Hammer & Silicon: The Soviet Diaspora in the US Innovation Economy

Sheila M. Puffer/ Daniel J. McCarthy/ Daniel M. Satinsky/ Cambridge University Press (2018)

Once there were two tribes. The people in the first tribe largely felt that their talents were being overlooked, their goals were being blocked by the "glass ceiling", and their beliefs were not shared by those around them. In addition, food was scarce, their pastures were trampled down, and their wells were drying up. So the most courageous, persistent, and determined members of this tribe decided to join the second tribe, which was made up of equally talented, ambitious, and adventurous people living in two remote areas where there was food in abundance and the pastures were plentiful. This book presents 157 stories told first hand by the people from the first tribe who reached these "promised lands", were accepted by their inhabitants, and even moved up in the internal hierarchy of indigenes who, it turned out, were not born there themselves but had just settled there earlier.

The book, which is written by Sheila M. Puffer, Daniel J. McCarthy and Daniel M. Satinsky, is neither a scientific monograph nor a guidebook on "how to move from the former Soviet Union to Silicon Valley and prosper there". It is more an anthropological field book containing stories told by 157 persons who left the former Soviet Union and are currently residing in two "enclaves" believed to be the most vibrant and dynamic territories of the US innovation economy – Silicon Valley and the Boston Area. These storytellers left their homelands to start life in a new world where habits, attitudes to work and life, and patterns of interpersonal relations etc. were different from those they knew.

Although the authors of the book do not emphasize this point, half of stories are about moving from the elite level of one society to the elite level of another society. The elite status of the interviewees in their homeland was stressed openly in many interviews, but there is also an objective measure of the elite status of the interviewees. Although the authors do not provide exact figures about where the interviewees actually came from, at least a half of interviewees were from Moscow and a third of the interviewees *were born* in Moscow. Taking into account the system of *"propiska",* which still exists in Russia today and presents a complicated system of barriers for migration into large cities, there are only two ways to be a Muscovite: you either have to marry a Muscovite or be a home owner in Moscow, where the housing prices before 2014 were 5–10 times higher than in New York City. Before 1991, however, it was impossible to just acquire an apartment in Moscow to become a Muscovite. If you were born in Moscow before 1991, it generally meant that your parents or grandparents had either been

educated at Moscow universities and were in the top decile of graduates to continue their career in academia or to be taken on by employers in Moscow, or they were extremely hardworking and highly visible provincial civil servants or plant managers who had been transferred to Moscow to became a part of the apparatus of central planning (*nomenklatura*). Of course, your parents or grandparents may also have been popular writers, celebrated theatrical actors, great musicians, extraordinary medical doctors, skilful lawyers, or brilliant army officers who found ways to settle in Moscow. More importantly, having been born in Moscow, you had unparalleled access to a wider choice of food and consumer goods, which were almost unavailable in all other places in the former Soviet Union; the possibility to attend cultural events (plays and concerts); access to the best medicine available; the opportunity to study in the best schools (in the 1970 s and'80 s, Moscow School No.57 held the status of a national establishment comparable to the Bolshoi Theatre); and the possibility to apply to top universities within a special quota for Muscovites (some interviewees have retained detailed memories for decades about how they were admitted or not admitted to the very best university in the former Soviet Union, Lomonossov Moscow State University. But even those who were not admitted there were admitted to other good Moscow universities and after graduation, nobody actually worked outside of Moscow).

Being a second or third-generation Muscovite gave another advantage to persons who decided to relocate to the USA – they had the opportunity to raise (starting) capital before emigrating. This was not possible for immigrants of the first wave (1972–1987) and had a relatively modest impact on the second wave of immigration (1987–2000). But for the third wave of immigration, this was indeed an important factor facilitating both mobility and the chances of successful adaptation in the new environment. After 2000, you did not need to be a successful businessman/businesswoman, but with the rapid rise in housing prices in Moscow, it was enough to sell your parents' or your grandparents' apartment to get your hands on a couple of hundred thousand US$ to make your transfer to another country smoother and more comfortable and to make you think about how to augment your starting capital if you were interested in entrepreneurship.

However, there are other stories in the book told by the persons who came from other, less privileged areas of the former Soviet Union. Many of these stories represent three well-known "paths". The first path is when the persons were recruited by large high-tech US companies in their worldwide recruiting campaigns, were relocated to the USA, and successfully remained in these, sometimes "iconic", companies or later left to become independent high-tech entrepreneurs. The second path is also well known and is not specific to people of the Soviet origin: people who come to the USA to study and then put all efforts into not having to return home, settling instead in the USA. The third path is also popular among specific ethnic groups in the USA. These people come to the

USA with school aged children and put enormous efforts into making their children eligible for admission to the best universities, sometimes making great sacrifices in the process. (We were unable to find references to Yale, Princeton, Duke, Berkeley, Chicago University and, surprisingly, New York University in the book, although Caltech, Columbia, Cornell, Emory, Harvard, MIT, Rice, Temple and many other good institutions are mentioned).

The most interesting stories, however, are those told by totally self-made men and women. For example, Umida Stelovska (nee Gaimova), founder and CEO of parWinr, followed a very unusual path on her journey from a small town in Uzbekistan to the USA. She initially left Uzbekistan for the Czech Republic in 2006 and set up an employment agency there that specialized in finding jobs for illegal immigrants and later established a Thai restaurant chain. Three years later, she was granted a visa for the USA, and it was there that she began to realize the value of her husband's patents and convinced him to start a company in 2011. In her interview, she just rephrased the words from a popular Soviet song "hope is my terrestrial compass, and luck is a reward for courage" by saying "… if you are able to dream, and if you're capable of following your dreams, then you will find ways to succeed. You are already different from others because you didn't stay back, or you didn't give up and quit when you faced tremendous challenges every day" (p. 193).

Every book review must contain some criticisms and suggestions for further editions. The major criticism here is related to the the absence of a clear and consistent description of the US innovation economy, which is not a national but a global phenomenon and encompasses many industries and corporations apart from IT and biotechnology that are also developing and implementing radical technological or social innovations to revolutionise whole sectors or industries. These include – companies working in the defence sector or civil aerospace; companies developing emerging industrial technologies (IoT, 3D printing); and companies working in traditional sectors, such as energy equipment, general industrial equipment, medical devices and apparatus, new materials, chemicals and petrochemicals, food and drugs. Mention must also be made of the US sector of global technology consulting, which helps to digitalise and find new and more efficient ways of doing business for companies all over the world. In the book, Google is mentioned 37 times, Facebook 14 times, Apple and Microsoft 11 times each, Pfizer five times, Intel four times, IBM three times and occasionally the reader is made aware of the existence of GE, Raytheon, and Boeing. Neither the composition of the US innovation economy (large corporations, national laboratories, research universities, start-ups and spin-offs) nor the real figures about this phenomenon – employment, the average personnel turnover in different types of actors, overall input in US GDP – are presented. Without such figures, it is quite difficult to assess the real impact of the Soviet diaspora on the phenomenon.

We hope that this issue will be resolved in the second edition of the book and that the achievements of the Soviet scientific and entrepreneurial diaspora will be presented not only as individual success stories, but also as the evidence of the absorptive capacity of the US innovation economy.

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