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Sosiologian ja sosiaalipsykologian laitos

TEIKOLA, NATALIA: In Search for a Russian Knowledge Worker

Pro gradu –tutkielma 62 s., 6 liitesivua
Sosiaalipsykologia
Toukokuu 2004

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My study is about Russia. More specifically it is a study about the development of an information society in Russia. My main task is to look for a profile of a Russian knowledge worker.

More than ten years after the collapse of the Soviet Union the heir, Russian Federation is still looking for its own path. I wanted to contemplate the process of transition from the perspective of information society. The discussions about information society often concern mostly capitalist countries. Even though Russia nowadays is acknowledged to have a market economy, it clearly has to tackle with the past and the socialist heritage. There are many obstacles for Russia in order to develop a functioning market economy, and furthermore, to become an information society.

I have concentrated on the labour force working with knowledge. The knowledge workers are sometimes praised as forerunners of a new era. I decided to find out about the Russian knowledge workers and about their situation in the society. My interest was to find out the positions of the knowledge workers in relation to of the rest of the working population.

The study is based on quantitative data collected for “Social Distinctions in Modern Russia” – research. The data are from the year 1998. More than two thousand interviews were made. In my study I will use some thousand of them, which is the share of working people in the data. I have analyzed the data using SPSS statistical program.

My study shows that the knowledge workers do stand up among the rest of the working population. Most saliently they do that in the respect of wealth. Also, they do have other benefits on their side, such as higher status in management categories. In addition, it seems that their world view tends to be slightly different than the world view of those, who are not categorized as knowledge workers. Altogether, it seems fair to say that the knowledge workers are in privileged positions. Thus they possess more means to act not only for their own future, but for a society at large. In a sense, they really are in key positions. However, it remains to be seen, in what way it all turns out.

Key words: Information society, Russia, Soviet Union, knowledge worker, middle class, attitude

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1 Introduction

Talking about information society, we often tend to think that this way of organising social life is going to reach the entire globe in a matter of time in a more or less unique manner. However, often the contemplation of differences offers a more fruitful view than just concentrating on similarities. One of the leading figures in theorising the information society, Manuel Castells, accentuates that all the information societies are born and developed in different cultural contexts and will form unique entities (Castells, 1996, p. 13).

1.1. About the Development of Information Society in Russia

In this study I concentrate on the development of information society in Russia. The whole sentence “the development of information society in Russia” could appear arguable for many. Firstly, the phrase “develop” is often held as charged with values. Secondly, “the information society” is nothing but a clear definition. Thirdly, even when we talk about Russia there can be many interpretations. Furthermore, combining the information society *and* Russia might seem impossible for some. To clarify all these relations would be a study of its own; therefore I shall avoid falling down on the first obstacles. With development I refer to changing state of affairs, assuming that the development in itself is neither good nor bad. The information society is a framework and in this study I shall observe how Russia appears in it. And Russia, it would be a geographical and political entity and Russians the people living within its borders. My vision of information society is mainly based on readings of Manuel Castells (1995; 1996-1998). The concept of knowledge worker is borrowed from Raimo Blom, Harri Melin and Pasi Pyöriä (2001).

The students engaged in Russian research often stress the uniqueness of their object (see Kangaspuro, 2000). So do I, Russia certainly is exceptional in many respects. But then again, so are all the countries and societies within, we could start alphabetically. Recall for universal science is, as we have to acknowledge, rather bound to western universe, and even for that we can have more than reasonable doubts. Russia as an object of research is often mystified and the culture is juxtaposed against “the western”. Russia is often situated between the east and the west. In seeking for its own identity, Russia has been wandering between the two for centuries now. (E.g. Koivisto, 2001; Pursiainen, 1999.)

My study is about the Russian society during the times of transition. The wider context of the study is provided by information society. My view is that the information society has evolved under the circumstances of the capitalist way of organizing social life. Shortly, I see the information society as a “western product”. For Russia it has meant more or less acquiring the format as it is offered. I am tempted to think that the orientation towards society at large has been different in societies organized by different principles, here capitalism and socialism. Historically the socialist Soviet Union did not provide a solid basis for an information society to grow (Castells 1995). After the collapse of the Soviet Union the new born state of Russia has faced numerous challenges, and the adaptation of the informational mode of production is one of those. Presumably, the cultural uniqueness of the Russian information society will become more visible with time.

1.2. Personal Notes

This study is positioned somewhere in between the traditions of sociology and social psychology. Weckroth (1992) has written that social psychology has expanded and hence is partly at the stage of disintegration (p. 17). Here, I obviously have fallen to a trap which was forewarned by Weckroth (p. 22) when he launched that by binding social psychology for instance to sociology of work - like I have done in this case - it is possible to underestimate the relevancy of the discussions about the identity of social psychology. Evidently it really is difficult for some to identify as a social psychologist (see *ibid*, p. 21).

So, my study falls in between the two disciplines, even in a troublesome manner. In order to understand the context of a Russian society it is necessary to approach the macro level. Mainly the theories of the macro level are found from the bookshelves of sociology. However, the core of my study is at the micro level. The core is framed in words in my research question: *do the Russian knowledge workers have a certain profile?*

Very often the discussions about the information society highlight the technological changes and its impacts to economy. I wish to promote an idea about the human factor in an information society. In any society, it is the people who form the social organization, which we call a society, in the first place. As a student of social psychology I tend to see individuals as part of a larger social structure. For an orthodox sociologist it would perhaps be easier to concentrate on those structures only. I instead would like to question the view predetermination of these structures and concentrate on an individual's position.

The texts about information society often raise an image of new demands for individuals to adapt (e.g. Castells, Drucker). Furthermore, it has become evident that not all the people are equally equipped to meet those demands. Although the information society is often seen to promote democracy, it seems clear now that new divisions are to be born, as well between the nation states as within those, between different regions or groups of people. (World Summit of Information Society (WSIS), 2003, Declaration of Principles)

If we take it, as I suggest (following Castells etc.) that the information society is a capitalist society and has developed according to the principles of free market economy, would it not be interesting to challenge the view by taking Russia, which has abandoned the state socialism, under scrutiny. Russian society is of a specific interest in observing the reorganization of society. It is not for the first time, now, that Russian people had to adjust in a total new way of life. In 1973 Eskola suggested that it would be interesting, although too early at that point, to find out how the transformation from a capitalist to a socialist society effects to national identity, or how any societal change effects to identity (Eskola, 1973, p. 106). Now the situation

has evolved even further and Russians have to cope with capitalism again. Although Russia is something brand new, it is by no means *tabula rasa*, but as an heir of the Soviet Union it carries the burden of history and many phenomena could be seen as continuum. Russia is undergoing numerous changes which are labelled under the term transition. By transition is often referred to economic (from command economy towards market economy) or political (from state socialism towards democracy) (see for example Salminen & Temmes, 2000). In the societal structure the transition mostly means a rise for entrepreneurship and middle classes (Kivinen & Nikula, 2003). For me it seems tempting to contemplate, if in these historical times we could also refer to “mental transition” (e-mail from Raimo Blom 5.11.2002). Even though in this case there would be neither a starting point (as for example command economy) nor an outcome (market economy)¹, we have to remember that also the “other transitions” are ambiguous. For me it seems obvious that Russian people have had to cope with new kind of challenges in everyday life. Evidently, it is not due to the development of information society only. In my study, however, I wish to observe how the reorganization of Russian society could be seen within the larger framework of information society.

In my analysis I will use quantitative data collected in the year 1998 for the purposes of “Social Distinctions in Modern Russia” –research (SDMR). The statistical data consist of more than two thousand interviews. From my point of view some thousand are relevant for this study.

My personal history is entangled with Russia since the first grade in school. So, in a way, I already made my choice at the age of six. For me this study is a natural continuum and a result of lengthy civil observations suited in academic form. Still, I reason my view not only by personal interests, but I claim that the issue has a certain topicality and it is a challenging bit for social sciences. Russia certainly is an object of great academic interest. There are plenty social processes going on and it provides a great field and a challenge for a social scientist. Furthermore, for us Finns, as neighbours, it is good to have a timely intelligence about Russia in various

¹ Unless we take it that once the “*homo sovieticus*” existed...

phenomena of life. An interest and intelligence avail to accomplish a fruitful interaction.

1.3 Definition of the Information Society

In his trilogy Manuel Castells mostly writes about network society, which is equivalent for *informational society* (see Castells, 1996, p. 21). However, elsewhere he writes about information society. “[W]e define information society as the social structure generated in interaction with the new technological paradigm constituted in the mid-1970s around the information technologies. It is characterized by the decisive role played by knowledge and information, on the basis of new information technology, in the generation of wealth and in the exercise of power, on a global scale” (Castells, 1995, p. 4). Despite the fact that in his trilogy Castells keeps the two (the network and the information society) analytically distinct, I use the information society (as defined above) as synonym for the network society due to an established discourse. Furthermore, it could be said that I leave the elaboration of concepts like information and knowledge for those who are able to clarify the contents in depth (see e.g. Niiniluoto, 1996).

2 About the Context of an Information Society

The existing of an information society is still widely debated and there is no consensus on the definition. The theoretical tradition leads its track to 1970’s to a path breaking work of Daniel Bell (*The Coming of Post-Industrial Society*, 1973). Other pioneers have been such as Alvin Toffler and Fritz Machlup, to name few. As well as Yoneji Masuda with his vision of the Japanese knowledge based society. For my opinion, it is needless to picture here neither the whole arena nor the paths of development. In order to comprehend the phenomenon it is more accurate to illustrate the dimensions of the phenomenon.

I am interested in the consequences of the so called technological revolution in the social structure. As mentioned, in my interpretation I will mostly rely on the work of Manuel Castells. In his massive trilogy Castells came off with a fairly adequate theory on present day's societies and the wider global context of development. Even though sometimes accused for overly technological tone (e.g. Webster, 2002, p. 123), for my needs Castells offers a fairly adequate description of the information society. Also, Castells explains the collapse of the Soviet Union from the perspective of the development of information society. The interpretation is interesting one among the others. (Castells, 1995; about the reasons for collapse of the Soviet Union see also e.g. Holmes, 1997; Kirkinen, 2002, pp. 533-536). Furthermore, at present one can not find too many theoretical approaches concerning the Russian society in the context of information society.

The technological development is a deniable part of the information society. However, it is not technology alone, that we refer to, when we speak about information society. There are several intertwined and interrelated processes. For a social scientist the information society becomes interesting when the social effects of the technological change are observed. According to Frank Webster it is possible to detect the fields of interest in discussion. He has named first five (1995) and later six (2000) spheres in society, in which the research of information society has been conducted. The discussion revolves around changes in 1) technological, 2) occupational, 3) economic, 4) spatial, 5) cultural and 6) theoretical sectors (Webster, 1995, 2000). It is a matter of the perspective on which we concentrate. I will mostly speculate with the changes in the occupational sector, but the cultural sphere is implicit in my reasoning. However, all the spheres are interconnected, as we recognise the complexity of society. (See also Lemola, 2000.)

There are several characters, which could be used to describe this information society. People engaged to discussion stress their own point of view, and there is no consensus on what we talk about. As Jari Aro has it, "the information society has gained a position in our discussion concerning society, which serves a duty of some kind of prism: everything societal is seen, one way or another, through the information society" [*translation* NT](Aro, 1997). Even though Aro recalls rationality and perhaps more criticism for the use of term, I have to confess, that I use "the information

society” precisely as a prism. I see that it is not my responsibility in the masters thesis to provide an adequate explanation over the process of informationalisation. I only wish to consider how the recent restructuration of Russian society could be seen within the context of information society. I take it as it is, recalling the criticism but keeping it apart. Hopefully the attitude can be detected between the lines.

As it is often stressed, the societies have always been based on knowledge. The technological advancement has brought privileges throughout the history. Yet the speed of certain changes at the present is worth of noticing. Frank Webster (2002, lecture course) recalls that more something does not necessarily lead towards something new or something different. Webster would like to make it clear if we speak about quantitative changes or those of qualitative character (Webster, 2002, lecture course). Evidently the latter is the one with relevancy. As Russian federation is a new entity, it is fair to assume that it most certainly is undergoing numerous qualitative changes.

3 Problematics in Russia

For the time being, Russia is acknowledged to have a market economy. The statement can be interpreted as a formal notion with no substance as such. The Russian capitalism is still quite original and is often described using words like robber capitalism or bazaar economy. Following Castells I assume that the connections of capitalism and information society are essential. Information society as we see it could not have evolved under the circumstances of command economy as it was fulfilled in the Soviet Union (Castells, 1996, p. 100).

In his massive trilogy “The Information Age” Manuel Castells explores the relations of information revolution and the collapse of Soviet Union (Castells 1995; 1998). Furthermore, he has revised his views in “The Collapse of Soviet Communism: a View from the Information Society” (1995). The exploratory essays are co-written by his wife, Emma Kiselyova (who is, by the way, Siberian by origin). Castells describes

that the Soviet production system was a rigid hierarchy and a discouraging environment for an individual (1995, pp. 21-26). Manuel Castells tracks the collapse of the state socialism to system's internal rigidity. "Thus, we are left anew with the idea that "the system", not the people, and not the lack of material resources devoted to scientific and technical development, undermined its foundations, provoking technological retardation precisely at the critical moment of a major paradigm shift in the rest of the world" (Castells, 1995, p. 29). Moreover, Castells argues that it was the Soviet Union's inability to compete in technology that caused the loss of the socialist system in bipolar world. The tradition of forbidden knowledge, the absence of balancing market mechanism and the stiff state structure did not provide basis for horizontal networks, and flows of information. (Castells, 1996; 1998.)

3.1 Individualism versus Collectivism

Enthusiastic individuals are often offered as builders for information society² (see e.g. Himanen, 2000). In the Soviet Union the official ideology outlined a collective society. An individual was seen more as part of a larger community. Individuals, like miner Aleksei Stahanov, were even used for purposes of creating a picture of an ideal Soviet citizen. Individualism was more discouraged than encouraged in the Soviet Union. In the west, on the other hand, individualism has been nourished, until lately, when the western culture has been accused for excessive egoism.

The idea about collectivism goes deeper, though. Russian culture is often conceived as historically collectivist. Traditional religion of Russia, Orthodoxy, is based on collective values. On the other hand the faith of western kind, Protestantism, is seen to courage individual efforts. The relations of capitalistic ethos and protestant ethics have been an issue for a century now (Weber, 1990; see also Castells, 1996, p.211). However, the ethos of productivity has been seen as the key issue binding together the ideologies of socialism and capitalism.

² *How is that echo familiar? Three components: research and development (R&D), enthusiastic and skilled labour force - better future.... Does the "ideology of information society" use the same metaphors as, you know, the socialists ? The notion between abstract similarities of science and technology (S&T) and R&D has been made also by Lundvall, 1992 (ref. Kaukonen et al.2000)*

3.2 Industrialism

In its time the Soviet Union was a major counterweight for the United States of America. The juxtaposition was the *raison d'être* for the super powers. Relations of the two evidently are historical, but the basic setting clearly formed the state in the Soviet Union. Although the ways of doing things might have differed in states following the different logics (i.e. socialist or capitalist), the difference is often overemphasised. As Alvin Toffler reminds us, in a fierce struggle of ideologies, it was often forgotten that the two, seen as opposing poles, nevertheless shared the same super ideology. They “[b]oth preached the superiority of industrialism to all other civilizations. Both were passionate apostles of indust-reality”. (Toffler, 1980 p. 99.) However, there are some fundamental obstacles in the way to Russian information society, precisely due to the socialist patterns of organizing the society, the production and the economy.

It is quite paradoxical, as the information revolution got started in the military sphere in the United States, that massively militarised Soviet Union could not follow the wave. Due to the primacy of military sector, the army and related industry had the best human talents in the country. It was not a matter of lacking potential or even unsophisticated technology. The engineering in the Soviet Union was of top quality. From mid-1940 till mid-60's the Soviet technology was equivalent to American, and the Soviet Union did have its own manufacture until mid-60's. Onwards the leaders of the Soviet Union *chose* to rely on copying and smuggling American models. It is suggested by Castells, basing on his interviews, that it really was a political choice. This decision caused continuous retardation in the advance of technology. (Castells, 1995, pp. 27-40.)

3.3 History of Hidden Knowledge

Another obstacle yet was the silencing culture, which hindered an open innovation culture. Innovativeness is seen to belong fundamentally to the ethos of information

society (e.g. Himanen, 2000)³. Innovation ability is often mentioned as a stepping stone for Finland's capability to compete in the global arena in information communication technologies (ICT) (see e.g. Castells & Himanen, 2001). Arthur Brian (2003, KEF) has also taken the floor to speak for the significance of creative innovation atmosphere. He accentuates that innovative knowledge-based economy tends to gather around certain centres. In a sense innovations feed themselves. In an innovative rich atmosphere new innovations are born more easily than where there is no tradition of creative know-how. (Brian, 2003; see also Castells 1996, pp. 35-37.) The Silicon Valley, "where it all started from", is often offered as an example. It is stressed that open co-operation was required to give a push for development. (Castells, 1996, pp. 62-65; 211.) Obviously in the Soviet Union the story was something else. When inventions were made, those did not become easily public, but the ideas were left wandering around. Different bureaus or enterprises did not share their findings and thus the positive impact did not grow. (Castells, 1995.)

Moreover, the issue of silencing is intertwined to individual persons. There are many aspects involved in this. First there is the censorship of written products. Second is the individual's need to polish the right-minded facade publicly. The former topic is in agenda once more and according to Azrael and Peterson (2002) it is a serious aspect in the development of information society in Russia. During the Soviet times the latter might have been a matter of life and death. The duality of the Soviet culture was present everywhere. The official story was often different than the reality behind the curtains. (See for instance Kivinen, 1998.)

Surely, knowledge was as important in the Soviet Union as in any society. But mainly 'the knowledge' was used for personal purposes in the private sphere. (See also Castells, 1995, p.74.) Discouraging rewarding system at work was often not enough to motivate a person to put an effort to work. A cited sentence describes the attitude: "We pretended to work and they pretended to pay us". Paid or not, frequently there was nothing to buy in the shops, even if one had money. Especially during the times of shortage it was useful to know a "right person". Basically it was possible to find

³ By "innovation" is usually meant any kind of newish idea whether it concerns technology or social organization (Eskola, 1973, p. 289) [translation NT].

almost anything. Good connections and personal relations were priceless in the Soviet Union. Perhaps they were even more valuable than hard currency. Thus developed a singular system based on mutual exchange, known as *blat*. *Blat* is a network through which it was possible to trade almost anything: goods as well as services.

Furthermore, *blat* is seen also as a moral and cultural foundation (Blom, 2002 , p.104). In the context of information society the *blat* has a peculiar interestingness. The information society is said to be based on networks. The *blat* is a network. Of course, the *blat* is a network of unofficial nature, but it testifies to capability to adjust to flexible formations. Furthermore, also the networks of information society are more or less informal. At least the informality is gaining more and more relevance. However, the barter economy generated a strong unofficial sector, which is still alive and sound, and is recognised as one of the main obstacles for the development of decent markets.

3.4 About the Area Structure

The vast land of Russia is “cold, far and dispersed” as Helanterä and Tynkkynen (2002, p. 11) describe it in their award winning volume. The writers wish to underline the role of geography in explaining the past and the present. Due to country’s geographical position, a certain way to organize production developed. In the Soviet Union geographical facts had to be taken into account, even though there were many attempts to overcome the geographical, as well as biological, barriers. (E.g. *ibid*, pp. 134-136, 142-144.) After the Soviet Union, the newly born Russian Federation inherited a production structure built to combine the ideology and the geographical facts. Still, this structure is the core of Russian economy, although in many places at the stage of distortion.

The Soviet Union was enormous in size. Not all the country was accessible, but the artificially low prices of transportation made it possible for the Soviet project to reach the remote areas. The production plants were located mainly by the transportation routes and alongside raised the cities. Principally, the whole country was lead from Moscow. An equal distribution of wealth was an outspoken goal, but it was not reached, even though during the Soviet times it might have been more so than today.

Helanterä and Tynkkynen (ibid) point out, that from the point of view of the areas the unfortunate development was caused by the centre's inability to control the national product as an entity within the large country. In the Soviet Union the national product was *built* as an entity, but *planned* within the sectors. The setting had a conflicting character and lead to dispute of powers in sectors contra areas. (Helanterä & Tynkkynen, 2002 p. 34-35.). Soviet Union was by no means homogenous monolith, and neither is Russia, but in order to comprehend the present we have to make some generalisations.

3.5 The Prospects

After the collapse of the Soviet Union the regions have been on their own in many cases. The core, Moscow, enriched on the expense of the regions during the Soviet times and there is no evidence for tables to turn. A few strong regions have managed to sort out their businesses in a lucrative manner. It has not been only a matter of resources, but a certain degree of self-governance that these regions have managed to achieve has helped to attain success. Certainly, the resources play an important role, too. On a map, Russia is a rich country. Lately Russia has had considerable economic growth, mainly as a producer of raw materials. In the context of information society this is an important aspect. In the year 2003 only one among the 200 most remarkable enterprises falls to the category of information technology. Fifteen enterprises are categorised under telecommunication. (Expert, 2003.) The backbone of Russian economy is oil. In order to develop post-modern markets it is clearly in its place to invest in more sophisticated spheres of production.

The Russian government has faced the challenge of information society (consisting of not only creating a knowledge based economy, but also taking into account the social factors like education) and it has launched an "electronic Russia"- programme (e-Russia). The programme is planned to be carried out in phases and the time span is 2002 – 2010. (E-Russia, 2002.) In addition, some cities have their own strategies and scientific institutions have formed nets of co-operation. These are conducted more or less in a same manner as in other countries – presumably all industrialized states, at

least, have their own programmes⁴. The implementation of the programmes is a different story in each country, of course. Also, a detailed analysis of implementation of the e-Russia would be far too complicated to accomplish here, it would stand as an object of its own. Yet, it is worth bearing in mind, that there seems to be political will to tackle with the problematic of information society in Russia.

4 Work

In the University of Tampere sociology of work is of a major interest. Thus it was quite natural for me to turn to that way as well. In my work I will rely heavily on findings of Raimo Blom, Harri Melin and Pasi Pyöriä (2001). The aforementioned have done numerous researches in post-socialist societies as well. In my study, however, I will mostly refer to their conclusion about Finnish society. Blom and Melin took part in the “Social Distinctions in Modern Russia” –project (SDMR), which is the source of the data I have in use. Also, their study in Finland (2001) covers widely the same questions that the mentioned “SDMR”. Furthermore, Finland is often presented as a top information society, whereas Russia still has a long way to the top. As my cultural background is Finnish it would not be wise to deny the obvious context of my thinking. I am aware that my position is clearly “western”, so why not speak it out loud.

I see, in a sort of Marxian way, that the work is the core of society. The institution of work is the major arena in which an individual attaches to a society at large. Moreover, the arguments of significance of the change in the work structure in the context of information society are quite convincing (see for example Blom et al, 2001; Castells, 1996). Furthermore, in the case of Russia, work is of a special interest. The productive labour force allocated by socialist principles is quite a different organisation than that of a capitalist system. In a transition society it is inevitable for

⁴*E-strategies for each and every [UN member] country by year 2005 has been set as a goal of United Nations' World Summit of Information Society (WSIS, 2003, Plan of Action).*

the patterns of work to change. Here, we can of course try to trace the changes to a different origins, but if we take it, as Castells suggest (1996), that the information society is a capitalist society (i.e. that the *mode of production* in society has changed, but not the *type* of society), it is quite the same if we detect any reorganisation of work during the transition, it is bound to a information society.

4.1 New Demands of Work – Knowledge Work

The late 20th century was seen to possess some major challenges for organization of work. (Cf. Virtanen, 1987). “In the new, informational mode of development the source of productivity lies in the technology of knowledge generation, information processing, and symbol communication” (Castells, 1996, p.17). The new informational economy is not restricted by time or place, that is to say that 21st century capitalism is global in a new way. Accelerating speed of markets has put new demands for companies and consequently the organization of work has to reshape itself. “[T]he great majority of the new jobs require qualifications the industrial worker does not possess and is poorly equipped to acquire. They require a good deal of formal education and the ability to acquire and to apply theoretical and analytical knowledge.” (Drucker, 1994.)

Daniel Bell sees the development of the post-industrial society as an inevitable outcome of rising productivity (*ref.* Webster, lecture course). He sees the exploding numbers of people working in services as the future path of modern societies. Clearly, there are major share of vacancies in the service sector, but it is not quite enough to label a society as an *informational* one. The essence of knowledge work is creativity. This is the emphasis in most (if not in all) theories. Here, we have to remember that even though there are numerous terms to describe present day’s society those are by no means synonymous. So, the term post-industrial reflects different aspects of development than the information society. However, I try to keep the post-industrialism also in mind, because the industrialisation is often seen to annex the capitalist and socialist worlds (e.g. Toffler, 1980, p. 99).

One indicator of the information society is the rising amount of educated and skilled workers. These people are apart from a traditional worker. In the working process the collection, application and creation of information is salient (Sitra/Työterveyslaitos, 2000, *ref.* Blom et al. 2000). The phenomenon is detected by many, but once again, the definition lacks coherence. Robert Reich (1991), for example, uses the term symbolic analyst. Manuel Castells, on the other hand, prefers to refer to informational labour (*ref.* Webster, 2002). I, following the professors in my University have chosen to use the term *knowledge worker* (Blom, 1999, *ref.* Blom et al. 2000). Despite the ambiguous definitions, the essential idea is more or less uniform. Pyöriä (2001) sums up some frequently cited characters and defines knowledge work as “*planning and expert duties which concentrate on information technology applications and which require, in some amounts, creativity and innovativeness*” (Blom et al, 2001, p. 26)[translation NT].

4.2 The Knowledge Worker

The term knowledge worker was introduced by Peter F. Drucker in his Landmarks for Tomorrow (1959, *ref.* 1994). Drucker accentuates the role of these knowledge workers in the knowledge society⁵. He writes that this group of people will not be majority in numbers, but their relative importance is undeniable. And “even [if they are] outnumbered by other groups, the knowledge workers will give the emerging knowledge society its character, its leadership, its social profile. They may not be the ruling class of the knowledge society, but they are already its leading class”. As many others, Drucker too stresses the centrality of education in the knowledge society. Even though the institution of school is in a key position in the knowledge society, the basic training is not enough, but an individual needs constantly update his or hers skills and knowledge. In Drucker's words: [A]bove all, they require a habit of continuous learning”. (Drucker, 1994.)

⁵ Drucker refers to knowledge society instead of information society (1994).

4.2.1 About the Operationalisation of the Knowledge Worker

The knowledge worker is operationalised by Blom, Melin and Pyöriä (2001, pp. 26-29) and I shall follow their lead. In my study a knowledge worker is a person, 1) who uses computer in work, 2) whose work demands planning and creating and, 3) who has an education of at least of higher intermediate level. Those, who shall not fulfil all the criteria mentioned above, would be either *information workers* (that is lacking either criterion 2 or 3 or both) or *traditional workers*, which are also to be called *the others* (do not use computers) (ibid, 30).

There is some restrictions worth of mentioning regarding the presented operationalisation in the context of the contemporary Russian society. Given the state of flux in society, the criterion of education is worth of considering. It is known, that in the Soviet Union, the level of education was high, as it is in Russia today. Nevertheless, in a transition society the significance of education as an employing factor has declined. Firstly, restructuring of markets has opened new opportunities for those, who were the earliest. In order to gain some success one did not necessarily need a sufficient education. Some connections or sense of the moment and a good hunch was often enough. Secondly, a work in a corresponding profession for highly educated is often not economically enough to support the family. It is frequently heard that once so estimated professionals as university professors have to have a supportive job in order to gain living. Or sometimes even many of them.

In the Russian context the criterion of usage of computers is also ambivalent. Here affordability comes into question. The fact that one uses a computer could imply, more than technical sophistication of work, the financial status of the enterprise one works for. There surely are companies, which could use technical assistance, but have no means to acquire them. Even though by now in comparison to year 1998, the quantity of computers used in work has presumably enlarged noticeably.

However, the core of the information work is in creative problem solving (Blom et al. 2001, p. 29). To contemplate knowledge work as a new phenomenon underlines the qualitative change in the essence of work. Blom, Melin and Pyöriä remind us, that there is nothing new in the notion that people are more privileged due to their abilities

to adapt information. (Ibid, p. 221). However, it is the speed and saliency of the changes that make it necessary for social sciences to take part in discussion.

In some opinions these knowledge workers possess key positions in the working structure and in a society at large (e.g. Reich, 1991; see also Webster, 2002, p. 5, 115). And they are the ones to secure national competence. On the other hand, others underline that the knowledge workers are “just” part of ordinary labour force, workers of the information age. At least in their study Blom, Melin and Pyöriä (2001) wish to emphasize that the knowledge work is a phenomenon at every-day level. The success stories of the new winners represent only the top of an iceberg (Blom et al., 2001, p. 19). Sometimes it is referred to so called information professions (e.g. Paakkolanvaara, 1988), which are out of reach of my study. Those are to be kept apart from knowledge work as such. The information professions are professions, as it is said. The knowledge work, on the other hand, can be found within various professions. And yet, not all the professionals of the same profession are knowledge workers.

4.2.2 ”Have’s” and ”Have Not’s”

“The *truly fundamental social cleavages of the Information Age* are: first, the internal fragmentation of labour between informational producers and replaceable generic labour. Secondly, the social exclusion of a significant segment of society made up of discarded individuals whose value as workers/consumers is used up, and whose relevance as people is ignored. And, thirdly, the separation between the market logic of global networks of capital flows and the human experience of workers’ lives.” (Castells, 1998, p. 346.)

It is of particular interest in my study that these knowledge workers are seen somehow unique in the information society. More often than not, they are seen to possess privileged positions in society. Certainly the cause and effect chains are too complicated even to try to elaborate here. When stressed that the knowledge work is a phenomenon at everyday level, it is yet visible that power possessing groups in society are more or less knowledge workers. That is, not all the knowledge workers

are in privileged positions, but mostly people in privileged positions would fall to the category of knowledge workers.

Undoubtedly a person's work is interrelated to a person's life for larger extent. As Drucker (1994) claims, "[t]hey require different approach to work and a different mind-set". If that is true even in America, how does it turn out in Russia then?

4.2.3 Knowledge Workers in the Middle Class

Usually the knowledge workers are seen mostly as a middle class group. At least that is the case in Finland where, according to Melin, two thirds belong to the middle class (*in Blom et.al. 2001, p. 61*). The rest, one third of the knowledge workers are categorized as traditional workers.

The debate about the relevancy of the class research is vivid. Markku Kivinen accentuates that "[...] in general, the question of the middle classes is one of the most fundamental issues of sociological analysis" (unpublished, p. 11). I shall take this position too, because in the context of transition the social classes might gain more weight than is customary in western societies. In order to understand the process of transition, we need to find the possible actors. However, there are amounts of vagueness in defining *a social class*. "Few concepts are more contested in sociological theory than the concept of "class" (Wright, 2003). In Wright's word's one option is that "[...] class may be offered as part of the answer of a question: What *explains* inequalities in economically-defined life chances and material standards of living of individuals and families?" (ibid).

I see that the position at the market is related to one's status and it can provide privileges, or disadvantages for that matter. My understanding of a social class falls closer to a Weberian tradition than that of Marxian. (Cf. Allardt, 1983, pp. 110-115.) Yet, the two traditions do share some core elements. "[T]hey both reject simple gradational definitions of class, they are both anchored in the social relations which link people to economic resources of various sorts, they both see these social relations as affecting the material interests of actors, and, accordingly, they see class relations as the potential basis for solidarities and conflict" (Wright, 2003). The two are still

often seen quite contrasted, though. Wright (2003) points out that the basic differences are highlighted in the terminology of these traditions: “*life-chances* for Weberians, and *exploitation* for Marxists” (ibid). It is often seen that the Weberian view suits the transition societies, since it is sensitive enough to acknowledge more positions than antagonist model based on ownership. Furthermore, in a sense the process of “original accumulation” is still on its way in Russia, so ownership offers very little basis for analysis in this respect.

In my study I use the Wrightian typology of class, since it is ready made in the data.⁶ In Erik Olin Wright’s class theory the power and authority relations in the working life determine the class positions (1978; 1997, *ref.* Melin 2003, p. 179). Here we have to remember that the class position is not equivalent to the class situation. The position and the situation, even the size of the Russian middle class are under reconstruction and the process is a topic of vigour discussion (see for instance Nikula, 2002).

4.2.4 Russian Middle Class

On the basis of the data that I also have in hand, conclusions have been made that nowadays Russian society clearly has proletarianised (Nikula 2002, *ref.* Melin, 2003, p.179). Furthermore, Melin (2003) suggests that at present Russian society does not even offer structural preconditions for growth of the middle class.

In Russia, a lot of responsibility has, however, been put on the shoulders of the middle class. The middle class is often seen as the engine of growing wealth, in a way as it has been in the west. Still, it is worth to bear in mind, that in the Russian transition society the middle class is even less homogenous than in more stable societies (although a *class* is always abstract and thus by character could not ever even be homogenous, I would think) . Moreover, it is typical in present day’s Russian society that there are very little articulated interests amongst any group of people. Looking for reasons for that would be another study. And it obviously is a subject for many.

⁶ *Erik Olin Wright could be seen as a follower of the Marxian tradition. Theoretically, I intend not to offer a sophisticated class analysis. My task is “only” to sort out the position of the knowledge workers in the middle class.*

It is clear by now that the Soviet Union was more of a class society than it was officially admitted. It is worth of noticing, like Melin (2003, p. 179) reminds, that the Soviet Union was not a class society in the same sense that the capitalist countries. In the Soviet Union the power positions were determined politically, not according to relations to capital (ibid). In accordance with the ideology the class of workers were the praised one. The middle class positions were lowly respected and the class was relatively weak. However, the class structuration varied over time and should be in the historical context. (Kivinen, 2002.)

The peculiarity of the Soviet society was that the middle class was the subject of alienation. In the western societies it was the working class that became alienated in the process of industrialisation. (See Kivinen, 2001; 2002; 2002 (unpublished), p. 14.) In today's Russian society, I would guess, the class position is not sufficient enough to explain the feelings of alienation. Those feelings are common in most strata in the Russian society.

In this study I wish to contemplate how it turns in respect of knowledge workers in Russia 1998? Does the class situation cover explanations for emerging inequalities? Or are the classes so dispersed, that they lack coherence and thus could not be offered as a tool for explanation? Markku Kivinen (1987) brings forward a thesis about "the new middle classes". He suggests that "the core of the new middle classes should comprise all the workers, who possess autonomy of professional, scientific-technical of capital adequate type, regardless of ones managerial position" (ibid, p. 248). My hypothesis is that the knowledge workers form the core of the new middle classes and thus are an important object of study in the context of stratification of the Russian society. However, in the turmoil of transition no social positions have had a solid basis, so the reference to 'new' has a slightly different echo in Russia than for instance in Finland. In Russia new really is new, non-existent before, whereas in Finland it could be seen more like reformulation of the old and thus new.

5 Attitudes towards Something

Although the definition of a social class is abstract, it is usually supposed that people sharing a social position have something in common what it comes to view of life. At least they do have common interests to protect and that might generate similar thoughts in some respect. Taking values into consideration would require deeper analysis than would be possible within the framework of this study. And yet, it is not incontestable that the division that I operate with would show any results, since the transition time is characteristically unstable. Values are usually seen to have more or less stable nature, and they are thought not to change easily. Attitudes, instead, adapt more easily to surrounding circumstances. (Allardt, 1983, pp. 51-57.) Attitude is defined by Eagley and Chaiken (1993) as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor”(p. 1).

Eskola (1973) contemplates that in liberal ideology and bourgeoisie understanding of democracy is often attached a thought according to which it is needful to impact peoples' attitude in order to gain societal change. Once attitudes are changed, behavior will follow. Eskola continues that the results of balance theories show the opposite, though (p. 87). Relations between attitudes and behavior are widely debated (Eagley & Chaiken, 1993, pp. 155-216) and sometimes attitudes are denied to predict behavior (ibid, pp. 157-158). However, I am tempted to think that attitudes are not meaningless in guiding our actions. At least they form an interesting subject of study.

5.1 Society in Change

In a changing society people's subjective realities are reformed. There is a need for *resocialisation*. (See Berger & Luckmann, 1995, pp. 177-184.) For many the changing objective reality causes a need for reconstruction of identity. In respect of knowledge workers it is worth of bearing in mind that they are found in every field in society. In contrast to people sharing a same profession, the knowledge workers are bound together in an abstract level. Being a knowledge worker hardly plays any role

in one's awareness. The knowledge worker probably is not something that someone would identify him/herself if asked.

One can still assume that the knowledge workers encounter some similar life experiences due to the nature of their work, even though their working environments might be completely different. A group of knowledge workers cannot be contemplated from the perspective of occupational socialization, for instance (cf. Coffey & Atkinson, 1994). It is something else that explains the similar experiences. It is the larger societal environment and the individual's position in it. It seems obvious to me that people in different positions have rather diversified experiences about changes in transforming society.

It is for sure, that Russians had overcome numerous changes during the last ten plus years. Here by changes are referred to such, which are related to transition. One can find several opinions about the phase or duration of transition; I will not step in to that discussion. Also, the outcome of transition remains an open question. Usually the spoken goal is set to achieve democracy and market economy. For some opinions the transition is fulfilled for that part. As for others, it is not enough or not achieved. Some claim it impossible for Russia to achieve western standards productivity. Steve Rosenfield, (2004) believes that Russia will become "normal" as soon as Russians will adapt the values of enlightenment (which he sees not happening in our lifetime).

5.2 About Mental Climate in Russia

How do the experienced changes reflect in attitudes? Moreover, is there something that we could expect in future on the basis of found attitudes? Eskola (1973) reminds that even if we assume that the driving force of social change is usually technological and economic development, the change in peoples' attitudes, has relevancy in ensemble of social change (p. 290).

Exploring the mental climate of Russia Blom (2002) has come to a conclusion that "the mental climate in Russia is relatively homegenous" (p. 116) and it is a clearly a

combination of old and new (p. 116)⁷. Blom finds out that the market oriented mentality and institutional conditions for market economy are absent in the contemporary Russian society (ibid, p. 111). Interestingly he points out that the most emphasis on modern markets is found among young having high incomes, but a low social status (ibid, p. 116). How about the knowledge workers then? To be defined as a knowledge worker one has to have to be educated so they consequently fall to higher categories of social classes.

6 About the Research Frame

To sum up the presentation this far I wish to clarify the settings. I have explored different aspects which are on the background of the study in hand. Basically we can detect three layers in the frame of this study. In many respects my grasp is interdisciplinary. The structure of my thinking in this study could be differentiated as follows.

First, the utmost layer consists of the idea about the essence of society as such. Loosely an understanding of society could be interpreted within paradigms of any social science. I have certain assumptions concerning the nature of peoples' social organization that we call a society. Naturally I do have suppositions on the specific character of Russian society, too. The wider context of information society operates on this level proceeding to the next. The second layer falls closer to "pure sociology" and is most evident in discussions about social classes and power positions. On the third layer, there is the social psychology - the core of the study, the research question (*do the Russian knowledge workers have a certain profile?*) could be seen as an attempt to figure out the interaction between individual and society. Although the question is rather simplified in form, it does have many dimensions. The answer to my research question could be interpreted from various angles.

⁷ *The conclusions are based on SDMR-data.*

All the layers are connected by my personal attempt to comprehend Russia. So in a sense, this is a very personal study although it might appear more cursory.

7 Methods

This study is a quantitative, descriptive one. Using quantitative data I intend to take a peek at the present day Russian society. Instead of covering a whole society, I focus in the labour force. The main interest lays on a small, specific group, which I call the *knowledge workers*.

In my study I divide the working population in three groups: the knowledge workers, information workers and the others. The basis for the division is presented elsewhere in this paper (chapter 4.2.1). Using this division I hope to trace some vital differences among Russians. For its part, my study will help to understand the social changes and the ongoing transition and even more it is directed to find divisions between social groups. I am not in a position to make social forecasts. However, speculating on the relations between some groups in the working process and clarifying the positions they have, we may have an idea of one possible path of development.

7.1 The Data

The research is based on data collected for “Social Distinctions in Modern Russia” (SDMR). The survey was carried out by Finnish-Russian collaboration in the field of sociology in the year 1998. On Finns’ behalf the study was fulfilled by Raimo Blom, Harri Melin and Jouko Nikula from University of Tampere and by Markku Kivinen from the Aleksanteri Institute. The Russian side was operated by the Academy of Sciences’ Institute of Sociology. The main outcome of the study was a book called “The Restoration of the Class Society in Russia?” edited by Jouko Nikula (2002). In addition, several articles based on the SDMR data have been published, both in

Finland and in Russia. As for me, I have written my seminar paper basing on this survey.

The survey was conducted all over the Russian Federation. The total number of interviews is 2506. I use 1294 of them, which is the share of working population. The questionnaire consists of 130 questions of multiple choices, and covers a wide range of aspects and factors in the social field⁸. From the variety of questions I have chosen some fifty as relevant for my study. The detailed description of the “SDMR” is presented in the appendix (II). Unfortunately the original questionnaire is too large to present here. It consists of 39 pages and for the purposes of my study I see it irrelevant to attach them all.

7.2 Data Analysis

To analyze the data I use the SPSS –program. The combined variable *knowledge worker* allows me to do numerous cross tabulations. In addition I will operate with factor analysis and comparing means. The data have been handled by researcher Pekka Syrjälä, so for instance variables knowledge worker and middle class positions (according to Wright) are ready made. In addition I have made some reclassifications, mostly by combining variables. It is proper to mention, that not all the statistics that I am going to present are trustworthy in a statistical sense (I have used the Khi-square to test the probability). That is mainly because of the remarkable size difference among the groups (knowledge workers N=98, information workers N=76, others N=1120). However, since my task is to outline the possible profile of the knowledge workers I consider it necessary in many cases to observe the whole field instead of combining classes.

⁸ *The questionnaire is, of course, in Russian language. It has, however, been translated in English. All question and answers of multiple choices, presented in this study are literal from the mentioned translation.*

7.3 Validity and Reliability Issues

The fact that my study is a secondary analysis has its pros and cons. The number of the interviews is something that I clearly could not have achieved by my self. 2506 interviews is quite a good share of population of the Russian Federation. Furthermore, the working group, both the Finns and the Russians, are acknowledged professionals, so it makes it easier for me to rely on the data. However, as I am not familiar with the process, I can only have good guesses concerning the reliability.

The interviews were made person-to-person. It seems to me, that there is no long rooted tradition in gallup-type questionnaires in Russia⁹, so one can only hope that questions were understood correctly and answered honestly. That is the doubt always present in this kind of research, this is no exception. However, I have noticed some confusion in the frequencies. Most evidently those have been resulted from data entering.

What concerns me most, in the question of reliability, and it comes to validity as well, is the time the interviews were conducted. Firstly, the year 1998, as we might remember, was not a steady one. The data were collected in October, so in a way the devaluation of the rouble in August had had its impact and people had had time to react. Given that I have included questions on economic situation, how reliable are the results to make general conclusions? Secondly, at the time of my analysis some five years have passed. Aren't the changes related to the development of information society particularly rapid? The computerisation of Russia has had a great speed, at least. Still, it seems to me that for the perspective that I have the data are still useful. As I try to picture a profile of a knowledge worker, it would be fair to believe that it would not change so fast. There might be a larger proportion of people working with computers, but we have to remember that using computer does not qualify as a knowledge worker. The structure of work does not change overnight. However, I shall keep these doubts on my mind and bring those even to the interpretation. To overcome the mentioned issues, one has to do further research.

The validity of the study is seemingly in order. Although I have had no impact, whatsoever, on the questions asked. It leaves me only with the choice, which question to pick up for scrutiny. The variety of questions is large. There is plenty of unused potential in the material. Here, being a secondary analysis, the interaction with the data is at the minimum. In a way it strengthens the validity. The questions that I would like to ask have to rise from the data, since there is nowhere else to look for. Evidently, there is a risk of picking up the wrong questions, but shall I avoid that.

7.4 About the Causality

In the framework of this study I intend not to offer explanations of causal relations as such. The consequences of bringing a computer as a material object into a working life are beyond my study. Also, Castells reminds: "...we know that technology *per se* is not the cause of the work arrangements to be found in the workplace", instead "the impact of technology can only be understood in complex interaction within the social system..." (1996, p. 256). Furthermore, even though I assume that certain divisions among the Russian population are due to a distinct standing in a structure of productive work, I use those results more as a test, than I would be willing to guess the deeper connections. In other words, as mentioned before, this study is about finding out how the Russian society looks like in the light of information society thematic. Information society provides me a theoretical background, to which I will reflect my findings on Russian society. As it is known for anyone involved to discussion about information society, the concept is still vague and undefined. Here, I wish to draw attention to notions about epoch causality expressed by Timo Toivonen "... and then the phenomenon is explained, for instance, by referring to a certain epoch i.e. era, and the existence of the phenomenon is explained by epoch, even though the phenomenon itself is one of the definers of the epoch in question" (1999, 52-53) [translation NT]. By this I refer to ongoing discussions about defining society's standing in the process of informationalisation. It is quite often, I would say, that in order to decide whether the society in question is an information society, the quantity of information workers is used as a yardstick (or people in information

⁹"VTsIOM", which is kept reliable in western opinion, was established during the perestroika years.

profession for that matter). In a way also I suggest that we could make some conclusions basing on the share of knowledge workers in Russia. At the same time we say, that in order to fulfil the new demands by the markets, economy, whatever globalisation, the structure of work has to change. And it is the labour force that stretches to knowledge work.

Whatever the measurements would be, it is quite clear that Russia is not an information society. Whether it will be one, remains an open question. This study is a preparatory report for further analysis of the human factor in the information society.

8. Results

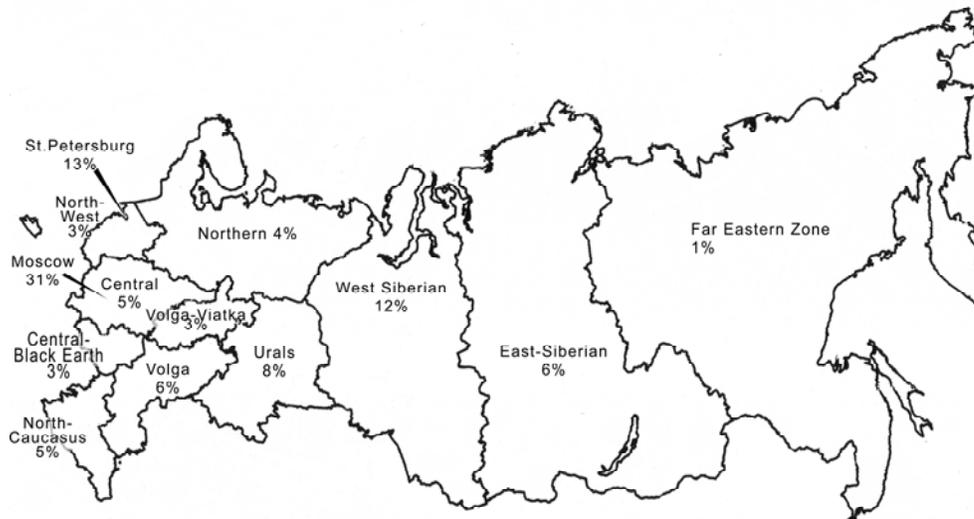
8.1 Demographics

The share of knowledge workers in the data, in year 1998, was 8 per cent of labour force. As information workers could be labelled 6 percent. The rest, 86 per cent of working population, are categorised as traditional workers, also to be called the others. The knowledge workers are quite evenly male (48 %) and female (52 %). In the data they are by and large Russian by nationality (94 %). As we know, that there are more than hundred nationalities in the Russian Federation, it is quite impossible to sort them all out in the framework of this study. The second largest group in the data are Tatars (4 %), having 4 per cent of knowledge workers among them. That is two per cent within the knowledge workers. Jews by nationality are also two percent. It is striking, that among the Jews interviewed, a half could be labelled as knowledge workers. But the *numerus* (N) is tiny, so there is very little that we could say. The other groups observed, Ukrainians, Chuvash and Byelorussians, do not have any knowledge workers in this study. One per cent were something else (not identified) by nationality. (See tables 1 and 2 in the appendix I.)

The classification by age shows quite an even structure reflecting the overall lines. However, the knowledge workers are more often over fifty than in average (19% of knowledge workers are over 50 years whereas in total 15% of working population have reached that age). Still, that is the smallest cohort in total. The largest age group both in total and among the knowledge workers is 41-50 years. So, over half of the knowledge workers are over 40 years old, whereas within the others and the information workers the majority is less than forty by age. So the knowledge workers tend to be slightly older in age that one perhaps would expect. Still, as mentioned, the groups are rather even by size. (For details see table 3 in the appendix I.)

As mentioned in the chapter 3.4, the development of the country is uneven. The core and the periphery are different contexts. I guess it goes without saying, that Moscow and St. Petersburg are considered as a core. Some forty percent of knowledge workers live in those cities. One third of Muscovites can be considered as knowledge workers, and in St. Petersburg that goes for one fifth. Still, in the data, knowledge workers are found in all over the country. Russia is divided into 11 economic districts, which base the presented division. Moscow belongs to the central and St. Petersburg to the northern district, but in the data they are held as separate cases. It is quite understandable given the economic significance of these two vital cities. Furthermore, they both possess a status of subject among 89 subjects of the Russian Federation. Beside the capitals (St. Petersburg is often called the northern capital, or the cultural capital - after all it has a long history as capital, perhaps that is still emphasized in those references) West- Siberian zone has over ten percent of knowledge workers. The Ural region has the average of 8 percent of knowledge workers. The rest of the country has less than eight percentages in each district. However, it is the European part of Russia, where knowledge workers are most often found. (See map)

Picture 1. Knowledge workers by area, a map of the Russian Federation



The distribution is probably explained by the production structure inherited from the Soviet Union. The existing production plants largely determine the type of demand of labour force. All the economic districts do have a share, even if a small one, of knowledge workers. We can also take a closer look to the types of settlements the knowledge workers live in. Even more often than in St. Petersburg (13%), the knowledge workers live in towns of 10-49 thousand by population (17%). The bigger (50-99 thousand) towns have attracted 12 per cent of knowledge workers, while in the biggest towns (100-499 thousand people) there are only 3 percent. The rest of the knowledge workers live more or less evenly in big cities (million or more, 6%; 500-999 thousand, 8%) and town type settlements (7%) or bigger villages (more than 100 households, 2%). Not surprisingly, there are no knowledge workers in the smaller villages (less than 100 households).

8.2 Social Profile

The knowledge workers are married just a little more often than people on average (81% vis-à-vis 75% in total) and four fifth of them have children (half of the

knowledge workers have only one child, whereas in the total population it is more common to have two, but there are only slight differences). Eight per cent of knowledge workers say they are single. In the Russian context this has perhaps nothing to do with the age since Russians tend to get married at younger age, than we do nowadays (although evidences of change have been detected, and it is most certainly related to the larger problematic in question in this study too).

In this study one of the criteria of a knowledge worker is to have an education of at least higher intermediate level. So when asked the field of education the data is reduced in one third. For some reason not even all the knowledge workers have answered on question about the field of education. However, on the basis of what is left we can notice that the knowledge workers come mostly from technology (50%). One fifth have their educational background in economy training. (Table 1)

Table 1. Educationl profile within the type of work (%)

Field of education	Knowledge workers	Information workers	Others	Total
Technology	50%	47%	33%	38%
Economy	21%	17%	9%	12%
Law	6%	11%	3%	5%
Social sciences	1%		3%	2%
Other humanities	10%	8%	27%	22%
Natural sciences	5%		12%	10%
Agriculture	3%	3%	7%	5%
Military	3%	8%	1%	2%
Other	1%	6%	5%	4%
Total	100%	100%	100%	100%
	N=80	N=36	N=265	N=381

Khi²=49.7, df=16, p<.001

8.3 Knowledge Workers at Work

Is there something in general that we could say about the working places of knowledge workers? According to data the largest employing industry branch for knowledge workers, as for in total too, is that of services. It is worth of noticing that among the information workers service sector employs considerably more seldom, than the average would be. Industry and construction employ every fourth knowledge worker, whereas one fifth is situated either in finance and trade and another fifth in state administration. There are no knowledge workers in agriculture and forestry, and very few in transport and communication. (See table 2)

Table 2. The main industry branch within the type of work (%)

Industry branch	Knowledge workers	Information workers	Others	Total
Agriculture and forestry		4%	11%	10%
Industry and construction	24%	27%	20%	21%
Transport and communication	5%	15%	13%	13%
Services	33%	17%	36%	34%
Finance and trade	19%	11%	7%	8%
State administration	19%	26%	13%	14%
Total	100% N=95	100% N=74	100% N=1109	100% N=1278

$\text{Khi}^2=52.3, \text{df}=10, p<.001$

In a more detailed observation it can be detected that the most knowledge intensive branches are those of finance, credit or insurance as well as research and development which have largest share of craft in knowledge work. This is hardly a surprise. In finance etc. nearly sixty per cent of people are working with knowledge. R&D has nearly half of its people in the knowledge work positions and in mass media there is a quarter of employed in these positions.

A great proportion, nearly 70 per cent, of knowledge workers perform in small and medium size enterprises (SME)¹⁰. Yet, very small enterprises, having less than ten employees, employ only four per cent of knowledge workers. In addition, very large corporations (over 500 employees) employ one fifth. Nearly sixty per cent of the enterprises that the knowledge workers work in are owned by state, this is a little less than the total share of the state owned enterprises in the data (67%). Private organisations, having in total 11% of employed in the data, employs approximately one fifth, the rest 23% are situated in joint stock companies (21% total). Even if we consider the size difference, it becomes evident, that the private sector is a surprisingly small employer of the knowledge workers (12% of its staff falls to a category of knowledge worker). This is presumably due to a Russian way of organising the business. In five years, this might have changed, since the “original accumulation” is still on its way.¹¹

Introducing the concept of a knowledge worker I speculated on the criterion of computer usage in respect to wealth of an organisation. It is remarkable here that nearly one fifth of the knowledge workers consider the finance of the organisation they work for good or very good. In total this is considered only by eight per cent. The financial situation is evaluated as average by nearly a half (45%) of knowledge workers (32% in total). Still, bad or very bad condition is identified by 35% of knowledge workers, whereas among the others this state of affairs is familiar to 62% and even to 47% among the information workers (See table 3). This is of course only subjective rating, but it could imply the setting at large.

¹⁰ “The Commission's suggestion that SME's employ 250 persons or fewer provides the basis of a 'common definition' and a profile of Europe's SME's.” Simon Mercado, Richard Welford & Kate Prescott (2001). *European Business*. Prentice Hall

¹¹ It is worth of noticing, that in the data no single respondent identifies him- or herself as self-employed!

Table 3. Financial status of organization within the type of work (%)

Finance	Knowledge workers	Information workers	Others	Total
Good or very good	18%	17%	6%	8%
Average	46%	37%	31%	32%
Bad or very bad	36%	46%	62%	60%
Total	100% N=92	100% N=71	100% N=1073	100% N=1236

Khi² =42.3, df= 4, p<.001

8.4 Position in Management Hierarchy

Knowledge work is often demanding and independent. The knowledge workers are expected to fall to the category of managers far more certainly than would be the position for the others. That is the pattern in Russia, too. The fourth of the managers are knowledge workers. Over half of the knowledge workers are managers whereas for the others that is the case for less than a fifth. (Table 4)

Table 4. Management category within the type of work (%)

Management category	Knowledge workers	Information workers	Others	Total
Manager of managers	10%	1%	2%	3%
Manager of non-managers	46%	23%	16%	19%
Ordinary worker	44%	76%	89%	79%
Total	100% N=95	100% N=75	100% N=1115	100% N=1285

Khi²=77.2, df=4, p<.001

The management position is related to the issues of autonomy, which is often used to testify one's class position. According to Wrightian division (ready-made in the data, presented in chapter 4.2) one third of the Russians in the data belongs to the middle class. The knowledge workers are strongly middle class positioned; eighty percent of

them belong to the middle class (see appendix I, table 4). So in my study the knowledge workers form a fifth of the middle class.

8.5 Satisfaction at Work

In addition to facts of a more general character I am interested in more specific descriptions. Given the narrow perspective and intention to only scratch the surface I have to confess, that the following characterisations are based more to a hunch than to a deep academic contemplation.

In a present day's society, which is centred on work, individual's personal satisfaction in ones job is essential. Of course, there are plenty of other arenas to fulfil one's urges, but I see no reason to doubt that the essence of work is relevant. That is, at least in our society. The Soviet Union had a more or less distinct tradition of work. One of the features of our time is, however, that many claim to work for work's sake, not only to earn one's living. Here, I will first observe the correspondence between one's education profile to one's job. That is by no means a sole indicator of personal satisfaction. Indeed, it might even be totally misleading. It is not against all odds to enjoy a totally different kind of work than one has the education for. Still, I take it is quite probable that there would be a correlation, if there would be a direct question to measure that. Since there is not, I need to choose a longer path. If the knowledge workers are highly trained professionals and there is, in the labour market, a constant shortage of them, one would expect the knowledge worker to be in a position of making choices. Furthermore, one could expect them to pick up a pleasing and fulfilling job. The skills are at the best use, when the employee is comfortable, that is the mantra in many fields nowadays. The days are gone when a Coca-Cola automates were enough to make an employed to feel special, and nowadays the means to attach the personnel are plentiful and imaginative. As there is a known tendency to easily switch jobs, companies have had to react. That is, once again, one picture in our society.

The data show, that only one fifth of knowledge workers see a correspondence between their education and the present job. The correspondence is at the same level

within the information workers, whereas it is higher among the others (1/3). Even 66 percent of knowledge workers consider no correspondence with the mentioned factors. The rest, 13 percent say that their education profile partially corresponds to their job. This could indicate the instability of the Russian labour market as half of the knowledge workers have yet been in the same work for the last five years, so there seems to be no will (or no chance?) to improve the situation. Perhaps the job is seen as good as any, and it is considered the most important to have one. One fifth of the knowledge workers did not work five years ago, and the rest of them, 30 per cent have obviously changed working places. When asked for main reason for the change of job, none of the knowledge workers reported to have lost their former job, while this was the most common (28%) reason in total. The major reason (59%) for the knowledge workers for changing a job was that they found one with a higher salary. The reason was the same for 33% of information workers and only 17% for the others. So clearly there is more money on the move in the circles of knowledge workers. Some fourteen percent of knowledge workers said they had found a job with a better employment of skills. This fourteen percent make one third of the total (of the knowledge workers). There is no single information worker in that category.

All facts mentioned above clearly indicate a different market position between the groups. And yet, the different situation in working life becomes even more palpable, when the respondents were asked about the changes in their job in five years. The following observation includes some of those knowledge workers who have announced to have changed the job (that is the changes are not in the same job). Apparently those have understood by questions changes of a more general character, which, of course, is also interesting. The aspects of change asked were: possibility to use skills and knowledge, salary level, relations between employees and managers, social benefits, promotion possibilities and technical sophistication of work, and the answer categories were: 1-worsened, 2-no change or 3-improved. It seemed to me to be in place to structure a new sum variable (in reliability analysis $\alpha = .77$) to measure changes for better. Overall, the knowledge workers notified considerably more of an improvement than the others. The most positive changes were reported by middle class positioned knowledge workers. (See figure 1.)

Figure 1. Changes in working conditions by class position within the type of work (mean)



(N=731)

Changes in work in five years: 1= for worse, 2= no change, 3= for better

F=28.5, df=2, p<.001

The low correspondence between the education profile and one's job needs still further inquiry. Eighty-two percent of the knowledge workers claimed to have maintained their qualifications. Among the others these are somewhat less in percentages (77%). The figures are rather high considering the low quantity of people in jobs which they hold as correspondent to their education. Still, the one fifth (in total) sees loss in maintaining ones qualification (of information workers 11%; knowledge workers 18% and the others 23% notify a qualification loss). Within this group the most common result, by far, is to identify that one's main job is not in line with qualifications (57% in total and within the information workers the figure is as high as 88). Here I would guess that the qualification is by and large synonymous to education. Of course, there are other ways to acquire qualifications, but the education is the most used channel.

So, to sum up, there seems to be a request for mobility. Thus, it is quite interesting that mostly people are in the same positions as five years earlier. Also, given the state of flux in transition society, there should be many options open. Obviously, there is still need for restructuring the labour market to get the demand and supply to meet. I wish to recall that in turmoil of transition, education is not as evident of a factor at the labour market, than we are used to think in our society. So reflecting these findings it could be in its place to ask whether we should use education as a criterion at all. I am convinced that we should. A transition is not (or at least should not be) a permanent state of affairs. Whatever the Russia's road will be, it is for sure, that it cannot be of any success without educated population. Furthermore, at present days, it simply is not enough if one has an education - it has to be up-to-date. Life-long learning is an often heard adage of information society, but is it also in Russian society?

Table 5. Plans to continue education within the type of work (%)

Have plans to continue education?	Knowledge workers	Information workers	Others	Total
Yes	50%	32%	18%	21%
No	50%	68%	82%	79%
Total	100%	100%	100%	100%
	N=86	N=68	N=1023	N=1177

$\chi^2 = 55.2, df = 2, p < .001$

As we can see in table 5, the knowledge workers do have plans to continue education considerably more often than the other two groups. Even though the group of knowledge workers is roughly divided in two, those who have no intentions to continue are far rarer among the knowledge workers than in total. The further inquiry shows, that mostly people are going to continue education in order to cope better with the main job (40% in total). Within knowledge workers that is the reason for 56%. If we remember that a great majority indicated that they have been able to maintain qualifications (thus there should be no urgent need for one to enhance the level of education), the present finding could imply the ethos of information society, the life long learning. Other often mentioned reasons for plans for further education were: "to master modern equipment" and "to find a better-paid job". Both had 14% of

perceptions within the category. On the other hand, only 4% percent of information workers and 6% of the others identified the need to master modern equipment as a reason. I would say that it looks like, at least at this point, there was no tendency to think that the computers are to come as essential tools to each work place. That is, if by modern equipment are referred to computers and such. An allurements of bigger salaries was the reason for a fifth among the information workers and the others.

8.6 Income Structure

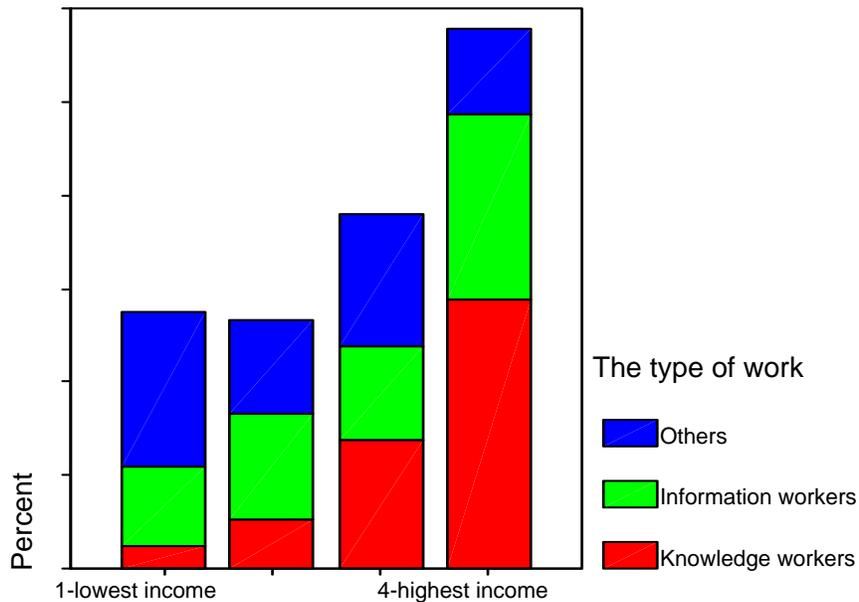
Yet, we have to explore one significant factor defining social inequality. The unequal position between the groups in question is in a most simple way presented in terms of earnings and related topics. However, I wish to recall alertness here, since the year 1998 was exceptional in monetary terms even in the context of Russian transition.

First, we can compare the monthly salaries, since it most likely is the main source of livelihood. The knowledge workers are paid considerably more generously (median 1250 roubles¹² (rbl)) than the information workers (median 800 rbl) or the others (median 600 rbl). In total comparison the median of the salary is 607 roubles (mean 874, standard deviation 908 rbl) while the mode is 1000. The average figures are revealing as such, but in order to have an overall picture, it is useful to divide the salary earners into quartiles. Knowledge workers appear to fall remarkably often into the quartile of highest earnings. (See figure 2)

¹² At the end of 1998 RUR/USD =20.7

(http://www.stat.fi/tk/tt/ibs/lahialuetietokanta_venaja.xls)

Figure 2. Income quartiles within the type of work (%)



Quartiles by monthly income

N=1238

However, there is a great diversity within the groups as well. The salaries range from 30 to 10 000 roubles. Between the regions the differentiation is also considerable (see appendix I, figure 1). All in all, Moscow and St. Petersburg are more expensive cities to live. Evidently knowledge workers have better possibilities to pay what is needed in capitals, since the family's whole earnings also show similar evidence of better livelihood. Over 70% of knowledge workers reported the family's gross monthly income to be more than 1500 roubles, whereas for the others that was the level only for 37%. Also, sixty percent of information workers fall to categories of income more than 1500 roubles. In order to understand, what the incomes mean here, we need to look what was the money good for in 1998. (Table 6)

Table 6. Income level by the type of work (%)

Income level	Knowledge workers	Information workers	Others	Total
Nutrition is a problem	6%	8%	15%	13%
Purchase of clothes is a problem	12%	27%	33%	31%
Durables are a problem	46%	32%	38%	38%
Truly expensive goods are a problem	29%	32%	12%	15%
Real estate is hard to acquire	6%	1%	2%	2%
No material problems	1%			0,1%
Total	100% N=98	100% N=76	100% N=1120	100% N=1294

$\text{Khi}^2=74.4, \text{df}=10, p<.001$

While interpreting the table above (6) it is worth of noticing that it is labelled as income level (in the data)? We can have several opinions if it really does measure the income level. I would say that indirectly it does tell us something about the income level: if one has very little money (supposedly a low level of income) it is hard to acquire expensive goods and vice versa. However, the form of question and choices of answers are really subjective experiences.

Still, in table 6 it seems that the knowledge workers are a little bit better off, when it comes to acquiring food and clothes. Yet, the knowledge workers seem to have problems more often in buying more expensive goods. By durables are here meant goods such as TV-set or/and refrigerator. Truly expensive goods refer to car or summer cottage and alike. In the questionnaire the choices for answer were richer in words than presented here. This table indicates that the better salary that the knowledge workers receive is enough for everyday living, but it does not provide a considerably better standard of living. What are then the material standards that the working Russians have achieved?

The questionnaire includes question on material possessions. The items listed are car, TV set, VCR, Hi-Fi, furniture ensemble, summer cottage, apartment, microwave, computer, camcorder, washer, vacuum cleaner, dishwasher, pager or cellular phone and refrigerator. On the basis of sum variable it looks like the knowledge workers have purchased, with their higher salary, more goods than the other two groups. (See table 7.) Bizarrely it is so even though they just have reported to have difficulties in acquiring durable (table 6).

Table 7. Material possessions by the type of work (mean)

The type of work	Mean	N	Std. Deviation
Knowledge workers	,4242	98	,14316
Information workers	,3571	76	,12178
Others	,3282	1120	,12117
Total	,3372	1294	,12588

F=28.5, df=2, p<.001

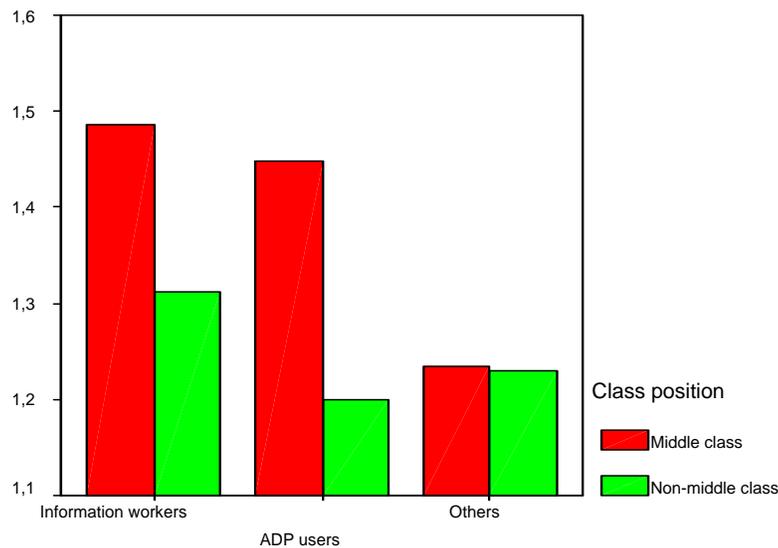
Here, we have to keep in mind that Russia is quite new as a consumer society. The consumption during the Soviet times was obviously a subject itself. In shops, there might have been nothing to buy, although practically everything was possible to get through the right connections.

On the time of survey, some seven years have passed since the collapse of the Soviet Union. How do the respondents reflect the present standard of living compared to the last Soviet times? When asked about the change in well being since 1988, a great majority indicated worsened conditions of living (84%). Also within the knowledge workers that was the most common story (60%), yet we can notice that the figure is considerably lower within the knowledge workers than in total. This might imply a current trend of thinking in Russia. It is impossible to speculate here, if the living standards have really lowered, or if the past is mystified or if the expectations for future people had at the beginning of transition did not materialize. However, there has been a change for better noticeably more often for knowledge workers (23%) than in total (7%). No change in well being was denoted by 9 percent in total, while within the knowledge workers the living conditions had remained more or less unchanged in

17 percent of cases. Here, we could have guesses about the respondents' position in the Soviet society. That would be very interesting indeed, but within the framework of this study it is quite impossible to go further in analysis.

In the light of the data it looks that financially the knowledge workers really are considerably better off than the rest of the working population. When asked if the respondent was satisfied with one's living standards, the knowledge workers admitted more often than the other two groups. Not even a middle class position explains the satisfaction as well as the belonging to a group of knowledge workers, although among the information workers the middle class positioned were notably more satisfied than those who do not belong to the middle class. Here, the class position and the type of work combine effects and that is clearly seen among the knowledge workers. (See figure 3)

Figure 3. Satisfaction with living standards within the type of work (mean)



N=1283

1=Fully dissatisfied....5=Fully satisfied

Even though in the figure (3) it is seen, that the knowledge workers were clearly more satisfied with their living conditions, it is worth noticing that the mean is still rather low. Even the knowledge worker are below the value 3, which reflects partial

satisfaction (partially satisfied, partially not). Only six percent of knowledge workers did report that they were satisfied with their living conditions.

So the respondents were rather dissatisfied with their living standards (figure 3). Do they have any plans to improve their well-being, then? Half of them do have, the other half is settled with the present conditions. The knowledge workers plan even less often to take some measures for enhancing the standard of living than the people in other two groups. (Table 8.)

Table 8. Plans to improve well-being (%)

Do You have plans for improving Your well-being?	Knowledge workers	Information workers	Others	Total
Yes	36%	42%	50%	48%
No	64%	58%	50%	52%
Total	100% N=98	100% N=76	100% N=1120	100% N=1294

Maybe the knowledge workers yet are more satisfied with their living conditions if they are not looking for change. However, it would be an oversimplification to make any conclusions based on this table. Furthermore, it is still nearly forty percent of knowledge workers that do plan to take an action in order to make life better. And it has to be kept in mind, that even if the knowledge workers, too, were mainly dissatisfied with their living standards, they were not as much dissatisfied as were the information workers or the others. Nevertheless, the setting turns more interesting when we look at the expectations one has considering the near future.

The working population in Russia seems to be quite pessimistic. Almost sixty percent of the respondents believe that their well-being will even worsen in the year 1999. The difference between the groups is not too extensive in the negative or the positive prospects. The information workers turned out to be the most optimistic group: twenty per cent were looking for brighter times ahead (knowledge workers 15%, others 11%).

Summing the three dimensions; satisfaction with the living standards, plans to improve well being and future expectations, picture a quite gloomy atmosphere. The satisfaction with the living standards and the evaluation of the well being in the next year do correlate positively, although not very strongly ($r=.35^{**}$, $p<.001$). That is, those most satisfied are also the ones who do have their hopes up, and vice versa. The same correlation remains even when the “plans to improve well being” is controlled for. Perhaps an individual takes the surrounding circumstances as something one cannot change. So it does not really matter, if one plans something. Russians tend to love the expression describing the first years of transition: “we longed for doing better, but it turned out to be done the same way as always”. In this respect, the knowledge workers are not in notably privileged positions. The insecurity of a transition society seems to concern them almost as much as it does the rest of the working population. How did the felt insecurity affect the mental climate among the Russian wage workers in the year 1998?

8.7 Attitudes

The SDMR data cover a wide range of aspects concerning values, opinions and attitudes. I intend not to explore them all. I chose to concentrate on question outlining important aspects in society: “In our country there is a discussion of what directions of development of our society should be. From Your viewpoint, to what extent the directions listed [below] are important?”. Answers on Likert’s scale varied from “no importance at all” (1) to “very important” (5). To sort out possible typologies I used the rotated factor analysis. The factors turned out to be quite diversiform. Several variables were charged in two factors. Some of the variables fell off the list, since the charges were so vague. However, I managed to structure five factors, which I named after the apical variable in a grouping (see table 9)

Table 9. Factors of important aspects in developing society

	I	II	III	IV	V
Development of democracy				.773	
Development of market				.854	
Imposition of strictest discipline		.444			.485
Privatization				.614	
Entry into the world economy				.739	
Full employment	.433	.504			
Campaign against crime	.465	.582			
Social support of the poor	.698				
Securing individual rights	.749				
Prevention of the disintegration of the country		.585			
Protection of ethnic Russian's rights					.670
Development of spirituality and human qualities	.446		.510		
Improvement of inter-ethnic relations			.569		
Material equality of citizens					.749
Reunification of former Soviet republics			.438		.457
Fighting bureaucracy	.530		.546		
Protection of family and birth rate	.603				
Restoration of production		.742			
Restoration of agriculture		.808			
Fighting alcoholism and drugs	.583				
Fighting corruption	.491		.509		
Fighting foreign capital and invasion			.530		
Strengthening the rouble			.673		

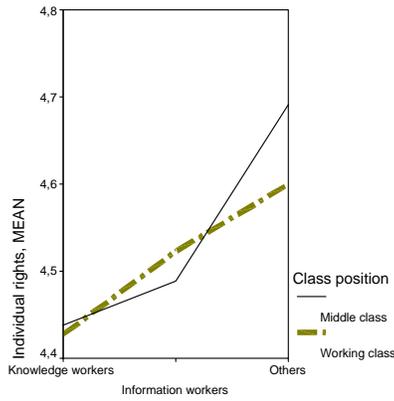
Extraction Method: Principal Component Analysis; Rotation Method: Varimax

In the first factor (Individual rights) correlate variables which are valued dearly in the Nordic welfare state. This factor visions a Russian welfare state. The second

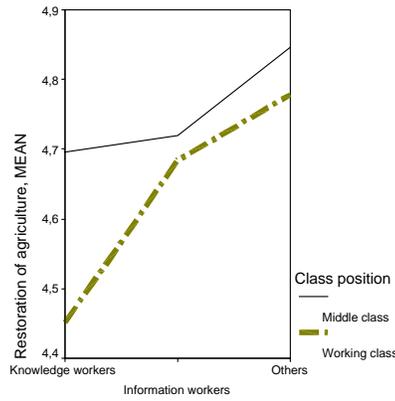
(Restoration of agriculture) factor seems to emphasize strong and coherent Russia. The third factor (Strong rouble) is perhaps the least univocal: on one hand it claims soft values of spirituality and on the other it demands unflinching fight in the economic sphere. The fourth factor looks the most unequivocal and the label “Market economy” conveys the idea pretty clearly. The last factor, “Material equality” echoes for Soviet past on its behalf.

From this basis I structured five new variables (sum) to compare the contents of factors between the groups. In addition I explored the groups according the social classes in order to consider the position of knowledge workers within the middle class. The groups clearly differed in opinions. It seems safe to say that opinions varied mostly according to the type of work. Only in the factor labelled as “Restoration of agriculture” the class position seemed to be stronger in effect. Furthermore it basically seems that the knowledge workers were not too active to have strong opinions for any factor, which is, for my opinion, quite unexpected. (See figures 4-8)

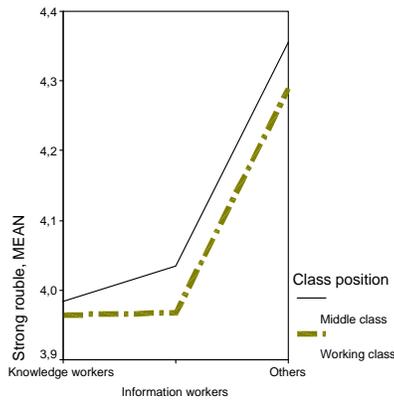
Figures 4-8. Factors of attitudes within the type of work, by class position (means)



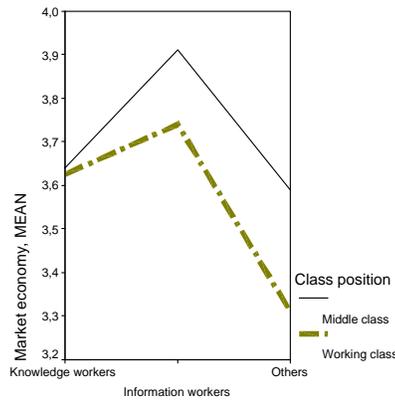
N=1106



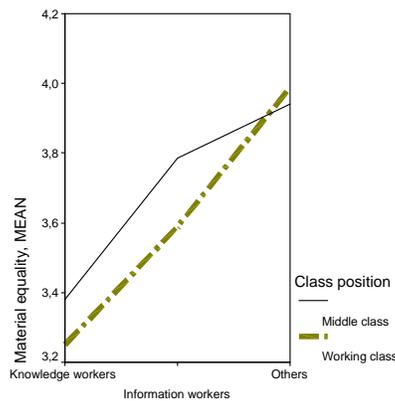
N=1139



N=904



N=989



N=950

It is worth of taking the factors and the means under a closer scrutiny (Table 9 & figures 4-8). The first factor is named after the variable “securing individual rights”.

The knowledge workers are the ones to least agree with the importance of this factor. In consideration it is, however, worth of noticing, that also the lowest mean (that is among the knowledge workers) is rather high. So, basically, in the light of these results, it could be said, that most of the representatives of Russian labour force would like to see Russia to take steps into forming a welfare state. The variables correlating in the first factor calls for a functioning state apparatus (fighting bureaucracy and corruption) and healthy citizens (fighting alcoholism and drugs, development of spirituality and human qualities) as well as co-operation of these (protection of family and birth rate, social support for the poor, campaign against crime). Individual ought to feel safe, as it is appraised in the declarations of welfare states (full employment, securing individual rights).

Also the second factor, restoration of agriculture, has seemingly a high importance. Here, the working class positioned knowledge workers agree lesser than the rest. This is the only factor where the class position has substantial effect. If we explore the variables within, we can see that a productive, strong state is seen to guarantee the best results. There is very little space for a free and willing individual in this scenario, a decent citizen would be a more descriptive term for a human being (restoration of production, prevention of the disintegration of the country, imposition of the strictest discipline etc.). Perhaps the picture has culminated here, because the importance of the factor is overall rather high. The working class positioned see this factor less important than the middle class positioned. Perhaps it could be explained in terms of social capital (which is a phrase often attached to middle class) and ability to see wider connections in society. However, based on these figures I would not dare to suggest that. Instead I would envision, also in here, that all the variables within this sector are considered to have notable importance for society, by the majority of working Russians.

The third factor, strong rouble, is perhaps the most ambiguous. The apic variable, strong rouble could probably be seen not only in economic terms, but also as symbol of national identity. The tone of this factor could be interpreted as an idea of “mother Russia”. The human spirituality is often underlined in Russian myths and in this factor the charge is rather high. The knowledge workers, regardless of the class position, are least willing to admit the importance of the factor; the others agree considerably more

often. Here, it could be misleading to make any conclusions, since the factor is so dispersed. I see a slight dissonance between the variables such as improvement of inter-ethnic relations and reunification of Soviet republics. I would guess that most of the former Soviet republics would not be too pleased about reunification. And that would most certainly be articulated in a way that a simple improvement of inter-ethnic relations would not be enough to overcome. I do doubt that the most of Russians sincerely would aspire for the kind of future path for their country.

Market economy and democracy are the outspoken goals of transition. From the perspective of these data, those are not overtly unanimously agreed upon. Although the variables within the factor picture quite clear preferences it is worth of considering the possibilities of simultaneous power of market contra common people. However, since the democracy and market economy usually are named as aims of transition society, I would think, that they could be held together as some kind of combined package in peoples mind, without a deeper contemplation of the philosophical essence of each term. In addition to democracy “privatization” and “entry into to the world markets” are seen to gain importance.

The fifth factor (material equality) could be seen quite controversial to the fourth one (market economy). It might be in its place to consider these two factors at the same time. Besides the material equality in the fifth factor correlate variables such as “imposition of strictest discipline” and “protection of ethnic Russians rights” (which seems to collide with the “reunification of the former Soviet republic” for the same reason that was speculated above).

As mentioned above, the fifth factor holds elements from the past, whereas the fourth underlines the proposed prospects. It is worth of noticing that these two factors have the lowest means. In a sense the last two factors are most clearly political: Soviet past *vis-à-vis* democratic future. Probably the means are as low as they are, since there are more people against suggested variables. In the previous factors, there are variables easier to agree upon. I would assume, for example, that “full employment” raises no furious resistance, whereas “imposition of the strictest discipline” or “privatization” might just do that. Another reason for lower means could be the felt alienation. Since the factor’s content could be seen as political, people perhaps feel frustrated to even

express their attitudes. The political climate in Russia is often described quite pessimistic.

Even if the means are overall rather low in the two last factors, there are evident peaks. The information workers are most clearly for the market economy, whereas the others support the material equality. The social class plays only a little role in here; the middle class positioned seem to agree more with both factors. One could make conclusions, that the groups of knowledge workers and information workers are quite dispersed in opinions (because in both factors the mean is somewhat the same within these groups), that is, if we take it as I suggested that these factors are more or less competing.

9 Discussion

Do the Russian knowledge workers have a certain profile? Based on my analysis, it seems that the knowledge workers do differ in some respect from the rest of the working population. But do they form a homogenous group in the sense that we could speak about a recognizable profile?

In my research setting the knowledge workers are analytically kept apart from other labour force by classifying respondents according to their level of education, demand of creating in their work and handling computers. The first mentioned, educational degree is often thought to have its consequences to one's life experience, one's values and lifestyle. How then would the other two affect?

I saw the criterion of usage of computer problematic in the chapter 4.2, where I speculated that it could be possible that the results vary according to the enterprise one works for. Perhaps the results tell us something about the enterprises that the knowledge workers work in. However, even if it is that way, it is interesting that the knowledge workers are gathered in certain enterprises. It is likely that those enterprises represent "the new Russian economy". In the information society also the

enterprises are undergoing various changes. Often it is seen that the most adjusting enterprises are formed into networks and a network is seen as the most triumphant type of organization in the context of information society.

The notion for creativity is clearly the most difficult one to verify. At the same time it is the most important one. I will escape the trouble, since the variable “knowledge worker” is ready made in the data. Creativity, however, is a really wide and abstract issue. Also, it could be seen as a personal trait. Some people tend to be more creative whereas others settle with things as they are. The demand of creativity in work, then, puts people in different positions.

However, if we accept the operationalisation of the knowledge worker, it becomes evident that these knowledge workers do differ from other respondents. But how fundamental are the differentiations? Here, we could sum up some basic characteristics of a knowledge worker. The most probable encounter with a Russian knowledge worker takes place in Moscow or St. Petersburg, which is hardly a surprise. Besides the geographical situation, there are no striking differences in the demographics of the knowledge workers *vis-à-vis* the rest. The division between the sexes is exactly the same as the overall division in the data. We also remember that the age structure was quite compatible with the common structure. When we turn our eyes to work related questions the divisions become more visible. The knowledge workers have better earnings and they do possess more power. So it seems that the Russian knowledge workers are in privileged positions in many respects in comparison with the traditional workers. The information workers, in between share something with both other groups. I would say that the information workers are in most contradictory position.

In my analysis I used social positions to explain variations. The knowledge workers belong essentially to the middle class. After discovering that fact, it would also be interesting to sort out the knowledge workers by age cohorts. Often held view is that the young people have already internalised different values and different lifestyle (cf. Kivinen & Nikula, 2003; Blom, 2002). In latest ten years in Russia has happened much historically unique subversion that we could call as key experiences. Usually it is thought that the shared experiences shape the mind sets of age cohorts (cf. Allardt,

1983, pp. 88-89). Also, it is said (Eskola, 1973, p. 289) that the technological advances usually benefit those who are already in wealthier positions. Deeper understanding of the issue would require combining the social position as well as social background (and the age should be taken in account).

My analysis strengthens the impression of uneven development of Russian society in a geographical sense (and in social, for that matter). (See also Blom, 2002, p. 117.) In the framework of this study I had no possibilities to concentrate on the different realities there presumably exist for knowledge workers according to place of living. The large scale of Russian federation is one of its peculiarities. Is it ever possible to bundle everything under the same label “Russian”? There certainly exist a variety of administrative solutions, for example, which lead to different operational environments.

In my study I did not concentrate deeply in lifestyle. The slight scratch on the surface that I made reveals that the lifestyle would be an interesting object for further studies. There seems to be enough differentiations. I would see that the type of work relates to one’s lifestyle in many ways. The educational background has its reasons as well as organisation’s culture, to which the employed attach to. Moreover, the level of salary leads to quite different patterns of consumption, which is seen also in this study. It would, however, be tempting to dig deeper in this subject as well.

In the year 2003 while I am writing this Russia has still not reached stability. The transition has been prolonged and there can only be guesses concerning its duration. At the moment it seems very uncertain to predict the future. The news report daily about the power struggles. Upcoming elections create tensions which are beyond an ordinary citizen. Even if the knowledge workers are better positioned in comparison to the others in the light of my data, they are, however, ordinary citizens. Thus also their ability to act in society is bounded by the legal state apparatus (by this I mean abstractly – following the rule of law in Russia is quite a many-sided issue as well). Apparently the success of knowledge workers is tightly depended on the enterprise environment, which on its behalf seems to be one of the major uncertainties on the threshold of elections.

After all, there is very little that we can say about the general nature of knowledge work in Russia basing on my analysis. There are many possible intervening factors that would be worth of taking in account when explanations are offered. It seems to me that in order to understand the phenomenon more completely it would require a qualitative approach. Also, it would be interesting indeed to fulfil a comparative research to find out if the Russian knowledge workers share something in common with their western colleagues. But then again, I am not still quite convinced about the connections of knowledge work to life at wider scale. On what basis can we assume that a person is something just because he or she is a knowledge worker? Certainly people do share something in common due to their positions in society. And the life path of an individual was more predictable earlier than nowadays. But still, I guess, that an individual never completely fits to a certain matrix. And that, I see, is the essence as well as the challenge of social sciences - the human factor.

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Appendices

Appendix I

Additional tables

Table 1. Sex within the type of work (%)

Sex	Knoweldge workers	Information workers	Others	Total
Male	48%	28%	49%	48%
Female	52%	72%	51%	52%
Total	100%	100%	100%	100%
	N=98	N=76	N=1120	N=1294

$\chi^2=13.6$, $df=2$, $p<.001$

Table 2. Nationality within the type of work (%)

Nationality	Knowledge workers	Information workers	Others	Total
Russian	93.9%	93.4%	88.4%	89.1%
Ukrainian		2.6%	1.2%	1.2%
Tatar	2%		3.8%	3.5%
Chuvash		2.6%	2.1%	1.9%
Belorussian			0.4%	0.3%
Jewish	2%	1.3%	0.1%	0.3%
Other	2%		4%	3.7%
Total	100%	100%	100%	100%
	N=98	N=76	N=1120	N=1294

Table 3. Age within the type of work (%)

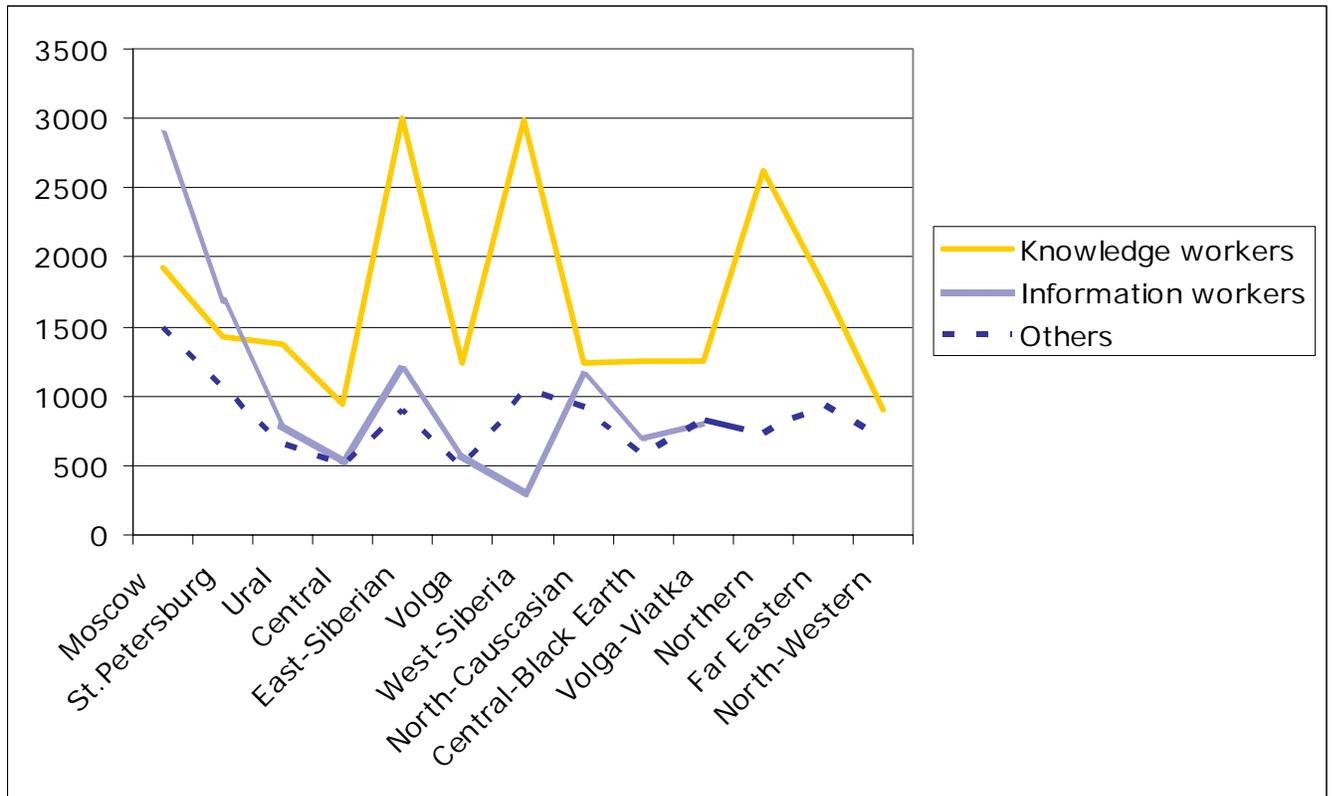
Age	Knowledge workers	Information workers	Others	Total
18-30 years	20%	23%	25%	24%
31-40 years	28%	30%	29%	29%
41-50 years	33%	34%	31%	32%
51 and over	19%	13%	15%	15%
Total	100%	100%	100%	100%
	N= 98	N=76	N=1120	N=1294

Table 4. Working population by the type of work within the social class (%)

Class position	Knowledge workers	Information workers	Others	Total
Middle class position	80%	56%	22%	28%
Non-middle class position	20%	43%	78%	72%
Total	100%	100%	100%	100%
	N=87	N=69	N=1048	N=1204

Khi²=161.5, df=2, p<.001

Figure 1. Monthly earnings (rbl) by the type of work within the economic districts



Appendix II:

Description of the SDMR

Here I have cited the main points of the project description :

“(….)The project was set out to span a wide range of various issues characterizing social differentiation in contemporary Russian society. In the context of the project the social difference was treated in abroad sense as a variety of human conditions (occupation, social mobility, property, income) as well as distinctions of attitudes towards civic life, politics, religion and other relevant issues.(….)

General principles of sample design:

It is assumed that as any effective sample for any population the sample on the Russian Federation must be based on the following major principles:

The sample must allow for a reasonable equilibrium between the costs of the study and the precision of the data. (...)

The sample design should be clear enough to allow for an easy replication in the future. (...)

The sample must be well documented and open to the inspection of international experts. (...)

Sample constraints

(…)[T]he sample must not invade any of remote areas or areas difficult to accede.

(….)The sample design should not require entry into dangerous or war-stricken areas. At present or in the near future it would hardly be feasible to incorporate areas in the Chechen, Ingush, Dagestan, or Ossetian republics into any reasonable design. (...)

The sample must not require the selection of respondents in areas forbidden for visits of outsiders with no comfortable conditions for interviewing. Such are prisons, military units or hospitals. This rule poses problems because all of the named institutions comprise a significant part of the population in the working age, particularly males.

Choice of PSU’s

The design of the sample was based on the assumption that the overall sample size will be tantamount to about 1600 households or about 3000 respondents. The first stage of a multistage cluster sample develops the first level of classification of

observation units in the population. The logic for the choice of a primary selection unit (PSU) is based on several vital conditions. (...) [A]n administrative district (*rayon*) as the optimal choice for a PSU in the sample design of the Russian Federation. Firstly, *rayons* are comparatively small: their population might range from 50 to 300 thousand. However, it can be observed that smaller *rayons* are usually found in rural areas and bigger ones – in urban centers. Therefore, a process of stratification into rural and urban *rayons* can eliminate a large part of the size-related variability of the PSUs. Secondly, *Rayons* are fairly well described in statistical and other literature and the data on *rayons* are not classified. Thirdly, the number of *rayons* in the Russian Federation is close to 2800 and that is a good basis for selection.(...)

Self representing units

The sampling theory demands that self-representing units (SRU) should be chosen in line with two main principles:

The size of the unit. In almost every country there is one or several urban centers that are much greater than others. In Russia there are two such centers – Moscow and St. Petersburg. According to the State Committee of Statistics the population of Moscow is now close to 9 million, and the population of St. Petersburg – 5 million.

The distinct social and cultural environment of the center offering more potential for research. Both Moscow and St.Petersburg are capital cities with an array of life style distinct from the rest of the Russian Federation. Moscow is particularly specific and different from other Russian cities because it is traditionally privileged city with a seat for many government offices and private companies. Currently over 90% of all Russian private enterprises are based in Moscow. It is a well-known fact that Moscow has gone a lot farther towards capitalism and private enterprise than any other Russian city.

(...)

Choosing Respondents

(...) For many years Russian pollsters relied on electoral lists as a source of names and addresses.(...) The present design provides a more reliable alternative to the electoral lists. While data contained in the electoral lists is increasingly unavailable (frequently classified) data the housing blocs situated in the district is no secret. As a rule, in urban areas an electoral district contains from 5 to 10 housing blocs. Prior to the survey an interviewer can easily list bloc apartments. Actually each apartment can

be regarded and is a household unit. When they are listed down, a selection of households can be done. In rural areas the interviewers have relied and will continue rely on household books. The book lists all households and their members residing in a given village. It opens the possibility of a systematic selection that would start with the random figure. In practice it is often required that the data of the household books should be checked and rechecked against someone's inside knowledge.

(...)

Non-response

(...) [T]he rate of non-response for the SMRD survey is tantamount to 20,5%. The non-response is made of refusals (7,2%), not-at-homes (10,8%) and other losses (sickness, etc.=2,5%). In terms of refusals the survey came out with a good hit rate. The not-at-homes tended to constitute a large part of the population that in itself is a basic characteristic of modern Russian society: massive unemployment forces many Russians to become temporary dwellers of regions other than their own.

(...)The overall impact of non-response would not be conducive to any serious bias. The problem of non-response is traditionally more acute in Moscow. The losses caused by non-responding residents in Moscow are equal to 28% - a significantly bigger than in the Russian provinces.

Conclusion

(...)In our view, the design of the sample strikes equilibrium between the required precision and the chances of collecting a set of representative data characterizing the Russian society at crucial period of its history.”