2 Understanding Ground Zero

The Soviet Context and Legacy as the Starting Point for Reform

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The dissolution of the Soviet Union creates a unique laboratory for studying University governance. Before 1991, the now independent nations had a common University system, structure, and philosophy guided by the ideas of a planned economy (Eliutin, 1984; Huisman et al., 2018). With the dissolution of the Soviet Union, the now fifteen independent countries found themselves with opportunities to develop a public University system appropriate to their country and, with those systems, to develop an approach to governing higher education. To understand their current structure and the extent to which these structures evolved in common and uncommon ways, it is crucial to understand the Soviet context and its legacies impacting higher education. History shapes organizational structures but also organizational identities. The organizational future can be shaped by the past (Wadhwani & Bucheli, 2014). Thus, this chapter attempts to highlight the main historical events and underlying ideologies that shaped Soviet universities and their organizational and governance features, providing the foundation from which the current fifteen approaches began. Section 2.2 explores and analyzes initial common challenges of the newly independent higher education systems in the post-Soviet period to set a context for the later transformations.

2.1 BEFORE THE SOVIET SYSTEM

Before the creation of the Soviet Union, there were approximately sixty-three universities in Russia, Ukraine, Armenia, and the Baltic states of Estonia, Latvia, and Lithuania with their unique features and characteristics (Ait Si

20

Mhamed et al., 2018; Froumin & Kouzminov, 2018; Karakhanyan, 2018; Leisyte et al., 2018; Rumyantseva & Logvynenko 2018; Saar & Roosalu, 2018). For instance, the establishment of pre-Soviet universities in Russia was initiated by the Peter the Great's time in the eighteenth century. He established the fundamental organizational principles of the pre-Soviet Russian universities that were based on the integration of the Academy of Sciences, the University, and the gymnasium, where University professors acted as both teachers and researchers and the graduates of the gymnasiums would enroll in universities to develop and disseminate scientific knowledge (Avrus, 2001). This model was based on European, specifically Dutch, universities, where Peter I spent a considerable amount of time. The first University was established by Peter I in Saint Petersburg in 1724 and named Academic University. However, the operation of this University was complicated by various challenges including lack of professors to teach and students to enroll (Avrus, 2001). As a result, the University struggled to become sustainable.

The first Ukrainian higher education institutions were opened in the sixteenth century (Rumyantseva & Longvynenko, 2018). According to Rumyantseva and Longvynenko (2018), the Ostrozska Academy, established in 1576, was one of the important centers of innovation and research performing as a model for universities in the East of the country. In eastern Ukraine, universities that appeared at the beginning of the nineteenth century in Kharkiv, Kiyv, and Odessa were established under the Russian Empire at that time (Rumyantseva & Longvynenko, 2018). By the beginning of the twentieth century, Ukraine had approximately 27 higher education institutions with more than 35,000 students (Rumyantseva & Longvynenko, 2018). Because the Ukrainian universities in the eastern part of the country were functioning under Russian rule, universities were under strict control of the Imperial government.

In Estonia, one of the critical events for education development was the reopening of the University of Tartu in 1802, which trained more than 5,000 graduates, including lawyers, doctors, and agronomists, with a quarter of graduates being female (Saar & Roosalu, 2018). Pre-Soviet Estonian higher education institutions mirrored the Humboldtian and Statist models with the governing of academic bodies, but the budget was controlled by the state government (Saar & Roosalu, 2018). The first higher education institution, Riga Polytechnic Institute in Latvia, was opened in 1862 under the Russian Empire (Ait Si Mhamed et al. 2018). One of the oldest universities in Lithuania, Vilnius University, was established in the country in 1579 but was closed between 1831 and 1919 under Russian rule (Leisyte et al., 2018).

By the time of the Soviet annexation, Lithuania had eight higher education institutions (Leisyte et al., 2018).

Furthermore, the University of Gladzor in Armenia was one of the first medieval universities. The country has a long history of institutions of higher learning where medieval universities set degrees for successful graduates (Karakhanyan, 2018). In Azerbaijan, the Baku State University was established in 1919; however, the University did not have time to develop fully due to Soviet rule, which arrived in 1920 (Isakhanli & Pashayeva, 2018).

As observed, the history of higher education before the creation of the Soviet Union was grounded by different historical, political, and social changes in each of the countries. For example, the establishment of universities for Imperial Russia was important for its social and political cohesion (Froumin & Kuzminov, 2018). The current Moscow Lomonosov State University was founded in 1755. It became the first University with its own charter and had relative autonomy and academic freedom, which was uncommon for Russia. The charter determined the duties of professors, adjuncts, students, administrators, and the University's organizational operations. Notably, the relative autonomy allowed universities to have textbooks from abroad while foreign literature for universities was free of censorship. Universities also had the right to establish special scientific societies for the joint study of any science, the statutes of which were approved by the minister (Avrus, 2001). Despite these elements, the autonomy within Russian universities was still limited since the universities of that time were under the jurisdiction of the Russian Imperial Government (Avrus, 2001; Froumin & Kuzminov, 2018).

Historical analysis shows that pre-Soviet universities operated according to diverse models of governing, including Humboldt's idea of linking teaching and research, the Static model, and elements of the French model with significant changes and additions (Avrus, 2001). Most of the universities taught general courses in the first years allowing students to major at senior years. There was a fair connection between scientific research and teaching and rigorous requirements for master's and doctoral dissertations. All these ensured significant achievement for universities and their governance, which drastically changed in light of the political transformations in 1917 (Avrus, 2001).

2.2 IN SOVIET TIMES

During seven decades of Soviet rule, the country built an extensive and integrated education and post-secondary education system (Counts, 1957).

However, the Soviet universities were characterized by limited academic freedom, highly politicized organization, and held under the tight control of the Soviet government. The literature during Soviet times proclaimed that education in the Soviet Union was inspired by an era of Enlightenment and the Marxist views about the structures of society. The Soviets aimed to not only provide education but also to bring socialism to the country through an ideology-driven approach (Eliutin, 1984). Education policy and practices of that time promised to give equal rights to all citizens and education to all children. In addition, education was the vehicle for economic advancement and ideological cohesion. Marxist-Leninist–based education aimed to create the new Soviet "socialist" citizen (Eliutin, 1984). Thus, the school was the site both for socialist enlightenment and development of a labor force for economic growth. In addition, the creation and dissemination of a new socialist culture would be linked to the emergence of new forms of societal life and new forms of societal relationships (Eliutin, 1984).

Enormous losses in central funding brought about by the Revolution in 1917 and the subsequent civil war posed challenges to both socialism and the evolution of the educational system. Furthermore, Stalin's purges and mass arrests of teachers and the professoriate weakened the economic and educational systems as Stalin had subjected all aspects of Soviet society under control, not tolerating expression of any views that deviated from those of his government. The state was particularly threatened by the professors, scientists, and teachers whose creative thinking and efforts could threaten the state's power (David-Fox, 2012). World War II brought even more challenges; twenty-seven million people died, and most of the cities, schools, industries, universities, and other buildings were destroyed. Nevertheless, total enrollment in elementary and secondary schools increased from twelve million to twenty-one million children during first decades of the postwar era (Ewing, 2002).

In the next decades, the Soviet Union grew its higher education system. For instance, Imperial Russia had only about a hundred tertiary education institutions, including eight comprehensive universities located in the major cities of its European parts in 1914. After the creation of the Soviet Union and over the next four decades, the higher education system in the country grew rapidly and expanded its geographic presence. By 1959, there were 766 institutions all over the country. For example, in Central Asia, there was no formal higher education institution (University) before 1917. At the time of the Soviet Revolution, only religious-based schools, *madrasas*, existed. They taught religious books and fields such as geography, astronomy, mathematics,

and geometry. However, *madrasa* education was not acceptable in Soviet times, due to its religious connections, and these institutions of higher learning were closed in favor of newly developed state-run postsecondary institutions (DeYoung et al., 2018). By 1979, Tajikistan, for example, had thirty-three specialty and technical institutions or schools, eight higher education institutions, and an Academy of Sciences (DeYoung et al., 2018). However, the inequality in terms of economic conditions, the level of urbanization, and the cultural and ethnic and demographic diversity in the territory of the Soviet Union was profound. The number of higher education institutions and the number of students also differed in each of the republics (Smolentseva et al. 2018). Nevertheless, the state support and massive public investments meant that Soviet secondary and higher education experienced some of the most rapid growth in the world during that time frame (Johnson, 2008), all driven in support of the planned economy and to advance Soviet ideology. Driven through central planning, Soviet higher education became one of the largest systems of higher education and research in the postwar era (Johnson, 2008). Yet, in reality, the Soviet government could not overcome the sociocultural and economic disparities across the republics.

The growth of higher education was also shaped by the widened access to postsecondary education, especially for peasants, women, working-class young people, and national minorities (Fitzpatrick, 1979; Johnson, 2008). The system was organized collectively around a series of principles advanced by the State in line with Soviet ideology. First, the system was designed to prepare students for professional careers in line with the state, planned economy. Second, education sought to promote classlessness, which meant that the school should be built as a structure to fight against any signs of the class system, and promote gender equality, so that girls and boys attended the same school and were to be taught in the same way. The third principle focused on equality of the ethnicities and nationalities; different treatment of any nationalities living in the territory of the Soviet Union was to be abandoned. Finally, the fourth principle included a "world view," where the Soviet Union welcomed all nations of the world to become socialist and pursue Soviet education and its ideology (Zajda, 1980b). Despite the principles set by the Soviet government, Soviet education was deeply stratified, creating an elite higher education system and the restricting access to higher education institutions.

The Law on Higher Education, in turn, promoted objectives such as the training of highly qualified specialists educated in the spirit of Marxism-Leninism, "well-versed in both the latest achievements of science and

technology, at home and abroad, and in the practical aspects of production, capable of utilizing modern technology and of creating the technology of the future"; the production of research that will contribute to the solution of the problems of building Communism; and providing advanced training for working in various fields of the national economy, the arts, education, and health services (Zajda, 1980a, p. 94). As a result, higher education, professional training, research, and science became systematically linked with the planned economy, technological development, and the ideological mission of the Communist Party and Soviet leadership (Johnson, 2004, 2008).

The educational system of the Soviet Union consisted of primary, lower, and secondary education. Primary education included first to fourth grades, lower education included fourth to eighth grades (after eighth grade, a student could enter *technikum* [technical school] or continue his or her education in the lower school), while secondary education included eighth to tenth grades. General educational schools came in part- and full-time varieties, some offering only primary classes, some primary and lower secondary, and some all three levels. In time, schools offering all three levels predominated. Because Marxist and utopian socialist ideology prioritized school education over tertiary education, differing opinions about the purpose, function, and organizational features of higher education among Communist Party leaders emerged (Froumin & Kuzminov, 2018). For example, the first idea reflected the universalist education available for marginal groups based on European ideals, driving the state to open so-called Proletariat universities (Froumin & Kuzminov, 2018, p. 50). The second idea was to establish educational institutions to train future communist political leaders. Examples included communist universities under Sverdlov (Froumin & Kuzminov, 2018). By the 1930s, there were forty-five communist universities in the Soviet Union (Froumin & Kuzminov 2018, p. 50). And the final idea, similar to the second one, was to train specialists in specific fields, for example, polytechnic education combining the theoretical and practical skills for students, which developed to be one of the peculiarities of the Soviet higher education (Froumin & Kuzminov 2018).

That said, a common idea existed among the country's leaders that postsecondary education should not be separated from but "connected to politics" (Lenin, 1957, p. 354, as cited in Froumin & Kuzminov 2018, p. 49). As a result, Stalin, as a part of his industrialization policy, opened so-called *rabfaks* (workers' colleges) that prepared workers for industry. *Rabfaks* prepared low-level workers with basic training in engineering. Later, these workers' colleges were replaced by *technikums* in which students could enroll after the eighth

grade. The *technikum* was developed to prepare the young generation for careers of middle qualification or semiprofessional grade in different branches of industry, construction, transport, communications, and agriculture (Counts, 1957). These too offered technical-focused education that aligned with the needs of the planned economy.

Soviet institutions of higher education were divided by specialties, unlike most other higher education systems worldwide, where one University can accommodate many specialties. Universities; technical institutes; agricultural institutes; medical institutes; institutes of economics, law, and art; and pedagogical institutes were established separately; each of these institutions prepared students for different, specific economic-orientated specialties. For example, technical institutes (polytechnics) offered courses in technological subjects such as electrical engineering, metallurgy, energy, and chemical engineering. Agricultural institutions prepared specialists in agronomy, veterinary medicine, and agricultural subjects. Institutes of economics prepared economists needed for the planning and management of the country, with subjects varying from political economy to finance and transportation. The curriculum of the economics subjects was based on Marxist ideas of economy and management.

Admission to a University or to an institute was based on entrance examinations that included both written and oral elements. To enter a University, a student had to pass the examinations required by each University. Courses of study usually lasted for five years. After completing one's education at a higher education institution, a student was given a diploma that confirmed his/her graduation.

The Soviet government invested around 10 percent of its state budget in education and even more in the development of science that resulted in launching of different space programs such as Sputnik I. By 1984, one-third of the Soviet Union population were enrolled in different types of formal educational institutions (Eulitin, 1984).

2.3 GOVERNING SOVIET HIGHER EDUCATION

The governance of higher education in the Soviet Union was carried out by the Ministry of Higher and Specialized Secondary Education. The Ministry held close control. It was responsible for all curricula, syllabi, textbooks, entrance examination requirements, and the planning of professional training. There was no autonomy as it is understood today (Pruvot &

Esterman, 2018a). "Soviet higher educational institutions had no institutional enrollment policies or curriculum development; rather, they were training facilities executing governmental instructions" (Kuraev, 2016, p. 187). Some universities with a specific focus were governed through governmental partnership between ministries; for example, the medical University was coordinated with the Ministry of Health, and the Ministry of Agriculture supervised agricultural institutes. Compliance mattered and was the evidence of quality (Kuraev, 2016). The Ministry of Higher and Specialized Secondary Education regulated academic standards and conducted regular inspection tours (Counts, 1957; Gerber & Hout, 1995).

Decision-making originated at the highest levels of government and local administrators were responsible for implementing, not making, decisions. Kuraev (2016) offers a very interesting discussion not only of governmental top-down control but of what he calls the "one-man management principle" (p. 188) that existed throughout the Soviet higher education system. The chief administrator, following a military-like tradition, issued commands that those below followed. "The administrative practice of every rector of an academic institution was based on the same principle of one-man management. The rector of a Soviet higher educational establishment was a key administrator who bore full responsibility for its activities in front of superiors." (Kuraev, 2016, p. 188). Governance was thus a coordinated activity between the ministries responsible and the institutional administration accountable.

Burton Clark (1983) in his work *The Higher Education System: Academic Organization in Cross-National Perspective* provides a comparison framework for higher education institutions and their types and levels of authority. In his triangle of coordination, Clark placed the USSR in the upper bottom corner indicating overwhelming authority coming from the State with little sources of influence from markets or academics (See Clark, 1983, p.143). Froumin and Kuzminov (2018) argue that Clark's model is a "simplification" given that his Western perspective separated government and market forces. Instead, they argue that the purpose of the Soviet system "was not just state control over the higher education system" but "the fact that the state combined the functions of manpower producer and principal employer that defined the system" (Froumin & Kuzminov, 2018, p. 47). The State played two functions in terms of educational oversight. It both exercised state authority and because of a centrally planned economy it also served as the primary economic engine, fulfilling the role of markets in the Western context. Thus, the State's higher education system was an integral part of a

whole that included the production of employees for a planned economy. The State both created the supply of workers and the demand for them (Froumin & Kuzminov, 2018).

The functioning and planning of the system were divided into several government-run stages. In the first stage, individual ministries identified the need for specific specialists and submitted documents to the USSR's State Planning Committee. Then the Committee developed a plan and mandated parts of this plan to the corresponding ministries, which in turn governed the specific higher education institutions; for example, the Ministry of Education was responsible for the training of teachers. The ministries reviewed the plan, made changes if necessary, and then rolled out this plan to higher education institutions. Institutions would then work according to the Ministerial plan and accept students into the relevant, predetermined academic programs. If the number of applicants was more than the plan required, universities accepted the best students. The unified curriculum did not allow students to study more than five years (as opposed to Western universities) and the preparation of the specialists trained in different higher education institutions was very similar. After graduation, students were sent to their workplaces, which were identified by the State Planning Committee. Employers had the right to complain about quality of graduates to the State, which consequently was communicated to the ministries and higher education institutions (Vakhitov, 2017).

Universities were funded directly by the ministries "at a very high level of public investment" (Johnson, 2008, p. 167). Given the structure of the planned economy and Soviet ideology, universities received their resources directly from the State. Each year, the State planning system specified the number of students in certain fields for further job placements and distributed funding among responsible ministries, which supervised related higher education institutions. The education system required no tuition fees for students and parents. In fact, all students were paid a stipend to support their living expenses while in college.

Although the system of education and the rapid development of higher education contributed to the Soviet Union's economic development, tight bureaucratic control became both a "strength" and a "weakness" of Soviet higher education (Johnson 2008, p. 5). For instance, the control over education inherent in the state socialist higher educational system allowed for no private institutions or alternative models of education in the Soviet Union (Huisman et al., 2018; Johnson, 2008). As higher education and research directly served the Soviet system's goals of economic and ideological

development, this alignment created several factors that contributed to the weaknesses of Soviet higher education, such as narrow and rigid vocational and professional curricula; restrictions on certain fields and disciplines, such as history, linguistics, genetics, and sociology, in the service of political ideology; and poor management of financial and human resources (Anderson et al., 2004; Heyneman, 2010; Johnson, 2008). The Soviet Union was also characterized by massive militarization that meant that almost 70 percent of research funding was directed to the development of military priorities (Johnson, 2008; Smolentseva, 2003).

One of the most important features of Soviet higher education and research was the role of the Academy of Sciences. Research in the Soviet Union was conducted primarily at institutions under the auspices of the Academy of Sciences, while universities focused on teaching (Huisman et al., 2018; Johnson, 2008; Kataeva & DeYoung, 2018; Smolentseva, 2003). This separation of teaching and research was a fundamental difference between Soviet and Western higher education, and this compartmentalized approach to research meant that research was not deeply integrated into University instruction (Johnson, 2008).

The tight control of universities by the State created numerous strengths when viewed through the lens of an ideologically driven and centrally planned economy. Universities produced graduates for well-defined and sufficiently provided jobs. They benefited from strong and consistent financial support from the State. They had a supply of academic workers. However, this lack of autonomy meant that higher education was excruciatingly uniform, with little variability across what is geographically and culturally a vast region and there was little room for professional prerogative (Johnson, 2008). From the Soviet perspective, its strengths outweighed its weaknesses. "It was free of charge; equally assessable; professionally focused; and state-owned" (Kuraev, 2016, p. 182). It was "the best academic system at work" (Bubnov, 1959, as cited in Kuraev, 2016, p. 182).

Overall, the higher education system in the Soviet Union was built to respond to ideologically driven politics and a tightly controlled economy. The Soviet higher education institutions mainly served as teaching institutions with no academic freedom, a top-down control model, and weak involvement of students and faculty members in governing universities and institutes. The research, taking place mainly in the Academy of Science and its research institutions, was also tightly controlled by the Soviet government and separate from universities. These characteristics of higher education were challenged following the dissolution of the Soviet Union in 1991.

2.4 THE INITIAL POST-SOVIET PERIOD

Higher education across the former USSR has experienced dramatic transformations since the collapse of the Soviet Union. The former Soviet republics strived to establish their national identities through economic and political policies and organizational and institutional changes. Educational institutions in all post-Soviet countries have experienced sharp declines in funding, simultaneously adapting to new market and neoliberal relations (Anderson et al., 2004; Brunner & Tillett, 2007; Heyneman, 2004a; Mertaugh, 2004). Over more than two decades of independence, the countries have been adopting educational reforms to respond to economic and political changes related not only to internal transformations but also to global trends in higher education (Dailey & Silova, 2008; Silova, 2005; Silova & Steiner-Khamsi, 2008).

After independence, many of the reforms in higher education across the region were similar (Johnson, 2008; Silova & Steiner-Khamsi, 2008; Smolentseva et al. 2018). They included marketization, developments in the structure of higher education, curricular content independence, admission procedures, the establishment of unified entrance examinations, internationalization, and the inclusion of the Bologna process (Smolentseva et. al 2018). These changes in structures involved the privatization of educational property, the introduction of tuition fees for students, and changes to the curriculum taught in higher educational institutions. The curriculum was found wanting in post-Soviet countries, especially in the fields of history and political science. Subjects like dialectical materialism, the history of the Communist Party, and the study of Marxism and Leninism were considered useless (Heyneman, 2010). Striving to establish national identities, many republics have also adopted language policies to raise the status of national languages within the countries, which has influenced higher educational systems (Korth, 2004).

The Soviet model of higher education and research that was tightly constrained by centralized policy coordination and public investment appeared to adapt inadequately to the rapid shift toward market-based economies post 1991 (Amsler, 2012; Johnson, 2008; Silova 2009). Post-Soviet countries often implemented policies of "borrowing and lending" that were not thoroughly assessed and when implemented led to uncontrolled consequences to higher education (Silova, 2005). Researchers reported deteriorating educational quality, underdeveloped curricula, and weaknesses in the

establishment of transparent financial mechanisms in some of the newly independent states (Heyneman, 2010).

Although different educational reforms appeared across the region – for example, student-centered learning, liberalization of textbook publishing, privatization, and decentralization of higher education – this was used to legitimatize the maintenance of authoritarian regimes in some countries and included ideological indoctrination in schools (Silova, 2005, 2011). In addition, according to Johnson, "the absence of state regulatory power, adequate mechanisms for political accountability and chaotic privatization contributed to the ways that undermined the ability of post-Soviet states to sustain and reinvent the rule of law, social institutions, social cohesion, and social trust" (2008, p. 166). Many post-Soviet countries experienced a massive "brain drain" in the aftermath of the collapse. Massive numbers of intellectuals, faculty members, and researchers migrated to developed countries, resulting in a loss of human resources that seriously affected education (Heyneman, 2010).

Reforms aiming to decentralize the system attempted to provide more autonomy to educational institutions. In addition, the introduction of a non-state and private sector grew rapidly allowing private colleges and universities to open in Russia, Kazakhstan, Azerbaijan, Georgia, Estonia, Latvia, Lithuania, and other post-Soviet countries except Tajikistan and Turkmenistan (Huisman et al., 2018). Tuition fees in the public sector have become widespread. Internationalization of higher education has also become one of the features in a few countries (Smolentseva et al. 2018). On the whole, the higher education landscape grew rapidly over the past three decades by doubling and tripling of institutions of higher learning. The number of students has also grown in many countries except a few. Many countries transformed their institutions into universities and opened regional institutions (Huisman et. al 2018).

One of the important transformations in the early post-Soviet period involved countries joining the Bologna Process (Jones, 2011; Merrill, 2011a; Tomusk, 2011). Almost all post-Soviet countries sought membership in the Bologna Process except the four Central Asian countries of Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. Higher educational reforms, according to the Bologna principles, included changes of degrees that were inherited from Soviet higher education (specialists, *kandidat*, and *doctor nauk*) into bachelor's, master's, and PhD degrees (Merrill, 2011a; Tempus, 2010). They also emphasized the improvement of educational quality through independent accreditation and licensing organizations, recognition of degrees, and student and academic mobility. However, adoption of these

policies had unclear purposes for many stakeholders including faculty and students (Kataeva, 2020; Merrill 2011b; Smolentseva et al., 2018).

To a large extent, for the past three decades, the countries of the former Soviet Union have undergone significant transformations with similarities but also many divergences. Many publications are now dedicated to specific countries examining a range of issues and problems in higher education in the post-Soviet states, including several edited books that showcase the ongoing debates on the higher education and its future in each of the countries of the former Soviet Union.

Post-Soviet countries inherited a centralized governance model with government and higher education functioning as an apparatus to produce an ideal citizen for the economic development in the country. The breakup of the Soviet Union gives higher education across the former Soviet space an opportunity to revise its governance model and possibly to decentralize its education systems. As history affects organizational structures, and organizational identities as well the organizational future can be shaped by the past (Wadhwani & Bucheli, 2014), the transformation of governance models is an uneasy task. The following chapters provide overviews of the governance models and their contexts in fifteen former-Soviet countries.