

**RUSSIA AND THE NETWORK SOCIETY.
An Analytical Exploration.**

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Preliminary Remark

This is not, strictly speaking, a paper about Russia. Rather, it explores the applicability of an analytical model of social structure of the Information Age to the labyrinth of Russian society in this end of the 20th century. As with all models, it is not expected that Russian reality will entirely fit into the proposed theoretical framework. The hope is, however, that by reflecting on current social trends in Russia from this perspective, some fruitful hypotheses may be generated, that will help to understand Russia when used to inform empirical research. As a communicating device, I will illustrate the argument with some empirical observations. Yet, this should not be considered as a full-fledged analysis of Russian social, technological, economic, cultural, and political trends. Indeed, even a sketchy empirical assessment of the broad range of issues considered in this paper would be tantamount to a book-length study of today's Russian society. Hopefully, the analytical approach tentatively proposed here may contribute to such a study.

Introduction: The Network Society

The network society is the social structure that seems to characterize the Information Age, albeit through a wide range of manifestations, according to cultural and institutional specificity. The model represents the synthesis of observation and analysis Manuel Castells carried out in three continents, and a variety of countries, including Russia, for about 14 years, and presented in a trilogy titled “The Information Age: Economy, Society, and Culture”, published in 1996-98. The network society is characterized by a simultaneous transformation of the economy, of work and employment, of culture, of politics, of state institutions, and, ultimately, of space, and

time. New information and communication technologies are the indispensable tool of this multidimensional transformation, but not its cause. The genesis of the network society is largely related to a historical accident: the coincidence, around the 1970s, of three major independent processes that took place around the world: the information technology revolution; the cultural social movements of the 1960s/70s; and the crisis, and subsequent restructuring (or perestroika) of the two socio-economic systems existing at the time, capitalism, and statism. Statism failed to adapt to the Information Age, and in its desperate attempt to overcome its contradictions, spiraled politically out of control, and collapsed. Capitalism emerged triumphant from its self-transformation, in a new, leaner, and meaner incarnation. Only to have to confront the new dramas, crises, and conflicts, engendered by its contradictory nature. The new social structure that characterizes most of the planet today, the network society, is related to a new economy. This economy is capitalist, but from a new brand of capitalism. It is informational and global. That is, knowledge and information are the key sources of productivity, and of competitiveness, the two crucial processes in any economy. Knowledge generation, and information processing, depend upon access to an appropriate technological infrastructure, as well as on the quality of human resources able to operate advanced information systems.

Globalization has linked up all core economic activities in all countries, even if most activities, jobs, and people are still national and local. Economies of all countries depend on global financial markets, and of world linkages in trade, production, management and distribution of commodities, goods, and services. Foreign investment, either direct or in stocks, shapes/conditions economies of most countries in the planet. The new economy is

organized around networks of information, without a center, in constant interaction between the nodes of these networks, either locally or globally.

Furthermore, globalization is not limited to the economy. Media networks are connected in business transactions, as well as in the global exchange of information, sounds, and images. Internet has become the horizontal medium of communication worldwide, currently with about 130 million users, heading towards 500 million in the early 21st century. The networking form of organization provides essential flexibility for firms, individuals, and countries. Constant adaptation to the whirlwind of capital, demand, and technology is the name of the game. The only rule is that there are no rules. When they still exist, they are bypassed by multiple networks. Under such conditions, the sovereign nation-state has entered a terminal crisis. Not that the state will disappear, but it is already being deeply transformed. Nation-states have banded together to defend their chances against global financial markets, against global media, global Internet, global crime, global terrorism, and global environmental, and social problems. So doing, they have become more effective, but increasingly distant from their own, specific national constituencies. To relegitimize their dwindling reputation, they have decentralized, through a process of devolution of power, and resources to regional, and local governments, and to NGOs (that is, Neo-governmental organizations). As a result, they have been able to set up stronger links between citizens, rooted in territorial identities and communities, and the state. But at the price of voiding even further the potential power of the nation state. Thus, the new state of the Information Age is also a network state, a network of political institutions and decision making nodes, national, supra-national,

regional, local, community-based, that relentlessly interact with each other in a process of endless negotiation, and shared decision-making.

Work, and employment, have also been profoundly transformed. Overall, there is a process of individualization of work, and networking of decentralized working units, contrary to the socialization of work, and vertical integration or large-scale organizations that characterized the Industrial Age. This does not mean that small business takes on large business. In fact, we are witnessing the largest process of concentration of capital and managerial resources in history, through mega-mergers, and super-conglomerates. The distinction between large and small business is largely obsolete. Large organizations have decentralized internally, networking themselves. And they link up, for specific projects, with other organizations. Small and medium businesses form their own networks, and become networked suppliers of networked, larger units. Workers are assigned varying tasks, and functions along this complex network of variable geometry, so that they are individualized in their labor relationship depending upon their potential contribution, self-stored skills, and self-programmable capacity. This is not only the matter of the Silicon Valley engineer or the City of London's financial wizard. This is the actual operating procedure in the informal economy that employs most of the world's urban population today.

Culture, as a set of beliefs shaping values and norms, has been by and large captured in an electronic hypertext that combines, and articulates, most expressions into an audio-visual puzzle that expands, shrinks, embraces, or specifies, according to the audience. The medium is not the message any longer. The message, in fact, reprograms the medium, since the media system is so flexible that it adapts to whichever message is

sent to whichever audience. So, that the message structures the medium. I propose that this is a new culture, the culture of real virtuality, because our life, our reality, is made up, largely, from our daily experience in the virtual world. It is the culture in which make believe is belief in the making. Not the least, in politics. Information Age politics is played out in the space of media. Not that media control, or dictate politics – because they are plural, and contradictory, and need some credibility to stay in business, so they cannot just bet on one political option. But, jointly, media expressions frame politics, since they are the main channel of transmission of information, and images to people. And people form their own opinion, and make their decisions, on the basis of what they receive from the media, albeit in a rather autonomous way, processing by themselves the signals they receive. However, the only signal they cannot process is the one they do not receive. Which means that absence/presence from the media (being on or off the network) determines who/what has chances to influence institutional decision-making. Social movements are also increasingly played out as opinion movements, in the world of collective images, and representations, as in the case of Mexican Zapatistas, or of environmental causes around the world. And terrorism, and counter-terrorism aim at striking the minds through images of destruction, and fear, and intimidation, rather than by the material power of their limited operations.

Space and time are also transformed. The end of distance, through telecommunications and fast transportation systems, allows organizations and individuals to share time, and activity without spatial contiguity, thus inducing a flexible arrangement of inter-territorial linkages, that evolves according to the changing functions performed in these networks of interaction. The space of flows, where most strategically important

activities are performed, gradually establishes its dominance over the space of places, the territorial communities where most people still build their livelihood, their experience, their identity, and their political representation. Time is being annihilated by light-speed transactions between computers, aiming at overcoming the time friction that wastes investment opportunities, or leaves resources idle, even for a second. Instant wars, using technologies of precise, devastating destruction, eliminate time from war, so that societies do not realize what is going on until it is too late, either to protest or to resist. Or, else, time is de-sequenced, thus denied, in the biological blurring of the life cycle associated to new reproductive technologies, or by the regeneration of bodies through cloning of human organs, a practice already in process of commercialisation. Timeless time seems to be the time of the Information Age, in contrast to biological time of most of human history, and to chronological time of the Industrial Era.

The dynamism of this social structure, the network society, and its global reach – enforced by the irresistible discipline imposed by financial markets, military technology, and control of knowledge, and information, make it an expanding system, that permeates, in different ways, and with different intensity all societies. But these differences are precisely essential when we try to understand the actual process of life and death in a given country, at a given time. Which kind of network society, and which are the differential forms of penetration of this networking logic in various spheres of social, economic, and political organization, become essential questions to understand the new realities emerging everywhere at this turn of the century. Thus, the network society is not a successful model of modernity to which societies should necessarily adapt to be successful. Rather, it seems to be an overwhelming reality, our emerging social structure,

as the industrial society was in its time. But because it diffuses at different pace in different societies, and because it interacts in various forms with pre-existing social structures, the analysis of these variations provides a potential clue for understanding both stability, and crisis in the current process of social change.

Therefore, the question to be examined in this paper is the following: which kind of network society, if any, is emerging in Russia? What is its specificity? And which are the consequences of such specificity on the process of social change of Russia in this end of the century? Or, in other words: may we better understand Russia by considering that it is going through a double transition? That is, on the one hand the transition from statism to capitalism, and, on the other hand, the transition from an industrial society to a network society, which includes the most apparent transformation from a secluded economy to a globalized economy. Let us proceed step by step.

Information and Communication Technology in Russia

Access to and widespread use of information technology is not, in itself, a sufficient condition for the development of a network society. But it is a necessary one. Thus, to examine, succinctly, the state of information technology in Russia is a preliminary step to the understanding of its specific linkage to the Information Age. Table 1 provides a rough comparison of Russia with the U.S., Spain, and Poland on some basic indicators standardized in an 1997 study conducted by Hewlett Packard and Novell for the World Economic Forum, to draw a “Map of the Network Society”. The data, however approximative, show a considerable lagging of Russia, way below of its scientific, and educational level. Concerning the key technological infrastructure of the Information Age, Telecommunications, the doctoral dissertation by Daniel Doucette has

provided concluding evidence of the retardation of Soviet, then Russian telecommunications, as a result of Soviet policies (Doucette, 1995). The study by Campbell (1996) converges towards the same conclusions. According to official statistics compiled by Rohozinski (1998), In 1996, only 48.7% of urban households, and 19.7% of rural households had access to a private telephone. In addition, there is considerable regional disparity,

TABLE 1 Indicators of Network Society, Selected countries, circa 1994.

Indicators	United States	Spain	Poland	Russia
Number				
Phone lines/1000 p.	602	371	131	162
TV/1000 people	790	496	300	379
Cable TV/TV homes	68.2	2.19	11.1	0
PC/100 people	350	70	20	10
Computer use ranking (among 49 countries)	1	19	34	41
Overall Network Society Ranking (on 49)	1	25	32	35

Source: World Link, in association with Hewlett Packard/Novell, "The Network Society Map", produced for the 1997 Annual meeting of the World Economic Forum in Davos, Switzerland. (Note: Indicators for which Russian data are not available have been excluded from this table)

In the access to telephone service. It varies between 64.5% of urban households having access to a telephone in the Central Region, and 76.9% in the North-Western Region, to 42.1% in Western Siberia, and 32.2% in Eastern Siberia. A key factor in this telecommunications retardation was that Russia inherited the fragmented telecommunications structure of the Soviet Union. As Campbell, and Doucette report, in

1991 only 55% of telephones were connected to the Public Telephone Network. The rest belonged to a variety of “branch systems”, depending from Ministries and industrial enterprises, without counting the special military-related telecommunications. This fragmentation continued, and even intensified, during the post-communist era, as many banks, financial institutions, trading groups, corporate services, and business conglomerates, created their own, satellite-based link-ups. As various systems were privatized in a disorderly fashion, the results have been lack of coordination, uneven quality of service, and absence of an integrated telecommunications grid providing a basis for universal access. Lack of investment, and delayed technological upgrading in the private infrastructure also contributed to an increasing gap between public service, and private networks, between residential telephony, and business-related telephony. In 1996, over nine million customers were awaiting installation. The Economist Intelligence Unit Report estimated in 1997 that 2 million new lines are to be installed annually, in part to replace obsolete ones, until 2005. Overall, updating and improvement of the telecommunications infrastructure in the 1995-2005 decade, up to International standards, would require an investment of about \$ 40 billion. Instead, foreign investment in telecommunications, while doubling in the 1990s, did not reach even \$ 500 million in 1995. And foreign investment is crucial since imported digital systems make up 90% of new telephone exchanges in Russia (GBN, 1998). In addition to the Ministry of Telecommunications, several semi-private companies, resulting from the process of privatization, control the telecommunications market. Rostelekom has the overwhelming control of long distance, and international communication, in spite of its deteriorating service, and high prices. Svyazinvest, a holding company for Russian local carriers, that

has opened 25% of its stock to foreign investment, carries local communications in most areas. The Russian government, and Russian business groups controlling telecommunications companies are deliberately limiting foreign control, and specify standards to favor traditional Russian telecommunications equipment manufacturers as preferred suppliers, although the upcoming privatization of Svyazinvest may change the picture in this regard. There is however one area widely open to foreign investment and technology: wireless, cellular, and satellite-based telecommunications. The dominant player in this field is Cellular Vision of Russia, a joint venture between the American company Cellular Vision, with Svyazinvest, and the Russian Government. Fujitsu is also installing wireless digital microwave in the Western Urals, and Rostelekom/Global Star is launching a joint venture company (Globaltel) to provide satellite services by 2002. In contrast with lagging traditional telecommunications infrastructure, the cellular market in Russia is growing at an accelerated pace in the 1990s, in spite of the high price of a cellular phone (\$ 2,500 in 1997). However, total cellular phones in service in 1996 were only 200,000 (but up from 6,000 in 1992). Their number should be approaching 1 million by the turn of the century. So, while affecting only a proportionally small fraction of the population, this users group may represent the dynamic, entrepreneurial core of the new market economy.

As for Internet, the pioneering study by Rohozinski (1998) shows a significant increase in its diffusion in the 1990s, along three different lines: the daring “Relcom/Demos” private network, that developed during perestroika years, to become, in the 1990s, the basis of a very broad commercial network; the academic-based networks, formed around the Academy of Sciences, and Universities, later supported to some

extent by foreign foundations; and the alternative network, linked to the global Fido-Net network, with free access to Internet. Altogether, by 1997, an estimated 1.2 million users were in Internet, although the distribution of these users reflected an onerous big city bias: 99% of the domains were in urban areas, and 70% in Moscow, St. Petersburg, and Ekaterinburg. However, there are conflicting estimates on the pace of diffusion in Russia. According to some sources compiled by Rohozinski, in 1996-97 was growing at an annual rate of 16% in Russia, in contrast to an estimated 80%-100% in the world. But other sources bring the extent of diffusion at a much lower level, while other sources estimate both penetration and growth rate at much higher levels (1). In any case, we think it is fair to say that, while Russia is, and will increasingly be, connected to Internet, this connection is still limited, and highly selective.

If diffusion, and use of new information technology in Russia is limited, and proceeds at a lower pace than in the rest of the industrialized world, the situation on the production side is considerably worse. Russia's electronics industry was already considerably behind the technological level in the US, Europe, or Asia, in the 1980s. But in the 1990s it has simply collapsed. At the root of the problem lies the Soviet Union's backwardness in information technology industries. In the study Castells directed on microelectronics factories in Zelenograd (the Soviet Silicon Valley, near Moscow) in 1991-93, we could observe the lack of sophistication in products and processes, in spite of the high quality of scientists and engineers (for references, see: Castells and Kiselyova, 1995). For instance, integration capacity was, at most, for 3 micron chips, and the "clean rooms" were so dirty that impurities were found in over 30% of the chips produced. Soviet computers, according to my interviews in 1990 and 1991, in one of the leading

research centers in informatics at the Academy of Sciences' Institutes in Akademgorodok, Siberia, were at least 10 years behind American computers, in spite of having been at scientific parity in 1960 (Castells and Hall, 1994). The reasons for the Soviet lagging in information technology lie deep in the structure of the Soviet system, but can be summarized under three headings (Castells and Kiselyova, 1995): the complete domination of the industry by military requirements; the subsequent isolation of the Soviet industry from technological supplies and exchanges with the rest of the world; and the constraints on diffusion of technological knowledge and information on the civilian industry and on the society at large. The result of this technological backwardness was that when in the 1990s Russian military markets shrunk, technological obsolescence prevented Russian microelectronics and computer firms from competing with foreign companies, both abroad and in the domestic market. The value of chip production in Russia declined from a low \$1.5 billion in 1989 to an incredible \$385 million in 1995. The advanced segments of the industry were devastated: out of 140 microelectronics manufacturers existing in 1990, by 1995, 130 had closed down. For the remaining 10 firms, manufacturing costs increased by 4,000%. These companies, and several telecommunications equipment producers, were barely surviving in the mid-1990s as subcontractors for low-technology Asian companies, producing toys, and digital watches. When in 1996 Castells interviewed, again, engineers of the the leading microelectronics company that he had studied in Szelenograd in 1992, they reported that 50% of their factory was producing shampoo [sic] for the Russian market. The most technologically advanced company still in the microelectronics business in Zelenograd, Mikron, became a joint venture with Hua Ko Electronics, a Hong Kong firm, that bought 50% of Mikron's

shares for 18 million dollars. Indeed, the most profitable business in Zelenograd became the sale of assets and shares to foreign investors. But there were few takers. An example will explain why: the rise and fall of an IBM PC computer factory in Zelenograd. In 1993 IBM linked up with Kvant, a former military electronics enterprise, to produce 40,000 PCs per month for the Russian market, under an agreement with the Russian government, under which IBM-Kvant would be exempted from taxes on imported components. This was essential, precisely because there was no reliable supplier of components in Russia. It was a commercial success. In 1995, Russians bought about one million PCs, 40% of which were supplied by IBM. IBM-Kvant employed 1,000 workers, and the value of its output was estimated at around \$960 million per year. Then in 1994, the Russian Parliament approved a law eliminating the tax exemption on imported components (for a value of about 8.5% of the cost of finished product). This put IBM at a competitive disadvantage with the Russian trading companies that were importing finished PCs, mainly from China and Southeast Asia, that continued to be tax exempted. That was precisely the intention of the law, since the powerful lobby of import/export companies had its way in the Duma. On February 27th, 1996, IBM stopped assembling PCs in Zelenograd. Most workers became idle again, as the plant was reconverted into a repair and maintenance shop for IBM PCs imported into Russia. For all practical purposes, PC production stopped. As for Kvant, it diversified its activity in a wide range, in order to survive. In 1997, for instance, one division of Kvant was working in the following businesses: chip design for a Western company; development of a parallel computer system for a domestic customer; prototyping of image processing units; and market research/survey projects. Without access to technology, equipment, supplies, and

know-how, the Russian electronics industry often became a low-level subsidiary of low-level Asian producers, or, in the best cases, subcontractors of specific tasks for Western firms. The exception was a small number of firms that continued to work for the Defense Ministry on the basis of imported components and foreign technology (either licensed or copied through reverse engineering). After reviewing the evidence on the state of high performance computing in Russia, Wolcott and Dorojevets conclude their study summarizing their findings: “As the waves of reform have washed over Russia, established Soviet industries, like high-performance computing, have been nearly swept away. Demand for domestic systems has plummeted, series production of this sector’s output has ceased, and large-scale systems development activity is but a whisper of what it was five or ten years ago. Under these circumstances, which are not dissimilar to those facing many advanced technology industries, it is reasonable to ask in what form, if any, such industries can survive, preserve their scientific personnel, and serve the domestic or global industrial and scientific communities” (1997: 127).

The consequences of this collapse of the civilian microelectronics/computer / telecommunications manufacturing industries for the new Russia are far reaching. First, they make the new Russian economy entirely dependent on imports for its advanced technological infrastructure. Second, they eliminate the possibility of industrial know-how that could make possible the existence of Russian firms as part of an electronic producers network. This does not preclude the possibility of foreign electronics implants in Russia, but they would have to operate, largely, in isolation from the Russian industrial environment, which limits the possibility and the interest of these producer networks in Russia. Third, the complete dependence of Russia, still a nuclear superpower, on foreign

supplies/know how in advanced electronics and communication technology, cripples its capacity at becoming again a credible, autonomous power in conventional warfare, reducing its military options to the unthinkable event of using nuclear weapons.

So, Russia's infrastructure, and capabilities, in information/communication technologies do not seem to be up to the level of Russia's educational, cultural status, nor are they adequate to the geopolitical, and potential economic role of Russia in the international system. Neither it would seem possible to witness the emergence of a network society, characterizing the social infrastructure of the Information Age. Yet, the process of social change is not the direct consequence of technological forces. Because, on the one hand, there is indeed fast diffusion of new information technologies, in certain areas of the country, in certain segments of the population, and in certain domains of activity, including Internet. And while this diffusion directly affects only a minority of Russians, and of Russian economy, this minority may well represent the dynamic core of the new society. On the other hand, Russia is now linked up with global networks of capital, trade, technology, and information, and this links operate through, and thanks to the new technological infrastructure. So, to assess the relevance of understanding Russia as a network society, we should go beyond the descriptive commentary on technological production and uses, to consider the emergence of a new economy, a new society, and a new institutional system.

Transitional economic networks: primitive accumulation, selective globalization, and local survival.

The story of Russia's transition to a highly peculiar form of market economy is well known (Aslund, 1993; Castells, 1998). We will simply recall here the main features

of the process in order to be able to ground the analytical questions we will be raising. Table 2, and Charts 1 and 2 tell the story of a collapse of the production system, as well as of public finance, and dramatic decline of standards of living. According to Stephen Shenfield, from Brown University, between 1989 and 1997, Russia's GDP fell by about 45%, real capital investment fell by 92%, oil production shrunk by 50%, and in 1991-97 real wages fell 78%. In 1997 2/3 of workers employed are not paid fully or on time. The impact on the living conditions can be measured in health terms: 40% of the population suffers from malnutrition, 40% of the children are chronically ill, and 60% suffer from lack of vitamins; 2 million people are believed to be infected with tuberculosis; syphilis has increased from 8,000 recorded cases in 1990 to 450,000 in 1997 (reported by Business Week, October 5, 1998: page 30). In 1998, the social situation has worsened. On October 16th, 1998, Izvestia reported that, according to Vitaly Linnik, chairman of the Duma Committee for Labor and Social Policies, more than 40% of Russian people were below the poverty line. Minimal wage and pensions were less than 6 dollars per month, with the average monthly wage being 60 dollars, and the average monthly pension, 25 dollars. There were 15 million unemployed people, and many others were in fact idle: out of a labor force of 75 million, only 40 million were actually working in the formal economy. While most people are entitled to social benefits, few of them actually were receiving their benefits (Izvestia, October 16h, 1998: page 1). Taking to the extremes, in September 1998, ORT television news reported that the situation in Russian prisons was such that inmates were paying tuberculosis-infected inmates to be infected themselves. The goal was to be transferred to a hospital, and conveniently fed. Furthermore, they were refusing treatment in the hospital to stay there as long as possible.

For those who still doubt the failure of unfettered capitalism in Russia, this has been the social cost of the gradual stabilization of macro-economic parameters, with inflation being gradually brought under control. Yet, this artificial stabilization was lost during in a few weeks during the devastating currency/financial crisis of August/October 1998, with its immediate impacts: return to negative rates of growth, resurgence of inflation, drying off of foreign direct investment, collapse of Russian stocks, unsustainable international indebtedness, both public and private, (see chart 2) shrinkage of domestic market, capital flight, collapse of domestic private savings and investment. Indeed, after six years of restrictive economic policy, the Russian economy could not stand the shocks of international financial turmoil, and domestic political instability.

To explain this extraordinary failure we must refer, first of all, to the extraordinary success of Russia's private oligarchy. What dominated Russia's economic transition was a gigantic process of primitive accumulation of capital, transferring public assets (that is all assets in Russia) from government property to private property, and then protecting the interests of the new oligarchy by failing to collect taxes, to regulate international flows of capital, and by tolerating unsafe banking practices. Examples of primitive accumulation: Moscow's prime real estate, Norilsk Nickel, Gazprom, St. Petersburg ship building facilities (a Chubais' favorite...).

In the end, seven major conglomerates emerged in Russia, each one with a mega-bank at its core, that together, controlled about one-half of the Russian economy. In fact, all what has any monetary value in Russia. This core of oligarchic capitalism linked up deeply with the global economy. Its member companies acted as intermediaries for most foreign investment in Russia. Hedge funds investors, and adventurous young capitalists,

some of then Americans of Russian ascent, linked up with these oligarchic groups, one such example being Renaissance MKF Investment Bank. But, more importantly, Russian banks and large companies siphoned off earnings and assets out of Russia, into foreign bank accounts. Between 1992 and 1997, an amount estimated to be in somewhere between \$ 75 billion and \$ 300 billion was transferred from Russia abroad (GBN, 1998). This is in contrast with less than \$12 billion in total foreign direct investment during the same period. Private households, burned by several devaluations and bankruptcies also took a defensive attitude: an estimated \$40 billion in cash dollars are under the mattresses of families, as a reserve for future misfortune (Source: reports by Business Week). A wise decision, seen from the vantage point of Fall 1998. But also a short-circuit in the relationship between savings, and investment – and a \$40 billion investment from Russian people into the U.S. Treasury. To make things worse, oil prices fell down, depriving Russia from its main source of hard currency. With little tax revenue, and a collapsing economy, the federal government became an international beggar, deeply indebted to its own citizens, and to its lenders. First, between 1995 and 1998 the International Monetary Fund disbursed to Russia an average of 430 million dollars per month, certifying the Russian government for additional loans from other public international institutions, governments, and private banks, in the tens of billions of dollars: counting both public and private sources, Germany lent 30 billion dollars to Russia in the 1990s. Second, the Russian government has systematically delayed or failed its payments in wages and pensions throughout the public sector, and state enterprises. Third, the government financed much of its budget with certificates of deposit, the notorious GKO's, with very high yields, about 35% interest rates on average. In doing so,

on the one hand, government pumped lending money out of investors' market that, otherwise, could have tried productive investment. In addition, the government created a pyramid-type of financial scheme, using an increasingly higher proportion of its meager revenues to pay the interests. Until, in 1998, it could not honor the payment, and had to restructure its debt into long-term obligations, thus destroying confidence in its credit. The economy did in fact survive, in non-traditional terms. About 40% of transactions are barter transactions. Companies developed extremely elaborated barter networks to keep factories working. For instance, one of these barter networks, reported in "The New York Times" (Gordon, 1998), originated in Splav Co. a valve factory in Novgorod. Not being able to find a solvent market for its valves, Splav started a barter business, with connections, and detailed agreements with other companies around Russia, and the former Soviet Republics. One of these networks functioned in the way described in Chart3.

Barter agreements change over time, thus, so do networks, linking up new companies, and new product lines. In the end, the economy is reconstructed around a web of horizontal connections that connects from time to time to the cash economy by securing access to goods that do have a demand in the monetized market. To be sure, this business networks are of a different kind of those existing in fully monetized market economies. They are not organized around complementarities, economies of scale or of scope, but around sheer opportunistic linkages. Everything goes provided that some goods/services can be reciprocated with other goods/services that represent an asset for the transaction's partners. But without this networking ability there would simply be no survival chance for companies that include thousands and thousands of workers around

Russia. While these networks are not very productive, in traditional economic terms, we can hardly imagine anything more productive for a firm than being on the positive side of the dichotomy between life and death.

On the other hand, the informal, “kiosk economy” provided flexible adaptation to the needs and pockets of consumers around the country, albeit at the price of becoming entangled in a web of local and ethnic mafias.

A legion of commercial and financial intermediaries, supported by the whole array of advanced business services (including security), hotel and entertainment activities, and high-end consumer goods providers, mushroomed around the transfer operations that took place between the public sector, and the new private oligopolies, and between this dominant segment of the Russian economy, and global capitalism at large.

Thus, there is no informational economy in Russia so to speak. Knowledge, and information (except specific knowledge of insider trading) is not at the source of productivity and competitiveness in the Russian economy, beyond some basic literacy in international business transactions, and the ability to imagine daring speculative schemes. It is an economy based on brutal control of access to resources, and to administrative decision-making in the hands of a small group of tycoons fighting each other, while cooperating together to keep the system working for them – as when they saved Yeltsin’s election in 1996 from an unexpectedly strong Communist challenge. There is indeed a process of globalization. To a large extent, given the lack of confidence in the Russian currency, the process of primitive accumulation, that is the pillage of Russia’s formerly public assets, can only be made profitable internationally. Thus the dominant core of the economy is fully globalized, in its markets (exports, and imports), in its business

alliances, in its information about global financial opportunities, in its sales of stocks to the world at large, and in the placement of its earnings. Furthermore, it can only function under the protection of a state, itself protected by the international community, represented by the IMF, for the sake of geopolitical stability.

However, this system of state-protected oligarchic capitalism suffered a serious setback in September/October 1998. Faced with the prospect of tighter financial, and fiscal controls, Berezovsky, and his allies, engineered a political crisis, counting on Yeltsin's weakness. But the crisis spiraled out of their control, both economically, and politically, worsening the financial crisis, and inflicting heavy losses on everybody, including the oligarchs. Furthermore, their political control was made uncertain by the shift of power toward the Duma, the disintegration of Yeltsin's court, the reinforcement of regional powers, and the Duma's rejection of Chernomyrdin, the man trusted by the financial oligarchy.. As a result, a process of redistribution of wealth and power between different oligarchic groups may have started in Russia (O'Brien, 1998). Yet, while tycoons rise and fall, and while they currently weigh their relative chances of profit making between their international assets and their Russian assets, they all share two features: their home is Russia, their ambitions are global.

Thus, the core of the Russian economy is essentially globalized, around networks of capital, management, trade, and inter-corporate linkages. On the other hand, most of Russia's economic activities, and the overwhelming proportion of the population have as their only global link the access to consumer goods distributed by the kiosk economy. A major, and socially relevant exception, is the visible sector of a professional middle class in the main urban centers, which has emerged in the activities of services and

intermediation around this globalized core of the economy. I will return to this very important feature of the Russian society, while emphasizing here that, economically speaking, their livelihood depends on the process of expansion of this globalized, oligarchic sector resulting from the processes of privatization, and global linkage.

The third feature of the network economy is, precisely, its organization around networks of cooperation, production, distribution, and management. This feature is absolutely central in the new Russian economy. Indeed, it has become the key element in ensuring the dynamism of the oligarchic core, and the survival skills of most people in the informal economy, as well as in the barter economy. Large conglomerates have adopted a flexible, internal, networked structure, very similar to that of Japanese keiretsu. They have also organized their activity around cooperative projects, bringing together resources, and influence, around a given task (e.g. to jointly appropriate a privatized asset, to control telecommunications in a given region, or in a business line), then disconnecting from already attained objectives, and creating new alliances around a newly found business project. This networking logic explains why ferocious competition between tycoons goes hand in hand with their attempt, as a group, to control the economy, and government. The irony is that this oligarchic Russian system of power and influence is what comes closest to the traditional caricature of state monopoly capitalism proposed by Communist mythology for the Western world. Networking is also essential in the versatility, and dynamism of the urban informal economy, that provides consumers, and creates jobs throughout the vast expanse of transitional Russia. And networking, and reciprocation, on the basis of trust, is also the backbone of the barter economy that keeps alive the public sector, and the unprofitable, but still indispensable

for the time being, state enterprises sector. Some of this networking requires, and uses, information and communication technology. This is particularly the case of the globalized business segment. But it's also the case of various mafias, and of petty traders, connected through their cellular phones, and benefitting from transborder trade or smuggling. So, informal networks that were a major feature of Soviet underground economy, have now blossomed, throughout the whole spectrum of the new economy, helping both the articulation of the oligarchic sector, and the survival of people around petty commodity trading. Networking is indeed a fundamental characteristic of the new Russian economy, albeit in a downgraded version, characterized by speculation, fiscal fraud, and the decoupling between earnings and investment: earnings are local, investment is predominantly global.

Space, Time, and Society in Fin de Siecle Russia

Major historical transformations are characterized by the social reconstruction of space and time as the foundational categories of our existence. This applies to all societies, but it is particularly true of Russia, because of the fondness of Russian rulers to dramatize their control over society by changing by decree time and space. Remember the time's big bang by Peter the Great, introducing the Julian Calendar, and bringing the clock several millenia back and several months forward, to assimilate Russia to the West. An obsession that persisted in his detailed personal schedule (chronological time), and in his orders to distribute the time of every Russian between service to the state, service to the lords and service to the Lord. Or, else, the bolshevik fascination with revolutionizing time, in line with the fundamentalist brand of the French Revolution, eliminating the seven-day week, splitting life in five-year plans, and then accelerating time, by making

five years plans in four years, and the workload of six-day weeks in five days. Furthermore, the only valued time horizon was the historical achievement of communism, so that present day labors only make sense by the future glory, not of people's children, but of a transformed humankind, the Soviet MAN. While waiting for the future, the present was organized around time, but around Moscow time, so that trains, and planes, and radio programming would be timed in Moscow units, and then the whole territory divided arbitrarily in time zones not following the sun, but the arbitrary sequence of bureaucratic minds. Thus, by commanding time, the Moscow-based Soviet power would command space. And by enclosing people in their localities, and in the Soviet territory, through propiska, and prohibition to travel abroad, in the end everybody's life was encapsulated in the political construction of time-dominated, subdued space.

This time-space organization of life is changing in Russia. But asymmetrically for different people, and different localities. The dominant groups in Russia are joining the space of flows, and timeless time, characteristic of the network society. The overwhelming majority of the population and of cities, regions, and villages, are still living in the space of places, paced by chronological and biological time. But, the most important transformation is the reversal of the domination of space by time (that is, the space of experience was organized around the historical time horizon of the Communist Utopia, so that the present was but a step in the sequence of pre-determined historical development). My argument is that in Post-Communist Russia, space dominates time, as it seems to be the case in the network society when and where it comes to life, around the world. Let me explain.

In Russian literature, in Russian art, in Russian music, in Russian philosophy, and in Russian geopolitics, there has always been an emphasis on a primary fact: the immensity of Russia's territory, this vast landscape, this huge span of humankind bridging over continents, oceans, seas, mountains, rivers, lakes, forests, and endless plains of all climates. We should never forget this feature, some times left aside, by an over-rationalized analytical scheme that fails to grasp the meaning of fundamental characteristics simply because they appear to be too obvious. Precisely because the vastness of the Russian land was always a challenge to any would-be ruler, the control over the space was tantamount to the control over people, and thus, the whole social and political organization was a relentless effort to subdue spatial distance, and rule everything from the center. Paradoxically, the new socio-economic system characterized by the network society and by the global economy, frees Russian elites from their burden: they may not need to control the entire Russian space to assert their domination, and to extract their rents. The key factor for accumulating wealth, enjoying consumption, and staying in power is the ability to link up to the global system, which can be properly done from a few nodes of the Russian economy, and managed, and enjoyed from a handful of urban centers. From these centers, a small, but rich and powerful oligarchy, and their ancillary professional groups, can reach out to the sources of valuable energy, and natural resources, spread out all across the territory, that still represent Russia's main assets. From these core centers, the globalized core of new Russian rulers, link up to much smaller elites equally concentrated in a few urban centers, mainly in the European side of Russia, but also in Ekaterinbug, Novosibirsk, Tyumen, Tomsk, Irkutsk, Khabarovsk, and Vladivostok. Around Moscow and St. Petersburg, the new class of professionals,

managing the linkage to the global economy, and their service activities, and controlling the development of private business, constitute local civil societies, living in the new information age. Smaller segments of this professional middle class, together with a promising group of self-made entrepreneurs, blossom in the interstices of Soviet-made ruins, around major urban centers in this Eurasian continent. All this “new Russians” world is connected, by trade, by telecommunications, by computers, by planes, by TV and radio programs, by music, by shared sources of information (e.g. Kommersant), by hopes, dreams, and worries. For instance, 70% of the Internet sites, according to the data collected, and elaborated by Rohozinski, are in Moscow and St. Peterburg, and 99% are in urban centers. New technologies, and the networking logic of the global, informational economy, allow, for the first time ever, to link up everything valuable in Russia (including oil, gas fields, diamonds sites, gold mines, nickel, rare metals, and forests), while disconnecting whatever and whoever is not valuable as producer, or consumer, and probably too trouble-prone to be included, or integrated. The obvious problem is how to operate the political control of this “residual population” (that is the large majority of Russian people). This is left, on the one hand, to the local/regional political elites that are provided with some attention from the center, on the condition of calming down their restive subjects. On the other hand, the lack of political alternatives, and the deep-seated skepticism of most people, after the double betrayal by the “Revolution”, and the “Democrats”, leaves them with little choice other than using their energy leftovers in implementing survival strategies. Thus, the Russian space has been decomposed, and recomposed, between networks of dynamic urban cores, ultimately linked up to the global economy, and vast territories in and around cities, but mainly in the countryside,

and in the provinces, that are localized, and segmented, left to their own local/regional strategies of survival, and anchored in their marginality. The unconstitutional de facto persistence of the propiska regime, everywhere, continues to fix people to their places, unless they can buy their way off (7,000 dollars in Moscow, as of 1997). So, the segmentation of space, the unification of dominant people and functions in the space of flows, and the fragmentation, and marginalization of most people in scattered places along the immense Russian landscape, are fundamental features of the new Russian society. The vastness of the Russian land is now redefined by the variable geometry of communications, and communications nodes, so that some places are linked to the new world, while others are more distant than ever – yet, watching the images, and listening to the sounds of this new era to which it would seem that they do not belong.

Time has a different value, and a different pace, in these two distinct spaces.

The new professional class of Moscow rushes around the whole day – and often night – in a relentless effort to pack more activity in the 24 hours, so denying time limits. Companies offer bonuses for longer hours, for on-call duties, going out of their way to pay private transportation to get their valuable employees earlier at their management desks. So that they are able to speed up transactions, ensure a faster rotation of money (the key source of higher profits in the electronic financial circuits), and a more complex networking of operations throughout Russia, and throughout the world. The life of all these hundreds of thousands of people, and of the millions that rely on their performance, depends upon the fate of their investments in the global financial markets, where time is annihilated by moving capital around, from one time zone to another, from one currency

to another, and from one stock to another. Or else, time is pieced out in abstract categories, and sold in auctions, as in forward contracts, future options, derivatives, and other new financial products that make value out of de-sequencing time: e.g. the future becomes potential value as a present commodity. For this world of new Russian business, the time horizon has disappeared, only the present exists, not only in their work, but in their life. Political instability, economic unpredictability, and the blurring of social meaning beyond personal lives, makes the experience of everyday the only standard by which to judge progress – in a collective, unconscious revenge against the former Soviet model of sacrificing the present to the future of a promised land.

For the large majority of people, rooted in the space of places, time has a different meaning, and a much slower pace. Certainly, they also rush the whole day, particularly women, trying to handle work, home, children, family, and still find an instant to feel their soul. But they use time, their time, as their main asset to solve every problem of survival, using it to find the cheapest buy; to travel to more distant location, if this helps with the job, or with finding a cheaper apartment; or using their spare time to plant, cultivate, and harvest precious produce to get by the winter. The time of seasons becomes then absolutely crucial, and paces life in accordance to the sun's course. Large state enterprises send people home “on vacation”, not to lay them off, when funds are exhausted or transferred into foreign banks accounts. So, they pay workers with time, and time becomes the only abundant good, the one that provides room to invent new survival strategies. For the growing mass of early retirees, they have all their time, but they also have to use it to buy their survival, beyond their meager pensions, by the means of survival strategies that populate the kiosk economy, and the streets of cities around

Russia. Ultimately, the time limit is biological, as the harshness of the transition translates in illness and death. Male life expectancy in Russia went down from 65.0 years in 1987 to 58.3 years in 1995, an unprecedented drop for any society in modern history, so that Russia's life expectancy ranks in the 136th place among the 188 countries for which the World Bank had data in 1995 (It must be said that male life expectancy seems to be somewhat improving in the last 3 years, but the 1998 economic crisis may reverse again this trend). Biological time is also being cut down at the other end: in the creation of life: Russia's fertility rate declined from 2.2 in 1987 to 1.4 in 1995. As a result of higher mortality and lower birth rate, Russia's population is declining, losing 160,000 persons per year, so that if trends continue, by 2020 the Russian population will have shrunk to less than 135 million. Thus, biological time, counted as the total life time of people, measured by life and death, is redefining lives, family structure, and future personal arrangements for Russia as a whole – but with a specific, dramatic impact on the majority of the population excluded from the dynamic escapes of the space of flows.

Thus, where people live largely conditions how people live, and how long people will live. Space structures time. The space of flows defines the content of life/time in the space of places, as being in or out of the networks assigns differential value to living time. The irony of course is that those whose time is valuable strive to annihilate time by their frantic attempt to squeeze the last drop of monetary value out of it. While those whose time has no value for the system, use it as their only asset, both to survive, and to live on, with somewhat greater degree of personal control over their time, that is over their lives. In sum, we seem to be witnessing a historical reversal: history has disappeared, the present is the only time. It used to be that time, the time of history, the

time of production, was the source of organization and control of space. Now, it is the new space, the space of flows, the one that redefines the notion of distance in Russia, and sets up different time regimes for the inhabitants of two forms of space that structure life in parallel universes. The experiences of people living in these two time/space regimes are increasingly distinct, and even incommunicable, because they are warped in different dimensions of a social hyperspace.

The culture of real virtuality and Russian culture

Introducing to the analysis of her remarkable book on Soviet political posters, Victoria Bonnell writes: “The critical issue facing the Bolsheviks in 1917 was not merely the seizure of power but the seizure of meaning” (1997: 1). Indeed. In this sense, the Russian revolution was a cultural revolution, a revolution aimed at the minds of people, not just at the development of productive forces. I like to suggest that the new Russian revolution, the one that destroyed the Soviet system, and triggered the transition to capitalism and democracy, also involves changing the cultural codes. However, the icons, this time, in the midst of the most extraordinary surge of communication technology in human history, are being cast in the virtual language of the audiovisual world (Mickiewicz, 1997). Yet, under circumstances such that codes are blurred, their meaning twisted, and the process of cultural change becomes a patchwork quilt of contradictory expressions. This is in contrast to the assertiveness, and single-mindedness of official ideology that characterized public images throughout Soviet history. Let me elaborate on this tentative hypothesis.

Two ideas dominated the anti-Soviet political coalition in the late 1980s/early 1990s. The first was the refusal of Communism, the rejection of Marxism-Leninism, and

therefore of all former icons of propaganda. The second, after 1991, was the idea of the market as the mean of individual freedom and prosperity. In the cultural realm, the direct manifestation of the rejection of Communism was the opening up of information, particularly in the media. Anyone who was in Russia in the 1988-91 period surely remembers the decisive role played by television programs such as List'yev's "Vzglyad", or Nevzorov's "600 seconds" in the liberation of Soviet minds. Even more important than their explicit political statements or informations, was the shattering of ideological officialdom, the fact that they constituted visual proof that a new era, the era of information, had arrived. Scott Shane, in an interesting journalistic report from a Western perspective, documents the essential role played by the liberation of information in the crisis of the Soviet system (Shane, 1994). However, while the explicit political dimension of this new media openness was essential in the demise of Soviet ideology, it did not provide, by itself, a new ideology. Rather, it was a wide spectrum of images, ideas, experiences, from around the world that, together, created a new cultural environment. Suddenly, Soviet citizens could see the world. And their reaction was similar to the shocking surprise of those citizens who, in previous times, were fortunate enough to travel outside the socialist world. In Shane's words: "what caught their imagination was "the good life", what young Russians called "kife", a flexible slang word used literally to mean a wave of alcohol, but also a metaphor for lucky breaks in general, for a lucky break of a good time...To have a good life, you need a lot of money" (1994:210-211). In other words, the market ideology came to Russia through two channels, not necessarily contradictory in people's representations. On the one hand, the harshness of high prices, and uncontrolled merchant speculators as a way of life. On the

other hand, through the television's mirror, the world of consumption, of advertising, of unlimited possibilities – with money. The new media world, with its role models, with its life-style images provided the new icons of capitalism, particularly for the young generations. Yet, the relationship between media, business, people, and culture, is more complicated, and Russia is no exception to this complexity.

People's access to the media changed drastically in the 1990s. And the media themselves changed substantially. First, the economic crisis dramatically affected both people and media. For most people, it meant that, while they had much greater choice of information sources, they could barely afford it. Newspapers, and magazines were entirely subsidized in the Soviet Union, so that, if people were not looking for independent political information, most other domains of information and culture were accessible to a large proportion of the population. In the 1990s, many people were confined into the audiovisual media world, as the print press became too expensive for the large majority of its potential readers. Thus, radio and TV, while being more diverse, took on a much more decisive role in shaping public opinion, and cultural representation.

On the other hand, media concerns could not sustain themselves. So, with dwindling state support, they gradually came under the financial control of powerful business groups, positioning themselves to control communication in the country. Even government television and radio became largely dependent on advertising, and investment from business groups. The trend of de facto business control of Russian media accelerated after the 1996 presidential election. As Yeltsin was on the edge of losing his re-election bid to the threat of either Zyuganov or Lebed, major financial groups provided decisive support, both in cash and in media influence, while many journalists,

newspapers, and TV stations willingly cooperated in supporting Yeltsin and undermining Zyuganov. It was partly motivated by the fear of losing freedom of information under a Communist presidency. But it was also the means for winning political and business favors for the media firms, and for journalists themselves. As a reward to the services of the financial groups, Yeltsin granted them privileged access to the main government's controlled media. The net outcome of these trends was the formation, in 1997-98, of an oligopolistic media sector, with various financial groups controlling key media. Thus, in January 1997 was constituted the most powerful private media empire in Russia, Media-Most, under the control of Most Group, presided by tycoon Vladimir Gusinsky. It included the private national TV channel NTV, created in 1993, and authorized to broadcast nationally in 1996. It also included, the leading daily "Segodnya", created in 1993, the influential weekly "Itogi", the radio "Ekho Moskvyy", and various magazines, and publishing houses. NTV claims 100 million viewers, and went on adding a new satellite pay network for select audiences in main cities. In 1998 Media Most started a regional TV network, TNT Teleset, with 70 commercial local and regional affiliated stations. In addition, "NTV Profit", and "NTV Kino", launched a large reconstruction program of Russian cinemas, taking a decisive position in film distribution. By mid-1998 NTV was planning to launch several satellites in the coming year, adding capacity to build a network of 20 satellite-based TV channels. Thus, "Media-Most" has already created an integrated media system, where images, sounds, and informations refer to each other, in a comprehensive, yet diversified, and decentralized hypertext that is capturing a growing share of Russia's audience. But NTV is not alone in this effort to provide the new Russian iconography. Berezovsky's Logo Vaz group has a determining stake in

government's ORT TV, and in a number of major newspapers, including "Nezavisimay Gazeta". Potanin's Oneximbank controls "Komsomolskaya Pravda", "Russky Telegraf", and "Izvestia" (the last two merged in the Fall of 1998 to survive the financial crisis). The second public TV channel, RTR, while state-owned, is in fact largely dependent on its private advertising agency, "Video International". The influential business magazine "Kommersant" was, at least until 1997, largely dependent on loans from SBS-Agro Bank. Gazprom itself entered the field. On December 1997, Gazprom Media was created, presided by Viktor Ilyushin, former deputy prime minister in 1996-97. Adding complexity to the network of business interests in the media, Gazprom entered in the board of public channel ORT, while acquiring a 30% stake of private NTV. Using the network of former oil&gas radio stations in the provinces, Gazprom has created 20 TV regional stations. It has also decided to become a major player in Satellite-TV, with two satellites ("Yamal 200", and "Yamal 300") to be launched in 1999. It also subsidizes or owns about 100 newspapers, and publications, including "Robochaya Tribuna", and "Trud".

City and regional media are also under the direct influence of provincial or local governments, and their business allies. Most important is the case of Luzhkov, the Mayor of Moscow, who controls "Center TV", with financial backing from the the City of Moscow administration. Center TV is already broadcasting to other areas, and intends to become a national network. In addition to Center TV the City of Moscow also controls dailies "Moskovsky Komsomolets", and "Rossiya", and the prestigious weekly "Literaturnaya Gazeta". Luzhkov maneuvered to receive the transfer of federal government assets in a major publishing house, and in various newspapers, so that

Moscow's media empire extends now widely throughout Russia. (For sources: "Russian Media Empires" 1997/1998, in:

<http://www.refrl.org/nca/special/rumedia1/rumedia2/rumedia3>)

What is the impact of this business control over the media for the media themselves, and beyond that, for Russian cultural expression? At first sight, it appears that journalists have very little control over their reporting, and opinion, in every subject that is considered to be important by the owners. A case in point is the fate of "Izvestia", traditionally considered the leading Russian daily. In late 1996, "Izvestia", until then owned by its own journalists and workers, sold a decisive stake to Lukoil. In April 1997, the newspaper reprinted an article from "Le Monde" that accused Chernomirdin of accumulating a personal fortune while being prime minister. The management blocked the article. "Izvestia"'s editor in chief, Igor Golembiovskii, defended the independence of reporting. He called upon Yeltsin, who did nothing to help him. Then, the journalists sold a controlling stake to Oneximbank, asking for protection. In fact, Onexinbank sided with Lukoil, and fired Golembiovskii. Many journalists followed the departure of their editor. Now "Izvestia" closely reflects the views from Oneximbank (Potanin's), and Lukoil.

Yet, on the other hand, the ferocious competition between business groups, for instance, between Berezovsky's interests and Potanin's concerns, means that there is no single opinion. Furthermore, business groups are extremely prone to information control in issues that concretely matter to them (the privatization of telecommunications, the appointment of the government). But life, and information, do not stop there. There are large areas of interest that are not monitored for censorship. In this case, the pro-market

ideology, with its focus in the interest of specific markets, is not the functional equivalent to the Marxist-leninist censorship that could potentially interfere in all domains of information.

So, what business control does to the media, by gradually removing them from the control of the state, is to expose the Russian mind to the world of consumption, and globalized media content that is pervasive everywhere else. In this sense, Russian exceptionalism is being undermined.

As for the impact on the people, observers report that “Opinion polls suggest televised news and analytical programs, and so-called respectable publications have a very limited audience throughout Russia” (Radio Free Europe Special Report on Russian Media). It would seem that, after a brief period of hope under glasnost, skepticism has now set in the minds of Russian people, referring to anything “official”, even if the new officialdom is praising democracy and promises the bounties of market economy. But, probably, and this is only a personal hint, while not internalizing explicitly political messages, people’s minds are indeed being transformed in the new world of media. By enclosing communication in an increasingly powerful, and diversified audiovisual world, by linking up the new Russian media with global production and distribution of infotainment, and by extensively relying on commercial advertising, the new Russian elites are, inadvertently, seizing new meaning. The meaning of meaninglessness. A feature that characterizes the culture of real virtuality, made up of kaleidoskopic images, fragmented in broken mirrors.

The reconstruction of political institutions: A Russian network state?

At first sight, the political architecture that Yeltsin's team proposed to replace the Soviet Union, looks like a daring blueprint of an information-age's network state. The Russian Federation was conceived as the strategic node of a supra-national confederation, the Commonwealth of Independent States, internally decentralized in a complex network of republics, oblasti, krai, okrugi, autonomous territories, and municipalities, all of which were encouraged to take, in Yeltsin's words, "as much autonomy as you can manage". They tried, in fact. Some republics, such as Chechnya, Tatarstan, and Bashkiria, declared independence. Others, like Sakha, asserted control over their own resources. The Siberian Agreement brought together Siberian provinces in an attempt to renegotiate their fiscal status with Moscow. And throughout the Federation, strong winds of regionalism, localism, ethnic identity, and political autonomy hinted at a fundamental redefinition of Russian federalism, as seven additional inter-regional cooperation networks followed the path initiated by the Siberian Agreement (Smith, 1998). Furthermore, the Russian state became increasingly embedded in the international networks of global governance. While its presence in the G-7 meeting (renamed G-8 by the Russian authorities) was largely symbolic, the close cooperation with the International Monetary Fund, and the World Bank, deeply transformed the practice of Russian sovereignty. On the one hand, the IMF, both through direct lending, and through its approval for other lenders, allowed Russian finances to go on for a long while, in the midst of economic irresponsibility (negative growth, minimal level of tax collection, emission of high interest GKO's without financial backing, periodic default in fulfilling the government's payment obligations etc). On the other hand, in exchange for feeding

this borrowing addiction, IMF monitored on a day to day basis the management of Russia, thus adding a new layer of complexity to the actual political construction. So, in principle, Russian governance was organized along a complex set of interactions between all the nodes of this multi-level network of institutions. Should the system have worked, it would certainly had provided much needed flexibility, and multiple points of connection between state, and society, during the difficult process of endless transition from surreal socialism to unreal capitalism. But it did not work as it was supposed to. First of all, CIS was a fiction, filled with distrust between its members, and submitted to strategic maneuvering from each member to appropriate as much as they could from the spoils of the Soviet heritage. At best, CIS provided an institutional platform to negotiate potential conflicts between neighbors, and to deal with the practical problems posed by the forced sharing of some basic facts of life (the electric grid, the ruble zone, the transportation network etc.). The connection between Russia and the Western world, quickly became a subordinate one, fundamentally enacted by the IMF, and characterized by increasing dependence of Moscow from US diplomatic initiatives, and to a lesser extent, from German's advice and support. The relationship with national republics was marked by conflict, dramatically emphasized by the disastrous Chechen war, that showed the limits of Moscow's military capacity to impose its authority. While Tatarstan and Bashkiria accepted closer cooperation with Moscow, it was in exchange for winning considerable control over their own resources. Federal relationships evolved in a constantly changing pattern, in time and space. Several periods can be distinguished. After an initial phase of relative autonomy, marked by the 1992 Federation Treaty, the October 1993 forceful demonstration of force by Yeltsin, led to a process of

recentralization. On the one hand, Yeltsin tried to exercise power through a network of presidential representatives. On the other hand, the Constitution opened up the channels of representation to regional elites through their presence in the Federation Council as the upper chamber of the Russian Congress. It did not work out entirely. Political processes in key regions, for instance in Ekaterinburg, in Vladivostok, in Novosibirsk, showed the limits of the power of the president when the regional elites remained united in their shared interest of autonomy, and defied Presidential attempts at imposing the President's men as regional leaders. Even the Moscow government, under Luzhkov, quickly created its own power base, in alliance with Chernomyrdin, and Yeltsin, but with its own, independent access to sources of capital, media influence, and political power. The 1996 presidential decree allowing the regions to elect their governors democratically acknowledged the reality of regional powers, and tried to establish a new basis of cooperation with a presidency weakened by the difficult reelection of 1996. The new tactics from Moscow focused on keeping tight control of the fiscal resources at the center while allowing greater political autonomy in the periphery. It did not work either. Regional elites linked up directly with industrial and financial groups, and with foreign investors, selling access to their territories – with their resources and markets – in exchange for sharing the goodies. When squeezed by Moscow in terms of funding, provincial authorities reacted by forwarding the pain to their citizens, blaming Moscow for lack of payment, and budget cuts. Federal relationships were also extremely diversified across the space. Depending on local, and regional power relationships, levels of autonomy and self-governance were extraordinarily different. Therefore, instead of a network of institutions, the political system that actually emerged was made up primarily

of local and regional systems of power, with their own business connections, and interests, endlessly negotiating with Moscow their allegiance in exchange of a greater say in the federal budget, and in the management of the region's resources.

Finally, during the crisis of 1998, regional governments took advantage of a much weakened presidency to increase their autonomy. The governor of Khakassia, Alexei Lebed, went on television to announce his decision to stop transferring funds to the federal budget, while comparing Yeltsin to Hitler. Kaliningrad declared its own 'state of emergency', and the governor of Sakhalin said that he would do the same, what, in his own words, could signal "the beginning of Russia's dissolution". The republic of Sakha halted deliveries of gold, diamonds, and other natural resources to the center. Krasnoyarsk, now governed by Alexander Lebed, imposed its own price controls, and so did several other administrative units. The governor of Omsk forbade the sale of food to other regions. Similar measures were introduced in various European oblasti. In Saratov, there were plans to introduce a regional coupon as mean of payment. Sverdlovsk oblast announced the possibility of printing its own currency, should the crisis worsen. When, and if the crisis does become worse, with over 40% of the economy already in a situation of barter trade, a regional fragmentation of the Russian economy cannot be excluded.

So, the formal network of institutions was in fact broken over time, and throughout the space. Republics, provinces, territories, cities, became, by and large, autonomous entities trying to follow the path of their own interests, then negotiating these interests with Moscow. Instead of a network, there was a growing juxtaposition of centralism, and localism. Moscow tried to keep control by administrative means while regional and local governments, usually without cooperating with each other, tried to

keep as much control of their own wealth and resources as they could, linking up directly with big business, both national, and regional. The outcome seemed to be a growing territorial disarticulation of the Russian state, only countered by a growing economic integration through the alliance between powerful business groups at the national and regional levels. Networks of business, and of interest groups, substituted for the state. And since the old, centralized state gradually lost the power to command over Russia's immense territory, a kind of political neo-feudalism seemed to emerge, in which the different levels of the state become disjointed, to be taken over by the dominant groups of each region or city.

However, the crisis of 1998 may change the trend. With the regions becoming increasingly autonomous economic and political actors, but with Moscow still being the critical node in linking up with the global economy, and in redistributing resources, a new kind of political/institutional network may be emerging. It would be a network based on greater regional autonomy, with horizontal relationships between regional governments, and flexible negotiations with Moscow. The center could become weaker, but still play a coordinating, and connecting role. So, in fact, paradoxically, Yeltsin's proposal of a truly decentralized federal system could finally be constituted as a result of the demise of Yeltsin's centralizing power.

Yet, depending on the political process, an alternative scenario could develop. If Moscow insists in asserting its power, instead of sharing sovereignty and resources, the contradiction between the segmented globalization of the economy, and the territorial fracture of the state could become a fundamental feature of the new Russian crisis. It may not lead to separatism, and independence (except in the Caucasus) since the

overwhelming majority of the population is ethnically Russian. But it could result into a de facto loss of national political unity – unless this process of political disintegration triggers a nationalist reaction to reassert Russia’s unity and identity by extreme political means.

Conclusion: Rethinking Russia towards the New Millennium.

The crisis that is sweeping Russia, again, at the end of the twentieth century, challenges us to exercise our conceptual creativity. Without a proper understanding of current processes of crisis and change, it will be difficult, in Russia as well as in the world at large, to manage this most dangerous transition. Yet, more often than not the intellectual categories through which we interpret Russia’s problems and conflicts are prisoner of an obsolete framework, still largely tainted by Cold War overtones. We still think in terms of dichotomies between capitalism and socialism, liberalism and sovietism, West and East, entrepreneurs versus bureaucrats, freedom versus communism, centralism versus localism. Our prevailing way of thinking simply does not fit Russia, or the world by that matter. And in the case of Russia the analytical challenge is even greater, because end of century’s Russia combines different processes of change, while being fully immersed in the new global reality. Given our current state of confusion we have nothing to lose by trying uncharted avenues of analysis. We suggest that rethinking Russia along the lines of the network society model, that seems to have shed some light on processes of change in other areas of the world, may yield some clarification on our future understanding. For instance, if we consider that the huge size of Russia, instead of being a factor of its isolation from the world contributes to its internal social disarticulation

between nodes connected to the global networks, and locales enclosed in their defensive survival. Or, else, if we understand the economy as made up of sets of networks with different levels of connectivity, with different networks organizing the financial flows, the export-oriented natural resource economy, the barter economy, the kiosk economy, the criminal economy, then finding points of connection that change over time, and depend on bargaining processes between economic agents. The transformation of the state may also be better understood as a broken network of institutions that, altogether, undermine the practice of shared political sovereignty, by linking up to diverse configurations of economic and political elites. This, in contrast to in the traditional, formal approach in terms of models of federalism.

The view of a new Russian culture as a patchwork of global messages and local adaptations, in a constant redefinition of meaning along the increasingly pervasive electronic hypertext – differentially appropriated by people according to their frame of reference – may help redefine the notion of emerging identities.

If we are able to rethink Russia with categories adapted to the Information Age, we may start deciphering the greatest mystery of all: the absence of social movements in the Russian transition from nowhere to wherever. If there is an iron rule of social history is that social movements are critical instances in triggering, and orienting social change. Even if, in most cases, the dreams and projects of movements are distorted, deviated, or watered down in their process of institutionalization. The demise of Soviet communism is the most remarkable exception to this rule, in modern history. With a few exceptions (nationalism in the Baltic states, Democratic Russia), social movements were a secondary factor in the Russian transition, a revolution from above that spiraled out of control. But

the paradox deepens with the apparent political passivity, and endurance, of the Russian population to the pain inflicted by the transition, to the realization of their cynical exploitation by their new “democratic” savvivors, to the criminalization of segments of the economy, and of the state, to their national humiliation, and to the endless betrayal of their hopes. It is easy to understand why Russians, particularly young Russians, are not lured by the populist appeals of barely reconstructed Communists. And why they do not trust neo-liberal economists admirers of Pinochet. But, throughout history, social movements have risen from the depth of society, without asking for the permission from self-proclaimed political leaders. Why not Russia now? In our view, based on 25 years of research by Castells on social movements around the world, there is a simple answer. Social movements do not rise just because there is pain, suffering, and oppression. There may be revolts, but not movements. The Russian population, by and large, is too educated to explode without measuring the consequences of its revolt. Overall, individual and groups survival strategies provide better means to get by if the world cannot be changed. So, the real issue is not why Russians do not revolt, but why they do not believe the world can be changed. Social movements always combine the wounds of suffering with the healing of ideals. Without ideals, without the projection of dreams and hopes, there are no social movements. Russia has always been, at the same time, an enduring society, and a potentially revolutionary society. Until the exhaustion of ideals, under Stalinism, Brezhnevism, Gorbachevism, Yeltsinism, bureaucratic socialism, and wild capitalism, dried out hope and belief. So, until people’s capacity to generate new ideals is not restored, there will be no social movements. And without social movements, Russia will not change. Orthodox economists got it all wrong: societies create institutions that

allow markets to operate productively. Markets without institutions are wild jungles filled with violence. Institutions that are not rooted in society are bureaucracies, thus sources of oppression. Social change in Russia depends on the formation of a civil society, produced by new social movements. But these social movements cannot be those of the past. There will be no banners, no mass parades, no all encompassing ideologies, no vanguard parties, and no seizing of the state. In the Information Age, seizure of symbols, belief in human values, is the critical source of people's mobilization. A decentered, networked, grass-rooted process of social change, using tools of information and communication, and making a new society by actually living it, are the new avenues of social transformation. The current proliferation of non governmental organizations in Russia could be the embryos of new forms of social change.

We do not know what this concretely means for Russia. But we know that meaningful social change will not be initiated from the political system. At most, creative political actors may be open to sense new values in society, values induced by people reconstructing their lives. And we know that the intellectual sensors we use cannot detect these processes of production of transformative values. We need to feel how Russian people generate new ideals, and how these ideals become sources of alternative forms of society. A society that can include the market without making it a fetish. A society that will appreciate democracy because it is connected to everyday life. Rethinking Russia is a pre-condition to feel Russia. And for Russian people to feel that they can believe again could be the beginning of their true transition: from surviving to living. The conceptual exploration presented in this paper is an attempt to understand Russia with the categories

of its future while Russia is still struggling through the new time of troubles of yet another uncertain transition from its past.

Notes

(1) The estimates on the diffusion of Internet use in Russia vary wildly, depending on sources. Rohozinski's data seem to place his estimates between two extremes. On the one hand, in 1997, the Foreign Broadcast Information Service, the foreign media monitoring arm of the U.S. Central Intelligence Agency, estimated that there were only 20,000 computers in Russia connected to the Internet. On the other hand estimates from surveys conducted by a Russian Internet provider, published by an usually reliable source, "Ekonomika I zhizn – Sibir", n. 73, April 1998, the number of computers connected to Internet was close to 200,000 in March 1998, twice the number of computers connected in the winter of 1997. This rate of diffusion (about 100% annual increase) would be in line with the rate in the rest of the world, thus increasing the rate of growth estimated by Rohozinski's sources. Besides, the last survey conducted on October 5th-8th, 1998 showed that the Russian financial crisis did not slow down significantly the diffusion of Internet: the number of computers connected had increased to 238,887, including 16,637 hosts with Intranet addresses (See <http://www.lexa.ru/ru-survey>). Given the discrepancy, and our inability to evaluate the various methodologies used in these various surveys, we cannot draw, for the time being, a firm conclusion. Yet, it seems that, in spite of Russia's technological lagging, and economic difficulties, a growing minority of Russians is indeed being locally and globally connected via Internet, at a fast pace. Furthermore, Russian domains are upgrading their content, in the range, and quality of the information they offer.

References

- Aslund, A. (1995) "How Russia became a market economy", Washington D.C.: The Brookings Institution.
- Bonnell, V. E. (1997) "Iconography of Power. Soviet Political Posters Under Lenin and Stalin", Berkeley: University of California Press
- Campbell, R.W. (1995) "Soviet and post-Soviet telecommunications: an industry under reform", Boulder, Colorado: Westview Press
- Doucette, D. (1995) "Telecommunications in Russia", Ph.D. Doctoral Dissertation, Berkeley: University of California, Department of Political Science, unpublished.
- Castells, M. (1996, 1997, 1998) "The Information Age: Economy, Society, and Culture", vol. 1: "The rise of the network society". Vol. 2: "The power of identity", vol. 3: "End of millennium", Oxford, and Malden, Massachusetts: Blackwell Publishers.
- Castells, M., and Kiselyova, E. (1995) "The collapse of the Soviet Union: the view from the Information Society", Berkeley: University of California, International and Area Studies Book Series
- Castells, M. (forthcoming) "Paths and problems of the integration of postCommunist Russia into global economy. In Zysman, J. et al. (eds) "Production networks in Europe", Vienna and Berkeley: Kreisky Forum-BRIE Books.
- GBN (1998) "Business Environmental Scan: Russia", Emeryville, California: Global Business Network, Business Report (unpublished)

Rohozinski, R. (1998) "Networks and the dialectics of control", paper presented at the Conference on "Information Technology and Social Inequality" organized by the United Nations Social Development Research Institute, Geneva, June (unpublished).

Shane, S. (1994) "Dismantling Utopia. How Information ended the Soviet Union", Chicago: Ivan R. Dee.

Smith, G. (1998) "Sustainable federalism, democratisation, and distributive justice", in W. Kymlicka and W. Norman (eds) "Citizenship in diverse societies. Theory and Practice", Oxford: Oxford University Press.

Wolcott, P. and Dorojevets (1998), M. N. "Making the transition? High-performance computing in Russia", *Current Politics and Economics of Russia*,

Vol. 8, number 2/3: 105-133

Mickiewicz, E.P. (1997) "Changing channels: television and the struggle for power in Russia", New York: Oxford University Press

www.rferl.org/nca/special/rumedia1/rumedia2/rumedia3 [On Russian media, 1997 and 1998]

www.rferl.org/nca/special/ruwhorules [On Russian elites, 1998]

O'Brien, T. (1998) "The Shrinking Oligarchs of Russia", *The New York Times*, September 27, section 3: 1-13

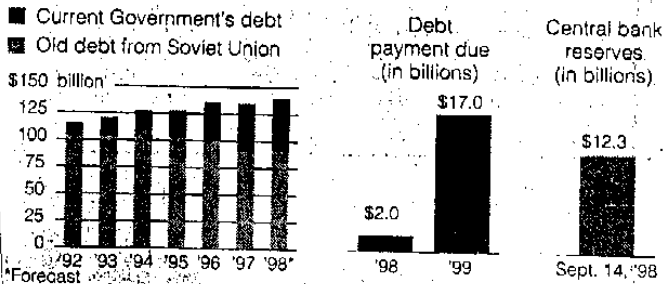
Gordon, M. R. (1998) "As ruble withers, Russians survive on barter",

The New York Times, September 6: 1

Chart 2

Running on Empty

The Russian Government's current cash reserves are insufficient to handle its debt payments through 1999, placing it in danger of default.



Sources: Moody's Investors Service, Brunswick Warburg, Moscow

The New York Times

Table 2 Russia's economic evolution.

Annual Percentage Change	1992	1993	1994	1995	1996	1997
GDP	-14.5	-8.7	-12.7	-4.2	-5.0	0.4
Industrial Production	-18.8	-14.6	-20.6	-3.0	-5.0	1.9
Agricultural Production	-9.0	-4.0	-12.0	-8.0	-5.1	0.1
Consumer Prices	2,650	940	320	131	22	11
Real Average Wages	-41	-14	-8	-13	5	25
Life Expectancy at Birth, Men	62	50	57	58	60	61
Life Expectancy at Birth, Women	74	72	71	72	72	73
Federal Revenues, as % GDP	16.6	10.0	11.5	13.6	12.4	12.1
Federal Expenditures, as % GDP	27.7	19.8	22.2	16.6	15.6	18.2