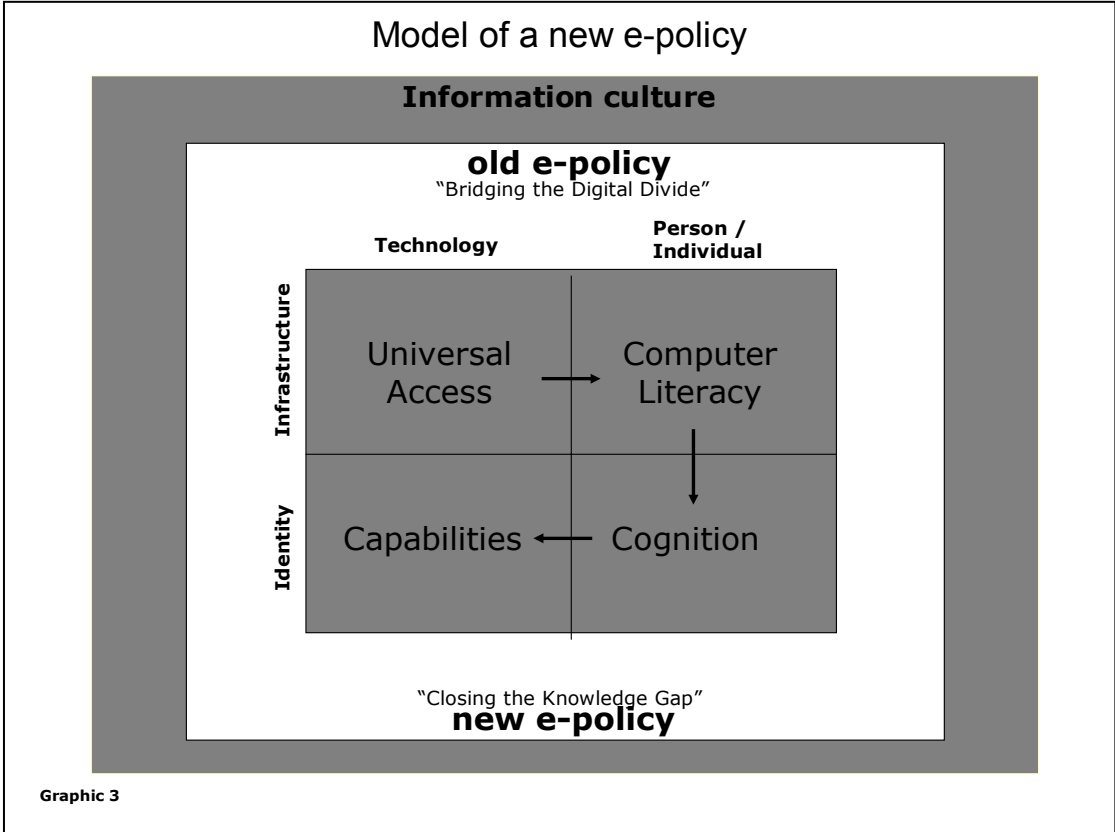
And this new orientation could be characterized as the shift from building infrastructure to creating identities. In other words: from bridging the digital divide to closing the knowledge gap.

This means putting the person/individual in the center of e-policy and not technology and therefore cognitive, cultural, and social factors must become determining elements of a new e-policy. Following the suggestion of Robin Mansell to adopt a rights-based capabilities approach, future e-policy will have to ensure equal chances to acquire capabilities in the context of ICT.

Acquiring capabilities requires cognitive abilities and socially- or culturally-motivated individuals on the one hand and, on the other hand, governments who want to offer a set of alternative choices for their citizens in order to allow them to achieve whatever new-media-lifestyle they want.

As we have laid out extensively, the development of this new e-policy depends strongly on the predominating information culture in the given society. In information-friendly environments, people have a greater chance to develop capabilities in the context of ICT and to decide upon the degree of their involvement with new media by themselves.

In *Diagram 3* we attempted to combine all relevant factors for a reconceptualization of e-policy that have been discussed in this paper in a comprehensive model. The predominating information-culture constitutes the more or less unconscious underpinning for all e-policy practice. The shift which we suggest e-policy should take and which will lead to the 'new e-policy,' is to proceed from infrastructure-oriented to identity-oriented measures. This means that the achievements of e-policy so far have built the foundations for the new e-policy. The overall goal of new e-policy is to make people understand how they are affected by the new media and which individual choices they have. This will eventually lead to the acquisition of the desired capabilities in order to develop a self-determined style of utilization of the new information and communication technologies.



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