

”The Tiger Leap” – Information society in Estonian frames

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1 Introduction

In the field of social sciences, as well as in political speeches, the information society is regarded as a key word of the future. The interest has reached an extent where information society is an object for both theoretical discussion and pragmatic programs.

Following the excitement around information society in our native country Finland it has become evident that much hopes, dreams and visions, and a lot of money is put on the plan of "being a world leader in information technologies". For us, it has been interesting to meet some similar ideas in Estonia as well. For example in a recent documentary film in Finnish television, former president of Estonia, Lennart Meri mentioned that Estonia would be taking a *tiger leap*¹, a jump from old Soviet styled technology to the very newest equipment. He emphasized the importance of learning how to use the new technology.²

Meri's notion was of course only a courtesy, perhaps a polite greeting to the northern neighbour, but our interest grew: How is Estonia actually meeting *the information era*?

Simultaneously, our course "Restoring civil society in the Baltic states" gave some interesting ideas. As we understood, the sense of national unity resulting of the singing revolution in late 1980s had pretty much faded away by 2002 in Estonia. On our lectures we met genuine worry about the future of Estonian society: How to build Estonian statehood, nation-state and civil society? How to make Estonia more democratic? How will the population, socialized during soviet occupation, learn civic qualities e.g. participant political culture or ability for self-organization? There were many questions, but few answers. Hopes were set on future memberships in Nato and EU or on the old recipe that "time will cure".

Yet, in this essay we want to consider one further thought: Could a development of information society, a movement into an informational era, build a new starting ground also for civil society in Estonia? We want to leave the question with less attention now, but confess that the study finds its motivation in this starting point.

¹ "Tiigrihüpe" or Tiger Leap is actually the name for an Estonian government project that aims to bring new technology into use in the Estonian education system. The name is an allusion to the "East Asian tigers", the countries whose economy boomed, in part as a result of information technology use.

² Unfortunately, we do not have at hand the specific date when this particular documentary was shown.

1.1 The study problem

This essay aims to make some analysis on the possibilities Estonia has in terms of developing towards an information society. First, we will discuss the general elements connected with information society. There will also be an attempt to fit the development of information society (both as a *real happening*, but as well in some extent as a *narrative*) into historical frames. Second, we will compare Estonia with different kind of societies around the world that are known as model examples of information societies according to Castells and Himanen (2001). Third, we will discuss some informational projects that are taking place in Estonia and try to make some evaluation of the depth of these projects (the evaluation here is made only on theoretical basis).

1.2 Some limitations of the study

Discussing the various concepts we are naturally faced with the problem of representation: Are concepts such as 'information society' or 'post-industrial revolution' valid representations of our world? According to a constructionist approach we should not mix the material world, where things and people exist, and the symbolic practices and processes through which representation, meaning and language operate (Hall, p. 25). The concepts are attempts to describe the reality, but are not the reality in itself. The concepts try to give a rough picture of the "field", but hardly compare as profound truths of our world. The concepts are here offered as tools that could help the reader, as some kind of looking-glasses, in categorizing the field.

We hope the reader has patience in following the beginning of the discussion, even if it holds rather general speculation. This essay cannot and does not even attempt to cover all the ground with regard to information societies and the case of Estonia, but rather tries to apply some of the ideas of modern theorists to the present situation of Estonia.

2 Discussion

The first information society theories were discussed in Japan. The theories reached the west during the 1990s. Before the information society/era theory the so called *industrial theory* created by Daniel Bell was in greater use. According to Bell, the west reached by the 1970s a stage he calls post-industrialism. The information age theory is a direct continuation of Bell's notions.

Whereas industrialism can be defined as a mode of development in which the main sources of productivity are the quantitative increase of factors of production (labor, capital, natural resources), together with the use of new sources of energy, the post-industrial phase suggests

movement towards informationalism – a mode of development in which the main source of productivity is the qualitative capacity to optimize the combination and use of factors of production on the basis of knowledge and information (definition from Castells, 1998). Also in Bell's theories of post-industrial society, information has become the main "*resource and transforming agent*...just as the combination of energy, resources and machine technology were transforming agencies of industrial society." (Kumar, 1995:9)

In more straight terms post-industrial 'revolution' refers to a transition in societies where education and knowledge replace capital and manufacturing as key resources (Hague & Harrop, p. 171).

The attempts to describe information society or post-industrial society can be paralleled with early sociologists' (and other writers') descriptions of industrial society and the modern man including writers from Goethe to Marx (Wilenius). Especially the recent works of the Californian, Spanish-born sociologist Manuel Castells follow a tradition similar to Marx when he is describing the transformations in contemporary world.

In Castells's logic, the post-industrial 'revolution' is capturing the whole spectrum of human life:

- The information age is something totally new – we can talk about a technological revolution, centered around information, as in comparison with the industrial revolution taking place in the western world some 200 years ago. The information age presents us with a new historical landscape, "whose dynamics is likely to have lasting effects on our lives, and on our children's lives." (Castells, 1998:2);
- Working in interaction with globalization, networking, identity-building, the crisis of patriarchy and nation-state, informationalization "has transformed the way we think, we produce, we consume, we trade, we manage, we communicate, we live, we die, we make war, and we make love." (!) (Castells, 1998).

Bearing in mind Lyotard's theories on postmodernism and *the loss of grand narratives*, we can of course ask whether such a total outlook and explanation, which Castells strives for, is reasonable. As we know, it is common for the human being to see his/her own time as times of radical transformations. Perhaps it is too a daring act to pose that our civilization is in stage of 'revolution'? Maybe we should instead lean more on the ideas that a trio of other influential sociologists, namely Beck, Giddens and Lash, present in their book *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order*... Instead of revolution, these scholars are talking of fine mechanisms set in the logic of modernization that disembedding

and reembedding change profoundly our societies, not planned or even predictably, but gradually, without us even noticing it.

Even if slightly dramatic, we must admit that the title 'revolution' is not totally missing the point. In his trilogy (*The Information Age*), Castells gives good argumentations and a fine set of statistics and tables to prove his point. According to him the information era is the result of three, in the beginning separate, but now interacting, processes that have their roots in the turn of 1960s and 70s (Wilenius, p. 32):

- 1) The technological revolution; the invention of the microprocessor in Silicon Valley, California in the early 1970s.
- 2) The serious moves capitalist economies have made after the 1970s economic crisis to liberalize their economies; major enterprises started to act globally, organizations targeted towards less hierarchy and more flexibility. The actions led to economic growth. The statist communist bloc did not catch up with this development (more about that later on).
- 3) The new social movements e.g. students' movements in the late 1960s started to express cultural criticism and demanded a more liberal society.

The third point might need some further explanations. Hand-in-hand with the post-industrial change, in the turn of 1960s and 70s, a new commitment to postmaterial values appeared in western world. According to Inglehart, postmaterialism in west was a result of material affluence, peace and security from late 1940s to early 1970s. Postmaterialism suggests emphasis on "quality of life" issues, such as environment, gender equality or self-expression (Hague & Harrop, p. 83).

It has been pointed out that while striving for equality, the movement was actually reproducing individualist attitudes (Wilenius, Castells).

In our mind, the postmaterialist attitude is important for the evolution of an information society at least in the sense that it prepares a ground where 'open source'-type of highly innovative thinking can pass an ultimatum of profit-making (if the reader approves we might draw parallels to the genius of renaissance man whose interest for technical innovations rose on first hand from artistic ambition and imagination). Understanding that somebody can strive for an innovation "just for fun" (to use an expression by 'hacker' Linus Torvalds), and wants to share the fun with others without making money of it, is a key element in making sense of the hacker's logic. Here the title 'hacker' is of course used in its old meaning and referring to

”somebody who loves programming, and networking with similar kind of people”, and who is not a criminal (Castells & Himanen, p. 64).

It is obvious that only a relative material affluence can give birth to this kind of mentality. But are there some other important factors as well?

One could imagine that a society which is experiencing great transformations, might give a good background for the ”hacker-mentality”. Partly, because in a transitional society the old recipes for successful living are losing meaning: there are no clear solutions for survival and therefore the society has more tolerance to experiments (if we now take hackers’ lifestyle as an experiment). And certainly, there is plenty of statistical background that show the transformations basic institutions such as family have experienced in the last few decades (read e.g. *The Power of Identity*, Volume II of *The Information Age: Economy, Society and Culture*).

Aside these one further alternative could be a sense of personal freedom, especially when it is discussed in academic frames. Castells and Himanen discuss in their book as one explanation for information society’s bloom in Finland the fact that Finnish universities offer students liberal curriculums. Moreover, in Finland, university studies are free of cost and the state even provides the students with a small allowance. Therefore university students are not forced to be as money conscious as they could be in other kind of conditions (p. 74).

So far we have emphasized the meaning of an innovative individual in creating a basis for information society. In the last paragraph the role of the state was shortly mentioned. Indeed, we observe in the Finnish model the supportive role of the state. The Finnish model shows how the state can be an important mediating factor in the equation of growing informationalism; a third element, bringing educated people and enterprises together (see for example p. 79 in Castells & Himanen).

However, the role of the state in promoting informationalism is by no means self-evident. It has been argued that in terms of politics, the “new times” benefit more the right than the left. Kumar argues, that the left-wing has had too much difficulty in throwing off heritage of national, organized capitalism (1995:52) and thus, re-orienting itself to the regulatives of post-industrial society.³

³ If we understand that the left has traditionally been more in favour of pervasive state involvement in social and economic life than the right + has cherished ideas ranging from strong egalitarianism, collectivism and corporatism to mixed or social economy (defined by Giddens in his book “The Third Way”, 1998).

2.1 Estonia; towards an information society

When we start to examine Estonia's suppositions for an information society, we must be conscious about the country's recent history. Then, we are especially interested in the relationship the former Soviet Union had with information.

2.1.1 Soviet legacy

Generally, university education in natural sciences (mathematics, chemistry, physics) was at a good level in the Soviet Union. Much of the innovations and technology was closed within the boundaries of warfare, but this was pretty much the case in the US as well. However, there were several computer building projects going on during the 1970s and 1980s in the Soviet Union, also targeted for civilians. For example, in Estonia the computer "Juku" was produced mainly for use in schools during the late 1980s.

Yet, according to Castells the difficulties in re-orientation to the informational era led to the collapse of Soviet Union. Castells carefully counts out several explanatory reasons ranging from economic, technological and military explanations to public dissatisfaction with the system (Castells sees that the Brezhnevian rule had succeeded in establishing *normalcy* and *boredom* in the Soviet Union so that dissidents were few) and finally explains the failure of Gorbachev's perestroika (reforms) and the collapse of Soviet Union by pointing to the extraordinary historical nature that Gorbachev met during his reign:

"I contend that the rampant crisis that shook the foundations of the Soviet economy and society from the mid-1970s onwards was the expression of the structural inability of statism and of the Soviet variant of industrialism to ensure the transition towards the information society." (1998:7)

'Statism' is orientation towards power-maximizing; the aim is at increasing the military and ideological capacity of the state apparatus to impose its goals on a greater number of subjects and at deeper levels of their consciousness. To ensure this, statism included an idea where the state was to seek a monopoly position over information. The soviet system was not able to meet the informational trends, because the idea of flexible networks did not fit in the system; "the vertical command chain was at the core of the system, making the transformation of large corporations into the new forms of networked business organizations much more difficult." (Castells, 1998:66)⁴

⁴ Castells sees that soviet managers and bureaucrats discovered flexibility and networking as an organizational form, but that this was applied to the development of the shadow economy (1998:66).

During our lectures on civil society professor Ruutsoo pointed that soviet rule had no understanding for self-organization, private interests or private initiative. Actually the soviet system condemned such mentality as irrational and selfish. Communities were organised and manipulated by the party; in this context "truth was not a question of debate, but known already and should be distributed." And furthermore, if people were in conflict (with the truth) the idea was that they should be enlightened. The soviet rule was not entirely totalitarian, although that was one of the lines of development. According to Ruutsoo, the soviet system (especially after Stalin's death) was more like a continuation of chauvinist tsarist Russian rule, with an idea of *bringing culture* to the underdeveloped peoples. The soviet rule meant a total liquidation of civil society.

If we consider the general code of rule in Soviet Union we see it is extremely hostile for innovative power, which in turn is necessary for the growth of information society. Yet according to the lecture by professor Ruutsoo the soviet philosophy was not exclusive, nor fascist. The idea was to build a modern society for everybody. What went wrong? The soviet system was not interested in feedback (bottom-up-relations) that could have been crucial in building the society.⁵

As time went by, the soviet socialism was accepted by the world as a permanent social model, a part of modernization. Eastern socialism and western capitalism were considered to be like twin brothers. In a historical phase where hard topographic power - concentrated in specific frames and usually achieved and held with the help of a massive construction of institutions – was 'the first game in town' the two systems would not greatly differ (if we think about the golden 1960s), but as soon as the west would be accepting a softer understanding of power - as a process or as a relational and pervasive concept and connected with postmaterialist developments in society - the difference of the twin brothers would start to become greater.

While the Soviet Union was tied by the cold war system, the US was the chief participant in the growth of global capitalism (explained earlier). According to this theory Soviet Union was limited by ideology and history to isolationism and thus unable to meet the challenge posed by globalization (*Globalization of World Politics*, p. 101-102).

2.1.2 Comparison of Estonia with selected information societies

In the beginning of the 1990s telephone calls to Saaremaa island would still be going through a telephone center, a human operator. The developments, the tiger leaps, Estonian society has

⁵ According to prof. Ruutsoo, there was some form of feedback through letters, but they rarely lead into actions except for KGB interviews.

experienced in the last decade or so seem incredible not least from our Finnish point of view. It may be slightly unfair to take Estonia in comparison with societies, where social and economic development has gone at a more gradual pace, but thinking about Estonia's future membership in EU we are interested to know how much Estonia is actually differing from other union members in terms of having an information society.

Castells and Himanen (2001) have compared the Finnish information society with the United States and Singapore, which are well-known examples of competitive and innovative information societies each based on a different type of societal values and institutions. Their analysis gives an opportunity to compare Estonia with those three models. In Castells' and Himanen's view, the three models can be very roughly described as:

1. "The Silicon Valley model" – a market-dominated, open society;
2. "The Singapore model" – an authoritarian information society;
3. "The Finnish model" – an open society based on welfare

	Estonia	Finland	USA	Singapore	EU	Source of original
Technology Infrastructure						
1. Internet hosts / 1000 inh.	43	200	179	72	69	UNDP
2. Cellular phone subscriptions / 1000 inh.	387 (Estonian UNDP 2001)	752	401	583	654	IMD
Production						
3. High tech export / total export (%)	25	27	32	58	18	UNDP
4. Electronic commerce (SSL servers / 100 000 inh.)	5.6	9.6	28.4	1.3	6.2	Netcraft
Know-how						
5. Internet users (%)	22	57	55		42	IDC
6. Tertiary students of science (%)	35	27	14	24	14	UNDP
Economy National						
7. Competitiveness (index 0-100)		83	100	88	68	IMD
8. GNP per capita (USD)	8 355 (UNDP)	23 430	36 144	22 949	22 551	IMD
Corporate sector						
9. Productivity (index, 100 = USA)		99	100			Etla

10. Growth of stock market in last 5 years (%)		994	529			Helsinki stock market; Nasdaq
Innovativity						
11. Investment in R&D / GNP (%)	0.6 (UNDP)	3.1	2.6	1.9	1.8	IMD
12. Royalties and licensing income (USD / 1000 inh.)	1.2	126	130	26	81	UNDP
Welfare						
Education						
13. Combined primary, secondary and tertiary gross enrolment ratio (%)	87	103	95	75	94	UNDP
14. Functional literacy (%)		90	79		82	UNDP
Health						
15. Life expectancy (years)	71	77	77	77	78	UNDP
16. Coverage of health insurance (%)	Nearly 100?	100	82			Health care financing review
Welfare						
17. Richest 20% to poorest 20% (proportion of income)	4.8 (UNDP)	3.6	8.9	9.6	4.8	World Bank
18. Population below 50% of median income (%)	13.7	5	14			UNDP
Openness						
Politics						
19. Freedom of press (index 0-100; 0=free)	20 (free)	14 (free)	15 (free)	68 (non-free)	16 (free)	Freedom House
20. Gender equality measure (GEM 0-1000, 0=inequal)	552	783	738	509	684	UNDP
Civil society						
21. Membership in organizations		1.8	1.1			Sisiäinen; Putnam
22. Prisoners / 100 000 inh.	350	62	554	255	74	UNDP
Globality						
23. Foreigners and foreign-born (%)		2.5	10.4			Tilastokeskus; US Census Bureau
24. Environment: CO2 emissions (metric tons per capita)	13.0	10.9	20.1	23.4	9.0	UNDP

The table above is based on the data collected by Castells and Himanen, extended with some figures for Estonia. In the table, as in the original, averages for the present 15-member EU are also given for comparison. Not all figures for Estonia were available and easily obtainable, but the selection allows some conclusions to be made.

In the first two parts, technology and economy, it can be seen that Estonia is heavily investing in high technology, but the current results are not on the same level as in the other model states. The investments in R&D and royalties and licensing income rates are, however, much below the other countries.

Castells and Himanen present some examples that clearly set apart Finland as one of the most developed information societies in the world - the 1st place on the UNDP's Technology Advancement Index (TAI), good placements on International Data Corporation's Information

Society Index, high rates of Internet and cellular phone users and some well-known contributions to the technology used on the Internet. Estonia is not listed on the TAI and has few other top rankings or well-known success stories to brag with. However, Estonia is one of the world leaders in coverage of wireless Internet access (Postimees Online 9.8.2002).

In terms of welfare, Estonia is clearly not approaching the Finnish model of welfare information society, but rather targetting a US-style laissez-faire capitalist state. Income gaps are not as high as those in the US. The poverty rate as measured by the UNDP is high, but actually not higher than in the US. Life expectancy in Estonia is several years below the other states. In general, the welfare status of Estonia can be quite well explained by the notion of transition into a neoliberal capitalist economy, where all the promised benefits of the new order have not been reached yet.

In terms of openness, Estonia seems to lie somewhere in between Singapore and the Western societies, although the figures are sketchy at best and no real conclusions can be based on them. Again, the high amount of prisoners shows that Estonia is not adopting a welfare state model that is common in EU countries. Gender equality has also not become a priority. However, Estonia cannot be categorized as authoritarian in the sense that Singapore can. Castells and Himanen point out that the US is in many senses similar to Singapore, with an inequal distribution of income and high poverty. Estonia also seems to belong in this group, not in the welfare group.

What kind of restrictions Estonia in specific might have in developing information society? Obviously Estonia's restriction here is not her small population in the same way it might have been during the expansion of industrial society in 1900s; the immigration of thousands of Russian-speakers to Estonia was motivated during the soviet occupation by the lack of labor force when the aim was to industrialize Estonia.⁶ The logic of informationalism is not the same. A small population is not a big restriction for development of information society as can be seen e.g. from the Finnish case.

Neither is geographic location or natural environment a big restriction. If geography serves a role, Estonia has advantage of it as it is neighbour to high-tech-oriented Finland. And if the efficient organization of the population's educational level and innovative power forms the main source for productivity in the future, natural riches lose their traditional meaning.

⁶ We can speculate whether industrialization was just an excuse for massive immigration, where the actual interest of soviet power was to Russify all regions of the Soviet empire.

The greatest restrictions appear when we consider the ACD-model (discussed by e.g. Juha Nurmela). The ACD-model accounts for the population's access (A), competence (C) and desire (D) in using information technologies. The first supposition for the development of information society is that the population has access to technology, either private or public. The second step is that they know how to use the technology and obviously third, that they have interest to use the machines.

Experience from various countries shows that a 'digital divide' is common; application of information technology varies according to class, gender and age groups, as well as between rural and urban populations. Attempts are issued on both governmental as well as non-governmental level to increase the public's interest in computers and internet so that societies could escape an enforcement of inequality, and instead, decrease it, at the brink of this new era.

2.2 Informational projects in Estonia

The Estonian idea of information society emphasizes advancements in the private sector. The state is not as heavily involved in research and financing as in Finland, for example. However, besides what the private companies do, there are also some private actors who are not as interested in creating revenue from information society projects. One such example is WiFi.ee, a non-profit organization of "hacktivists" with a combined technological and social agenda.

2.2.1 Building an information society from the grassroots: WiFi.ee

WiFi.ee is a loose group of technologically oriented people who are setting up wireless Internet access points all around Estonia. In the process, they are collaborating with business (e.g. Internet cafés, hotels, shops, restaurants) and also public actors such as schools and universities. They provide expert advice and aid in installing the equipment, whereas the costs are covered by the partners. As of January 2003, they claim to have set up a total of 80 access points covering 45 000 square kilometers, and the number of access points is increasing very rapidly. The majority of the access points are free of charge,



meaning that anyone with a suitable computer and equipment can freely use the Internet in their vicinity. Thus it can be said that the activists have some selfish interests – they like to be able to log in everywhere. However, they are also helping many others do the same, and they like to point out that Internet access should be – and it could be – cheap, easy to use and available everywhere.

The name WiFi in WiFi.ee stands for Wireless Fidelity, and it is also the name for an international standard for wireless networking equipment. It is a good example of technology suitable for “tiger leaps”: it is relatively new, can be used in places where previous infrastructure such as cabling does not exist, and the equipment is cheap at least when the costs are shared by a number of users. WiFi is not very common in Europe, where efforts to promote wireless technology are more concentrated on cellular phone networks. In a plain business sense, the early adoption of WiFi may one day be prove to be an important benefit for Estonia.

The technology might also prove useful for bridging the gaps between the winners and losers of the Estonian society. In an article in Helsingin Sanomat (8.12.2002), the case of Nõuni village in Palupera municipality is highlighted. The village suffers from many of the problems of “second Estonia”: social problems, young people moving away from the countryside, deteriorating infrastructure etc. However, Nõuni is the first Estonian village to provide free wireless Internet access, a place where the technological goals of WiFi.ee meet social ideals of well-being for everyone. The village library is open only three days a week, but now it can provide Internet access 24 hours a day. The local school benefits, because it doesn’t have to

pay for Internet use anymore. It is hoped that the service will help attract tourists on the way to the nearby Otepää ski resort and help gain investments.

The cost of the investment in wireless technology for the Palupera municipal government was tiny compared with the expected benefits. Already one previously unemployed person has been retrained and employed as a technician. In the article, the host of the Tehnokratt TV program and initiator of the Nõuni project, Peeter Marvett, says that in five years, everybody in the countryside will use the Internet. Whether that happens is very much debatable, but a fair guess is that if that happens, WiFi technology will be involved.

2.2.2 Information society as dynamo for civil society?

It is in interest of this paper to examine whether a development of informationalism could contribute to a new rise of civil society in Estonia.

WiFi.ee and its projects can be considered parts of Estonian civil society, which in general is not very well developed. The dominating view on civil society has been that it is mainly a means for providing services that the state or other public actors cannot or don't want to provide (civil society as the "third sector"). However, a modern and well-developed civil society also requires other forms of participation such as *forums for dialogue and debate*, the *possibility to realize innovations* and the *availability of information*. These do not magically appear from nowhere, but require structural and institutional changes in society to support participation. WiFi helps to fulfill some of these prerequisites, mainly giving technological means for communication and access to information, but also serves as a good, but unfortunately very rare, example of private initiative bringing about changes in society.

What comes to forums of dialogue and debate, much hope is put on Internet-based democracy; the Internet should help to increase political and social communication and help governments re-engineer services to the citizens. The hopes are big; if only the hurdles (defined as lack of awareness, insufficient penetration or un-affordability) were won and the potential (in terms of users interest) expanded in using of these information tools, it seems, the goals would be achieved easily.

If we want to be optimistic we say, of course, that Internet democracy is a good idea. However, we see some dangers in such projects. In our mind, relying on the good will of the government, and moreover, relying on a technology that is relatively expensive and the use of which demands certain competence, cannot be a sufficient boost to civil society.

Furthermore, hopes are put on the birth of an 'information elite' that would come to challenge the traditional view "that elites reflect considerations of power and wealth" and share an ability of controlling resources (Coombs and Cutbirth, 1998). Coombs and Cutbirth trust that a new information elite can have a strong positive effect on democratic processes while producing new political culture (?) In the Estonian case we should welcome this kind of new elite, but in our knowledge, no such group is at hand right now, which does not mean that one could not appear.

In the visions of Daniel Bell, post-industrialism was hoped to bring with it a "rehumanization of work relations, an increase in the amount of leisure time, all as a result of the immense wealth-generating potential of new technology." (Bradley, p. 38)

Considering outcomes such as mass unemployment, we see that Bell's idea of post-industrialism as a good-bringing saviour has had little grounds. On the other hand, if we drop the naïve optimism we can find surprising examples, hard to determine whether they're positive or negative, of how informational revolution affects civil society.

First, mass unemployment, resulting of cutting down hard industry, can give reason for people to organize in groups. For example, Viherä mentions in her article (1999:22) organizations of the unemployed as important movers in the third sector in Finland, many of these organizations resulting of recession years in early 1990s. Second, Viherä mentions different kinds of informal nursing arrangements, perhaps resulting of cut-down public nursing services. Such arrangements could come as another example of new civil society, also resulting somehow of the mechanisms related with informationalization, in this case perhaps of the crisis in the patriarchal family institution and the leftist welfare-state. Third, Viherä's list includes co-ops and other collective companies, in our mind rising from workers' distrust in being employed in traditional ways (either in private companies or in the public sector). The kind of distrust that can only be the result of bigger transformations in society (and which we earlier saw to result in lifestyle experiments).

3 Conclusions

So, could a development of information society build a new starting ground also for civil society in Estonia?

The information society, post-industrial revolution etc are discussed with great expectations. They are awaited to bring lots, mostly good things, to society. If we want to be realists, we have to acknowledge also the negative outcomes of the development to different layers of population.

On the other hand, we must also recognize that change and transformations in society will also create new social vacuums. We believe that as time passes organizations will evolve to fill in the vacuums, thus producing a new kind of civil society.

The idea to create an information society in Estonia may not produce all the expected benefits at least in the near term, but it may well function as a trigger for a more general movement that will reimpress the idea of participation into the thoughts of Estonians, and help to recreate the long lost civil society. New technology alone will not have profound effects, but the ways in which it can bring people together and find common goals and interests has potential to create something new.

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