Исследовательские дискурсы: профессиональный труд, занятость, этнография

Russian IT specialists and their professional mobility abroad¹

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The article considers professional trajectories of IT specialists in the (post-)Soviet world, which appeared to be a mixture of formal structure and informal practices. Whereas the state initiated and promoted the universal system of ubiquitous education stuffed with extracurricular activities, the community of teachers, scientists, and engineers took advantage of infrastructural facilities and were in a way free to bring up a new generation of future IT professionals. The nature of Russian IT training is based on, but not exhaustively with education. The success of Russian techies around the world was also highly determined by social and economic transformations in the post-Soviet countries. Russian IT specialists had to face difficulties to overcome and challenges to accept. Their professional trajectories have been shaping under conditions of drastic changes of economic situation, so their unique experiences tell much about mobility as means to become visible on the surface of IT world. The study is based on the materials of semi-structured interviews with Russian IT professionals living and working in London.

Keywords: information technology, professional migration, mobility, engineering culture, Soviet education

I was a simple Soviet man. I believed that I never get anywhere, achieve anything, nobody waits for me anywhere... I remember <...> the question from the English classes: "What are you going to do when you get Oxford or Cambridge?" I wrote that I never get Oxford or Cambridge, and there is no sense to think about it. Literally, some half a year after, I got California. Since then, I somehow started to believe that if you desire, you can go wherever you want, the world is open, especially if you are a programmer and know English (m, 1982, programmer, 28.01.2014).

The post-Soviet programmers are still surprised by the possibilities, which appeared to be "default features" of the profession, where mobility appears in the core of professional culture. The IT professionals take a considerable share in the global mobility and the migration process. Conventionally, a loss of intellectual resources is tightly associated with academics in terms of brain drain (Carr et al., 2005; Drori, 2013; Beine et al., 2003),

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so far the outflow of capital is tied to high-income groups. Paradoxically, IT professionals combine both intellectual and financial resources, which are used to enforce mobility opportunities. On the one hand, IT professionals are lined up with the classical for migration studies representation of the bipolar world, where the flows of workforce go from less to more developed countries (Abella, 2006; Boeri & Brücker, 2012; Kuznetsov & Sabel, 2006). On the other hand, a concentration of the IT professionals and attractiveness of the local market strongly depends on the conditions and opportunities of receiving society — that is easy access and high outcome (Clemens, 2009; Solimano, 2008). Being highly skilled migrants, the IT professionals are relatively free to choose between countries, cities, and companies as they are generally attached to the technologies access. This type of migration is determined by the explainable set of factors such as market demand and the specific working conditions, more stable career, and high income.

London is an illustrative example with developed financial and banking market, IT-companies, attractive immigration policy, and as a result — high concentration of the Russian IT professionals, who managed to organize different types of language- and profession-based communities. The United Kingdom at some point became a country with the favorable conditions and migration policy especially attractive to those who sought "a better life" (more on immigration policy in Britain: Zemnukhova, 2017). The entire Russian professional network grew rapidly, and often included graduates from the same schools, alumni from the universities, ex- and present colleagues, relatives, and friends. Individual ties and networks played a great role in the process of adaptation to the new cultural contexts. These migration flows became self-organized and formed in local communities, which in turn could be treated as parts of a greater diaspora of the Russian professionals in IT.

The process of professionalization for the Russian IT specialists largely started during education. Depending on their age, the Russian IT specialists got various working experience connected to state institutions, private enterprises, local companies, academic projects, or corporate jobs. The collapse of the Soviet Union and subsequent economic transformations benefited the development of IT business in Russia. The IT industry saw different stages and trends, which are described with different economic situation, job opportunities, and prevailing practices at the IT market: I will show how the industry created and followed its own rules, private companies implemented innovative approaches, and these professionals became in charge of making their sphere alive and prosperous. To reconstruct the process of professionalization, I turn to market paths of the IT specialists, which they traversed during or right after their studies and which facilitated their future mobilities. I focus on entrepreneurship experience in Russia, the "Russian-style" business culture, and the career paths with particular switches. This is the way of telling the story of the homeland by Russians being currently migrants. I attempt to reconstruct the background of the Russian business ethics through professional life stories, which provide the context and peculiarities of the Russian market, its rules of game and players. I also aim at discovering the way Russian market with own rules and culture influenced the IT professionals and fostered mobility. These past paths in the eyes of the Russian IT professionals in London are always estimated somehow and are never neutral.

The paper is one of the results of the study of Russian IT professionals in London, which was conducted in 2013–2015² within the larger project on Russian computer specialists at home and abroad. The general aim was to approach professionals in various locations in order to reconstruct their personal experience, professional trajectories, diasporic ties,

² The interviews were collected within the project "Russian computer scientists at home and abroad", Center for Science and Technology Studies, European University at St. Petersburg (the Russian Federation Government grant No.14.U04.31.0001, 2013–2015). URL: http://rcs.eu.spb.ru/



and knowledge transfer. Within the project, we followed the logic of the grounded theory to develop theoretical framework based on rich empirical materials. The biographical method we used intended to facilitate informants' narratives and to grasp diverse and deep motives and life choices. The guides for biographical interviews considered education background, working experience, migration project, some private and family aspects, as well as social and cultural spheres of life abroad. The case of London included 49 interviews with mainly male informants (4 female), aged from 22 to 58, both married or single, from the post-Soviet countries. The Baltic countries were not included as they do not have visa issues. Additionally, I used some elements of the ethnography of work and leisure places, participant observation during the professionals' meetings, and correspondence between members of online groups.

The paper is organized in the following way. I start from the post-study opportunities in the USSR and the idea of allocation of the graduates. Then I turn to the post-Soviet experience and discuss the "wild" 1990s period with its almost unlimited opportunities for IT sphere at home or abroad. Next, I go into details on work experience in Russia depending on different types of firms and companies. Here I focus on the "Russian-style" business taking into account skillset transferable into social capital, which might help to become demanded specialists abroad.

Engineering culture in the USSR

The Second World War provided new ecology of innovations in different countries, whether we are talking about the USA, European countries, or the Socialist camp. The first professional communities in between military and academic fields were physically at the universities and research laboratories (for example, in MIT or Stanford in the USA, and in Moscow, Kiev, and Novosibirsk in the USSR). Students of ecologies of innovations in the USA have already provided different sorts of explanation how tiny enthusiastic communities had become (or not) popular and massive giants (Raymond, 1999; Kenney, 2000; Saxenian, 1994). The growing technological industry in the post-war period during the Cold war required an updated system of education to satisfy the demand for Computer Specialists and Engineers. The situation of arms race called for the establishment of the massive training system and education, which was supported above all for military purposes, and caused its ubiquitous necessity. The governmental policies predefined the development of national technologies in various countries. In the USSR, the state appeared to become the major requester of the innovations and constructor of the education system, which included not just education as a function, but also an allocation of graduates and constant supply of the graduates for workplaces. The idea behind was to create the space of functional units in the economic machine, where technological sphere played a major role.

The political situation in the Soviet Union restricted access to foreign achievements, so the need for inventions was constant and appreciated. Experimenting and inventions were especially possible and facilitated at the academic and research institutions (Nauchnoissledovatelskyi institut, NII), which dealt with technological tasks and orders. As a result, the majority of inventions were strictly confidential: some of my informants recall their fathers or other relatives, who used to work at closed institutions for military services and were immobile. NIIs became desirable places to work at for many reasons. Being state-funded organizations, they were socially secured and stable paid. Moreover, the technological sphere was less influenced by political agenda and its ideological component. Informatics, first within the Cybernetics stream, started growing as an independent field.

The professional community placed in these NIIs developed in its own way. It was (and still is) a community between academics and applied engineers, which manages to combine

practices and elements of both cultures. For example, there were no rigid requirements for academic careers such as dissertation defense nowadays, so specialists were relatively free enough to solve problems and tasks:

Knowledge was important for him [father], not some wallpaper degree [korochka]. He always told that, say, kandidatskaya was very easy thing to accomplish; he had enough material for that. However, he was simply lazy, always for that. He chose to do what he was interested in. Consequently, he never did anything he did not really want (M, 1979, programmer, 06.01.2014).

Goszakaz (state demand, government contract) was the only possibility for technoscience to develop, so industry was wholly state-driven. However, the state did not exhaust the space for innovations. Because the material infrastructure provided minimal conditions for technological production, there was certain freedom for individual non-formal practices. For instance, it was partly institutionalized in *kruzhok*'s to transfer knowledge and applied skills. Real practices showed that engineers' children could use facilities for their practical interest — either at work or at home:

The first time computer appeared at home, when father brought it from the work (M, 1979, programmer, 06.01.2014).

[Dad] worked at the Academia, and they had computers there; I could come and write primitive programs using Basic (M, 1973, programmer, 14.01.2014).

The production chain was fully requested, organized, and supported by the state. There were practically no alternatives for young professionals, who wanted to devote themselves to engineering work. The post-study work was mostly connected to either NIIs, or manufacturing departments connected to the universities.

There was an allocation with a state commission. Well, yes. I had two offers: one of them was "in a box". Do you know this term? Don't you? Well, it means something confidential, some KGB, or military, or connected to the defense. And the second one was from the Institute of Applied Mathematics. I went there (M, 1956, computer scientist, 29.01.2014).

Moreover, it was impossible to diversify choices because of the Iron Curtain. It was almost impossible to get an offer from abroad, as the borders were closed and external mobility was not available: "Nobody went anywhere, we didn't have international passports. So we did everything homegrown" (M, 1956, computer scientist, 29.01.2014). The atmosphere of isolation facilitated boundless creativity, which reminds the atmosphere of the early engineering communities in the USA. It was a kind of cultivation of the new sphere of activity, before IT industry became popular. As Raymond put it, "Before cheap Internet, there were some geographically compact communities where the culture encouraged Weinberg's egoless programming (Weinberg, 1971), and a developer could easily attract a lot of skilled kibitzers and co-developers. Bell Labs, the MIT AI and LCS labs, UC Berkeley — these became the home of innovations that are legendary and still potent" (Raymond, 1999: 51). What we see here is sharing experience in a broader sense — there was no place for competition, envy, or struggling. Other mechanisms worked. Being close, these (pre)professionals built the culture of freedom. It was significant to be a part of this story, to be included and recognized by others in these communities. Even more interesting issues came around the process of artificial gathering of the community: "In order to build a development community, you need to attract people, interest them in what you're doing, and keep them happy about the amount of work they're doing. Technical sizzle will go a long way towards accomplishing this, but it's far from the whole story. The personality you project matters, too" (Ibid, p. 49). These feelings of fun, happiness, and interest make activity around coding a kind of funky thing. This relation towards developer's job does not greatly differ depending on open software movement or military producing, but the very idea of coding is inseparable from ideas of creativeness and pleasure.



The crazy 1990s and new perspectives

Keeping the community together is possible due to the "raw material" of production: initial professional gathering started around the code and tinkering. Different representations of the code-meaning come from authors. For example, Gabriela Coleman points the following metaphors or similes: code as law (Coleman, 2012: 27), code as speech (p. 161), code as poetry (p. 92). Code plays various roles and has different meanings for programmers and developers, as well as for students of them. The code is a tool for diverse needs, it comes across particular work (programming) and gives a basis for general culture. Coleman shows how hackers' community produces and reproduces ethics and constructs legal issues. She takes an idea of nomos as a framework to demarcate the field of her interest, namely how everyday micropractices of ethical enculturation and punctuated crisis form ethical stances. One of the main questions is how it is possible to share a common ethical background and at the same time disagree about how to implement the principles of this background. In other words, why does crisis happen within this homogenous milieu of hackers? According to Coleman, such crises deal with two components of ethical production: functional outcomes and reflexive articulation of ideas. Crises are inevitable stages of community life and development because every new crisis creates new possibilities. Russian IT community faced their crisis in the 1990s, as it lost a significant part of technical specialists and university professorship. Moreover, the software industry was not regulated sphere in terms of a law, so they created their own ecology of innovations.

Perestroika and the collapse of the USSR initiated the process of transition to a market economy. The ecology of innovations changed drastically. The various options of hardware and software development appeared. Mainframe technology dominant in the Soviet production was rapidly replaced by a new wave of personal computers, which could accomplish diverse sets of tasks and be used at a workplace, as well as at home. This new stock of computers required special software, system integration, security, and technical services. Consequently, the demand for engineers mastering new technologies highly increased. The new market stimulated the emergence of the new companies, which supplied necessary maintenance for hardware and software products and services. This period was beneficial for starting a new business serving the needs of mass customers. Transformation of engineering profession led to the new forms in the institutionalization of IT specialists as a qualified labor force. The world market and global practices intervened into hitherto closed and state-driven industry.

During the last decades, the IT industry in Russia went through the several stages, which made the significant and diverse impact on professional field and IT-population. The collapse of the Soviet Union gave a room for the chaotic, spontaneous market development with exotic forms of business and short-term enterprises. The IT market was not exclusive and followed the rules of the "hard 1990s". *NIIs* also found a niche for their commercial activity ruled by themselves:

By that moment, it wasn't actually the Institute, but rather several tiny firms attached to the Institute, and they adroitly shared the budget (M, 1979, programmer, 23.01.2014).

It is important to say that the job opportunities were almost the same for the whole range of technical specialists. The qualified and experienced professionals as well as students and recent graduated from the technical higher schools had few paths for their careers or options to choose. One of the possibilities was connected to the previous inertia-type career from the university to *NIIs* or other near-academia institutions. Usually, the reasons were practical: for instance, to get an access to the computer or to off military service³. Kinship connections sometimes helped:

³ This issue is very important to keep in mind when we consider males' decisions to continue their work at academia. In Russia, induction into the armed forces is relevant for young men under 27 years. Except health issues, the only legal way to avoid the draft was to enter *aspirantura* (post-graduate study) or other academic job. It still works like that.

I got fixed up in a job at a NII. There were two reasons for that: a friend of mine worked there, his father as well. And the main reason was that they provided a draft deferment. <...> They were engineers, engineers-programmers, or so. Well, they are not actually programmers, I don't know... This NII, where they did nothing. There are plenty of them in Russia, probably. It had a military profile. <...> And I programmed there — for them, and for myself because it meant an access to the computer, which I had not (M, 1976, programmer, 02.12.2013).

Such kind of a job was easy to accomplish and gave full play to create individual products. Moreover, the note on a usual situation for Russia in this quote indicates the crisis with NIIs: the 1990s brought a huge lack of orders and management, as well as a distinct relationship between the state, industry, and academia. Meanwhile, engineers with more entrepreneurial talents managed to find unexpected jobs benefitting from it.

During my second year [at the university], I had an intention to work, and I have started... I wanted my first job to be... You know, it was common enough at that time — there were systems, no Internet, but databases, for a law or something. <...> It was 1996–1997 <...> I was offered to... sell them. And the very first place I visited — they asked me to help with their computers. It was a feature of the 1990s. Professional attitude did not exist yet. But he said they had a stock of computers, which often cracked, and they had no idea what to do with them. <...> I had never done that before, but I loved tinkering and I knew I would succeed. I had a desire for that (M, 1976, programmer, 02.12.2013).

This accidental luck demonstrated the openness from both sides — business and a technical specialist. Different kinds of enterprises were generally open for the innovations: trends for computerization have led to the need of having hardware as well as a proper technician. There was room for experiments: a great deal of business developed in the 1990s, and personal computers and software systems became natural elements to organize internal work. This movement provided additional labor market for students, graduates, and already qualified specialists. At first, this new labor market worked according to the non-formal system of employment and recommendations. As a rule, this job was temporary and unstable; it did not cause anxiety, but rather provided opportunities to continue in some sense *kruzhok* practices:

I was often invited [for jobs] via recommendations, let's say. Well, someone recommended somewhere to repair a computer, replace something, upgrade something. And after these works, people often gave up some old parts and accessories to me. Because after upgrading, they didn't need that anymore. By these means, I constructed my own PC (M, 1977, programmer, 29.01.2014).

Such kinds of freelance or self-organized and spontaneous enterprises became alternative forms of employment for technical specialists. The market gained new entrepreneurs, who left academia. Very soon, the image of academic career suffered significantly. Sometimes the remaining at the universities conservative professors did not want to play new market rules.

We had a quite strange head of chair, he was the one from the old school with good mathematics, but he was of the old school. To my mind, until the end of the 1990s — he had not considered computers. And partly because of that, we had to self-educate, because our teachers were, you know... Their programming skills were poor, he personally didn't believe in that all (M, 1979, programmer, 23.01.2014).

Along with conservatism at the university, there was intensive development outside of academia. The industry and market grew so rapidly that sometimes studies appeared to be a time-consuming thing. Students of technical universities faced the need to combine work and study, and it became a choice problem, where higher education failed to prevail. The market attracted for an atmosphere of real possibilities and circulation of new ideas and projects.

The job was a kind of compromise if we think between work and study. It is still a question what was better because the time was different. That was a period of the 1990s, not mad-1990s, but the late 1990s, still. And the image of studies was not like you have to study — nothing



like that. Many interesting things happened around — people, who did that, they had no this education. Things have changed since then (M, 1977, programmer, 29.01.2014).

The role of the university should not be underestimated though: it was a huge source of human capital. The market was very diverse but limited. Academia was strong enough to provide not just basic education, but also conditions for networking. Spinoffs and startups began to pick up speed:

My friends placed me at the university. There was a small firm. Not firm, but... well, five employees. They earned not that much, but the job was some interesting. And I met them, and they told me: we will hire you, just come (M, 1979, programmer, 06.01.2014).

The global technological demand for skilled (and cheap) workforce caused significant transformations in the development of the post-Soviet IT industry. There was no IT market yet in Russia (pure national market), but the global one existed and absorbed Russian techies. IT companies at that period were either domestic and often with an academic background or foreign outsourcing departments or joint projects. Those who have not left the country might also participate in ambitious projects of emigrated professionals: one of the possible ways to connect to the global market was to create IT companies abroad — for example, the post-socialist countries, Germany, or the USA, but these stories are relevant for the 2000s. In the Russian context, the critical mass of programmers appeared in the Soviet times, but their professionalization shaped only by the end of the 1990s: engineering culture, which appeared in the academic institutions, transformed by the unregulated market, finally reproduced in the 2000s.

Work experience in hard times: restructuring the market

While the 1990s were a hard transition period, the 2000s became a platform for more or less institutionalized IT industry. Different kinds of business and entrepreneurship shaped and reproduced their cultures, which had been successfully co-existing. Post-Soviet Russia appeared to become a center for circulation of national and international practices, local and global collaborations, state orders and industrial initiatives, — the brew, where the Russian techies got their professional training and life lessons. IT shrank the world, as well as code reduced the space between those who are in charge of coding. Factors that used to be significant for community building at the very beginning became somehow less relevant and produced new spaces for communication, interaction, and mobility. It has a great meaning for the Russian IT professionals, as they experienced loss and emigration, but subsequently used diasporic ties for outsourcing, offshoring, and other forms of transnational collaboration.

The academic culture rooted in the Soviet institutions remained dominate in many respects. Universities accumulated students and young specialists, and they were at the crossroad between academy, industry and state relationships. Universities, with varying degrees of success, participated in the state initiatives for academic excellence⁴, invited industrial partners to support curriculum, strengthened relations with the research institutions. Several universities succeeded more than others.

The university's beautiful peculiarity is that we had more basic departments in the Soviet times than Pentagon might have. It was indeed all around Moscow, everything doing anything. After our country had collapsed, many industrial companies went to the university. And now they support educational programs, promote some their stuff, and recruit people (M, 1982, programmer, 28.01.2014).

Academic and research institutions, *NIIs* remained one of the possible careers for young scientists and operated as mediators with industrial partners. Some of the joint projects might

⁴ The examples are the project of Research and Education Universities, the Russian Academic Excellence Projects "5–100", etc.

stem from academic collaborations and contacts, and kinship sometimes matters here. The connections were horizontal, based on previous mutual background and shared education or experience. Students started their projects outside of the academia, and used their alma maters for recruiting as well:

A friend of mine, a senior student, came and ask: do you want to work? I said: yes. With seniors. Most of them. Some started their own business, some had their small projects (M, 1982, programmer, 01.12.2013).

Startups gained a new breath as a form of business, though there was no such a word. The idea to develop "own business" came from the 1990s and could easily reach fruition in IT. This emerging culture of technological entrepreneurship privileged in the new small tech firms producing many opportunities for in-service training. Moreover, the IT market was full of demand for service and products, ordered either by the state, private, corporate, or abroad customers. Companies produced spin-offs, new startups, and businesses enriching both market and employees.

The industry of IT got the new breath in Russia with the Internet, which gave an impetus to the startup culture and industry in general. Because the expertise was (and sometimes still is) blurred, the usual customers could hardly create software and web-technology:

It was around 2000. The internet already flourished, everybody started construction of websites, to the left and to the right, it was highly demanded. So I have got a chance to touch webtechnologies a bit (M, 1982, programmer, 27.11.2013).

The gap between lay users and technical "experts" was so huge at the beginning that even low-qualified and inexperienced technical students had chances to start a business. The entry barrier into IT profession was very low for those who were interested and curious, who gave a try to solve technical and engineering tasks. Young techies — probably, more than anywhere else — were treated as professionals:

I worked at the design studio, an advertisement agency. My position was technical director. I was the third or the fourth year student and held a position of technical director! My task was to control all the stuff, technical stuff. Well, yes, this is very Russian (M, 1977, programmer, 29.01.2014).

Western companies with their advanced (experienced) practices and global values also brought the new cultures of doing business in IT. Early enough young professionals imbibed values and ideas of working conditions. They provided huge incentives to achieve a higher level of competencies and performance for young professionals, especially in contrast to generally low requirements. Western companies heated the labor market and raised competition between local and foreign companies. Some of the newly born companies appeared to be branches of foreign companies, where Russians had already got positions and started conquering the Russian labor market. Standard networks had its effect here as well:

There was an ad about Java developer. I was so surprised — how could it be possible? And I sent my CV. The answer came: hi, it's me, do you remember me? <...> We were mates from the university. He was a year senior. <...> We participated in the same Germany internship. <...> So, he worked in Germany at some company and opened a small branch of that company in our town (M, 1979, programmer, 06.01.2014).

For many foreign companies, Russian market represented a relatively cheap labor force: they could buy qualified specialists at lower costs. Here, practices of body-shopping (Biao, 2007) and virtual migration (Aneesh, 2006) presented in a full range, where real working experience with western companies is significant:

It was Russian-American company... Americans suddenly requested the direct-action corps, which could work according to their time zone. The team needed cannon fodder ready to work at night, so they hired spare students to fill rents and gaps (M, 1982, programmer, 28.01.2014).



By the moment, when specialists got their right to choose between companies, there was a variety of companies with diverse regimes, conditions, planning, networks, and social security. Different generations of specialists produced and reproduced working and professional cultures — in general, but in reality, they became united by the "mysterious techies" image. New ethics of business and technological revolution influenced *goszakaz*, where usual for Russian business mechanisms like *kumovstvo* (Osipian, 2010) or *blat* (Lovell et al., 2000) could not work. The IT industry did not depend on the state, and the market allowed autonomous development despite control attempts.

The market context gives additional problems to the pure culture of coders and programmers. The biggest problem discussed in Russian nowadays (and not only here), is the lack of qualified professional, overstated salaries, and absence of standards for particular IT jobs. Coders and developers seem to be superheroes keeping abreast and being free and creative, but they are massively hunted by the IT giants with their corporate cultures.

Comparing to religion, Kunda (Kunda, 1992) describes how culture works in a particular hi-tech company. He underlines that the formal structure of organization reveals nothing about its culture. He draws a curious comparison with religion to describe how culture works — i.e. educate without awareness of being taught through culture as a religion without having it. Culture acts as a map to guide employees through routine daily events. It includes people, presentations, and rules — it is necessary to keep a caring and humane environment, but it appears to create an environment of control where management faces clear difficulties. There is no place for explicit normative control unlike work "with hearts and minds". Minds-and-heartsprocessing is possible through different types of ritual frames; it might be reflected in practices and values, which today's IT giants impose as norms and standards. Ethical production is the basis of any kind of IT culture, be it engineering, software development, hacking, or something else. This story started from the very beginning of professionalization and works quite well during the history of IT development. What I mean is that current condition of ethical code (let us remember the code of honor) did not change much — and it currently builds up communities of practice (Takhteyev, 2012). What changes from time to time is the relationship between corporations, state, market, and people. The IT professionals continue to bear values of initial ethics — rooted in academia — which seems to be an inevitable component of doing things in coding. It is a fair deal and sincere by its results even abroad.

Conclusion

Having considered the changing environment for technological and engineering production, I would turn to professional trajectories and their key features, such as an ability to deal with unusual things and challenges, a taste of freedom to create, taking responsibilities without fear or downplay risks, a desire to progress, and an adaptability to various circumstances. They might seem general, but their constellation helps to explain global mobility and visible positions of Russian techies.

For a Russian man, the [temporary] contract [work] is something unclear. Well, here, you are getting used to it quite fast. It didn't rack. This is freedom. I did realize that it was freedom — because you are in charge of every your act. Nobody will chase you and wipe your nose. Ok, screwed up means screwed up. That is you who screwed up. This is the reason why one wants to become a permanent at some firm and do something there. But this is a dead-end. But people usually realize it — that this is a dead-end — and try to change for contract (M, 1979, programmer, 06.01.2014).

This image converges with what we called the "Russian style" here — whether the talk is about wage labor or about own business. The latter is a kind of transformation from full entrepreneurship to a sole proprietorship (a contractor). Individual narratives and personal

stories reflect common trends in professionalization and shaping of the contemporary IT industry, which appears to be a mixture of backgrounds. The three stages of industry development emphasized three main vectors: first of all, academic roots of the closed and military institutions; second, the spontaneous market of the 1990s and total freedom for experimenting coupled with the crisis in academia; and third, international values and community of practices (Takhteyev, 2012).

Why does the experience from the 1990s seem so valuable for further mobility? A transition from the planned to the market economy let skilled workers reconsider their positions, most of all, economic. The status of an entrepreneur was quite ambiguous and usually resulted in a unique skillset, which was closed to a survival course. Those, who went through it, either became successful and developed globally or gave up on the idea of ever founding their own business — these are two main scenarios and the consequences of the 1990s. There was no place for childishness, but the phenomenon known as "Russian way of doing business" appeared. Even the IT business could not resist this style. Some features of this business culture are still found at outsourcing departments working with a foreign customer: the ability to solve unique problems, the desire to progress, and adaptability to changes.

However, the academic background also strikes back. Academics seemed to be privileged workers grown up in the "hothouse" conditions and not quite adaptable to the "real" market. At the same time, working for the foreign market trained new IT professionals for the global business processes. Both opportunities created a kind of "infantilization" of the IT industry because the future generations easily got a job whenever they wanted: the best IT companies are still fighting for new human resources, and many Russians are among competitors.

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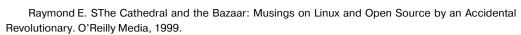
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