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We should state clearly that no Marxist economic geographer wishes to “locate” the old, reactionary, capitalism-serving human geography, neither some nor any of its branches, in Marxist economic geography. It is no aim at all to rename the child. There are some unscrupulous people who, proceeding from an erroneous theoretical foundation, are afraid that we are throwing out the baby with the bathwater. In my opinion, we should just throw out the child.

Markos (1955, p. 365)

Introduction

The history and geography of science offer ample evidence of how those in power try to control knowledge and education, how certain regimes tried to manipulate scientific disciplines to benefit their own interests, how some disciplines adapted to radical changes in political systems and adjusted their theoretical concepts to new ideologies, and what efforts these disciplines made to appear “useful” to those in power. This chapter examines the means used by the Communist regime in Hungary after World War II to “conquer” science and colonize geography. Researchers have richly documented how Central and Eastern Europe became objects of “Soviet

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colonialism” (Chioni Moore, 2001); how these countries were turned into economic fiefdoms of the Soviet empire, with economic production undertaken on a command basis and trade permissible only through the Communist alliance; and what consequences this development had on various fields (cf. Chioni Moore, 2001, p. 114; Romsics, 1999; for international power relations within the Soviet bloc, see Bunce, 1985). But scholars working in the history and geography of science still pay little attention to the intellectual transformation that took place in the discipline of geography in these countries as of the late 1940s.

For this reason, we aim in this chapter to contribute to a better understanding of these issues by revealing how Hungarian geography was colonized during the 1950s. We show how the Communist system crushed “the old geography” in order to establish Hungarian Marxist-Leninist geography. We reveal how geographic knowledge, like knowledge in general, became “a form of power, and by implication violence” (McEwan, 2009, p. 26). We describe different epistemological cultures that influenced and determined the approaches, methods, social tasks, and educational role of Hungarian geography between the world wars and after World War II. We analyze the effect that Marxist-Leninist ideology had on Soviet geography in this period. Furthermore, we investigate how a colonizing ideology dominated Hungarian geography, how the institutional structure of geography was transformed, and how the career paths of the “old” geographers continued. We also outline who became the “new” geographers and how, and describe the new tasks set for Marxist-Leninist geography in Hungary.

Hungarian Geography Before World War II

The dramatic changes that occurred in Hungarian geography during the 1950s cannot be understood without knowledge of the discipline’s role in Hungarian society and academia before then. The story begins at the end of World War I. As a consequence of the 1920 Treaty of Trianon (Paris Peace Conference), the country surrendered two thirds of its area, a large part of its industrial resources, and 60 % of its population (and one third of all native Hungarian speakers) to Romania, Czechoslovakia, the Kingdom of Serbs, Croats, and Slovenes, and Austria (Hajdú, 1998). Hungarians were shocked by these territorial, economic, and population losses. One of the main goals of post-war governments in Hungary was the revision of the peace treaty with respect to territorial losses. Support was given to disciplines that served revisionist aims and that promoted the strengthening of national identity. Geography—together with ethnography, history, and statistics—held a privileged position among such disciplines.

Although the peace talks failed to meet Hungarian expectations, geography gained a high reputation among the public and decision-makers involved in science and education policy. During the 1920s, the institutional development of the discipline saw new departments and research institutes being opened. The role of the geographer underwent remarkable changes, perhaps best illustrated by the scientific and political career of Pál Teleki (1879–1941), a prominent figure in Hungarian geography in those years (Fig. 10.1).

Teleki’s career path reflects the interwoven nature of geography and national politics during the first decades of the twentieth century. He came from one of the

Fig. 10.1 Pál Teleki (1879–1941), geographer, prime minister of Hungary (1920–1921, 1939–1941) (Source: From the Archive of Eötvös József Collegium. Copyright by Eötvös József Collegium)



most respected noble families of Hungary, and began his work on the history of cartography. He became interested in French *géographie humaine* in the 1910s, when he was a member of parliament. Teleki, after serving as prime minister in 1920–1921, was the head of the Department of Economic Geography at the Faculty of Economics of the Hungarian Royal Pázmány Péter University in Budapest during the 1920s and 1930s. He was elected the superintendent of Eötvös József Collegium, a leading institution of national elite education established according to the principles of the *École normale supérieure* in Paris. Moreover, he functioned as chief scout of the Hungarian Scout Movement. Teleki was appointed minister (first minister of religion and education, and then minister of foreign affairs), and became prime minister for the second time in 1938, holding this position until 1941 (Ablonczy, 2007). In Teleki's career, the revisionary goals of Hungarian foreign politics, national identity, and geographical research were strongly intertwined.

Given the privileged position of geography as a discipline, the vast majority of the geographers allied themselves with the “official” conservative-national ideology of the era and internalized the political goals of the regime. Hungarian geographers dismissed or ignored left-wing movements criticizing the overall social and institutional order of the country and the state. The interwar period witnessed the “golden age” of regional geography in accord with national political goals. Almost all monographs on the geography of Hungary focused on the geography of Greater Hungary. Geographers sought to emphasize that the borders set by the Treaty of Trianon were temporary ones. As Ferenc Fodor (1924), a disciple and colleague of Teleki, wrote in his 1924 book on the economic geography of Hungary, “Describing

Fig. 10.2 Geography as nationalist propaganda: One of the best-known emblems of interwar Hungarian revisionist propaganda (Source: From *Igazságot Magyarországnak!* [Justice for Hungary!], by O. Légrády (Ed.), 1930, Budapest, Hungary: Pesti Hírlap)



the economic geography of ‘Truncated Hungary’ is per se a contradiction.” (p. 9).¹ For Hungary’s interwar geographers, the new borders of the country did not coincide with any physical, social, or economic boundaries; they were considered the result of an arbitrary decision forced on the country. Even physical form was made to reflect this political moment. Gyula Prinz, a respected geologist and geographer, published his *Tisia concept* on the tectonic development of the Carpathian Basin in 1926, and again, in a revised form, 10 years later. Prinz’s purely tectonic model, according to which tectonism had “folded up” the Carpathian Mountains, was used to delineate the physical boundaries of a unitary country (Keményfi, 2006).

At the same time, everyday life was infiltrated by geographical discourse to a much greater extent than ever before. The defense of national space was basically a geographical issue. Geographical symbols appeared in schoolbooks, newspapers, speeches, operettas, and songs of the period. It was popular, for example, to christen new streets and squares after cities, mountains, and rivers of the lost territories. The best-known emblem of the period might well be the map depicting the borders after the Treaty of Trianon within those of Greater Hungary, with the text in the margin, “Nem, nem, soha!” (“No, no, never!”) or “Igazságot Magyarországnak!” (“Justice for Hungary!”; see Fig. 10.2). Not only did geography infiltrate revisionist discourse; revisionist rhetoric was also geographical.

¹The translation of this quotation as well as all other Hungarian texts into English are by the authors of this chapter, unless otherwise noted.

Hungarian revisionist foreign policy managed to achieve considerable success, though not until the late 1930s (Hajdú, 1998). Such territorial expansion was a national success, as was the success of Hungarian geography. However, Hungary had to pay a high price for these achievements. The country was becoming more and more obligated to the Axis powers, and the pressure on Hungary to enter the war was also growing. In June of 1941, Hungary declared war on the Soviet Union, thus entering World War II on the side of the Axis powers. The die was cast. To gain stronger control over the country, the German army occupied Hungary in the spring of 1944, and a fascist government serving the interests of Nazi Germany was formed that autumn. The war ultimately left Hungary in ruins.

The Soviet Colonization of Hungarian Geography After World War II

After 1945, Hungary became a part of the Soviet occupation zone. A brief provisional period with multiparty elections between 1945 and 1948 was followed by the violent establishment of the Communist regime. As Soviet pressure increased, the Soviets' reckoning with Hungarian fascism turned to a reckoning with the whole of conservative-bourgeois Hungary. It was Erzsébet Andics, a leading ideologist of the new system, who stated that Hungary had been a fascist state not only in the last year of the war but during the 1920s and 1930s as well (Andics, 1945). This view referred also to geography's place within the previous regime. Attempts at territorial revision were identified as the main reasons for entering the war. Against the scientific background of revision (and revisionist propaganda), the whole of geographical science was found guilty.

In Communist Hungary, geography, now stigmatized, fell from grace. The old research institutes were dissolved or ideologically "cleansed," and the geographers from the former staff were expelled. The heaviest casualty was the Hungarian Geographical Society, which was dissolved by decree of the Ministry of the Interior in 1949. The proscription was obviously motivated by the desire to quash "reactionary" geography: "Circumstances seemed not to guarantee the development of the society's work in a Marxist-Leninist spirit" (Koch, 1952, p. 884). The disbanding of the society also meant the end of its journal *Földrajzi Közlemények* (Geographical Review), published since 1872. Hungarian geography remained without a published forum for some years. The society's activities were stopped until the Hungarian Academy of Sciences, the organ for controlling science,² initiated the revocation of

²After World War II, the Hungarian Academy of Sciences, the leading non-university institution of Hungarian science since its formation in 1825, was transformed along Stalinist principles. With this change, the academy became the paramount institution in the hierarchy of Sovietized science: even the professional and administrative control of universities was placed in its hands. "Important" scientific research was removed from universities and concentrated in research institutes subordinate to the Hungarian Academy of Sciences. Universities were debarred from awarding doctor's degrees; candidate of sciences and doctor of sciences degrees were issued by the academy, and scientific societies were also subject to its supervision (Péteri, 1998).

the ban by the Ministry of the Interior in 1952. This development was possible because Hungarian geography was assessed as integrated into the Soviet-style scientific system. The justification provided enumerates nearly every step of scientific colonization: “Hungarian geographers have made big advances in the application of Marxist dialectic, and have familiarized themselves with the findings of Soviet geographical science, and Hungarian geography has gained new Marxist cadres” (Koch, 1952, p. 884).

The transformations affecting the whole discipline would not have been possible without changes in personnel. The staffing policy of the new system obviously followed Lenin’s (1960) instructions on how to organize a revolutionary movement. As he put it in his pamphlet *What Is To Be Done?* “Such an organisation must consist chiefly of people professionally engaged in revolutionary activity.” For him, this prerequisite was crucial to establish “a stable organisation of leaders,” which “maintains continuity” and enables the structure to “endure” (p. 464). The realization of these principles in practice took various forms. As for the “old” geographers, some of them were pensioned off or exiled from academia. Others were driven to the periphery, where they could keep their job but not their former rank or position. Some researchers were forced to compromise with the system (at least formally). In the meantime, all new appointments of the transformed institutional structure were filled by politically reliable figures, some of whom possessed neither an education in geography nor a university degree. Their involvement was crucial in helping realize the “great ideological turn”: Converting Marxist-Leninist principles into an unquestionable paradigm.

With the Communist party transforming the country ever more radically, “old” geographers’ prospects became progressively worse. In 1949, after the “year of the turn,” Communist science policy expelled all fellows of the academy who did not “fit” the new system. This “cleansing,” one step in the transformation of the Hungarian Academy of Sciences, exerted a strong influence on social sciences overall. Fifty-four percent of all fellows were expelled from the academy. Almost two thirds of them were involved in the humanities or social sciences, and a bit more than one third in natural and applied sciences (Péteri, 1998). Geography suffered especially. All four geographers who were fellows of the academy were expelled. The scientific work of most “old regime” geographers was discussed and evaluated negatively from a Marxist-Leninist point of view (Abella, 1956, 1961; Koch, 1956; Markos, 1955; “Vitaülés,” 1954). Members of the old regime staff were hindered from obtaining the newly introduced Soviet-style scientific titles and from having their articles and books published, and their disciples were expelled from universities.

The strategies of adaptation left few doors open for such “old” geographers, and for those who did have options remaining, the possibilities on offer for physical and human geographers were quite different. Although none of the “old” geographers became a supporter of the new system, learning and applying Marxist-Leninist ideology did present opportunities for physical and human geographers. Joining the Communist party might guarantee some measure of tranquility (although no real intellectual freedom) and the opportunity to reclaim former positions.

Because their field of research was politically more sensitive, the possibilities for human geographers were more limited. The economic geographer Ferenc Koch, a disciple of Teleki, compromised with the system—presumably to ensure his survival (Probáld, 2001). The urban geographer Tibor Mendöl could not, however, defend himself from attacks through his “passive resistance.” Mendöl, having been the head of the Department of Human Geography at the University of Budapest since 1940, lost all of his disciples and his close colleagues as they were expelled from the university. He struggled to have his works published and to receive his doctor of sciences degree, the highest rank in science in the Soviet-style academic system (Györi, 2009). The fact that he also tried to reformulate some of his works along Marxist-Leninist principles (Mendöl, 1954) was not enough. As one of his critics, who understood the main point of his work, remarked, “Nothing in this work allows Mendöl to say anything new from the perspective of urban geography; [he] just repeats his old approach in a new form” (Abella, 1961, p. 124). If such “old regime” human geographers, even at the price of serious losses and unfair treatment, could retain some of their authority, the younger generation taught by them had virtually no such prospects.

After “solving the problem” of “old” geographers, “new” geography was built on the ground of well-tested Communists. The leading ideologist in Sovietized geography and a constant presence in scientific debates was György Markos (1902–1976), the initiator of the Marxist-Leninist approach in Hungarian geography (Fig. 10.3). Markos had neither a formal education in geography nor a university

Fig. 10.3 Strangers within:
The “new” geographers –
György Markos (1902–1976)
(Source: From the Hungarian
National Museum, Historical
Photographic Collection,
Ltsz. 78.942. Copyright by
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degree. He had, however, formerly played a significant role in the labor movement. As a student, he participated in the Hungarian Soviet Republic of 1919, a short-lived Communist dictatorship established by the Party of Communists from Hungary led by the internationally known Bolshevik revolutionary Béla Kun.³ Later on, he spent most of the interwar period as an émigré in the West, remaining a member of the movement but working as a publicist and caricaturist. Before World War II, he returned to Hungary, where several newspaper articles by him were published, together with two populist works on economic history. During the war he was imprisoned for antifascist activity. After 1945, he worked at several jobs that were important for the party (e.g., in the Central Planning Office). Later on, he was appointed head of Pál Teleki's former department (renamed the Department of Economic Geography) at the Marx Károly University of Economics, and he became the vice president of the re-established Hungarian Geographical Society in 1952 (Tatai, 2004). Markos, although he had no prior connection with Hungarian geography, used his authority rapidly. His articles applying Marxist-Leninist ideology to geography illustrated the new way not only for economic but also for physical geographers. In debates, he confronted practically all leading geographers of the former era of geographical science.

After a thorough change of staff, Markos shaped Teleki's former department to make it the leading workshop of Marxist-Leninist economic geography in Hungary. Three department heads of the socialist era began their scientific career under his aegis (Bernát, 2004). Markos's department soon became the most important "truth spot" in Hungarian economic geography. The dissemination of the new knowledge was the task of Markos's disciples, who, like U.S. "space cadets" (Barnes, 2004), began to work in the leading centers of scientific life, or gained high positions in state government after receiving their doctorates. Many of them joined the new hot-spots of science production, the socialist "centers of calculation" (Latour, 1987). The most important examples were the Geographical Research Institute of the academy, the Department of General Economic Geography at Eötvös Loránd University, the Scientific and Planning Institute of Urban Construction (VÁTI), the Central Planning Office, and the Party Academy of the Hungarian Socialist Workers' Party. The essence of Markos's life was succinctly summarized by one of his disciples in the special issue of *Földrajzi Értésítő* published on the occasion of Markos's retirement: "Markos was a revolutionary, a conscious Marxist with high standards in every situation" (Enyedi, 1968, p. 406). Markos was a revolutionary, indeed. His work had considerable influence on the function and objectives of science, on the theoretical framework for research, and on the lives of geographers, and

³The Hungarian Soviet Republic, emerging in the politically turbulent period after Austria-Hungary's defeat in World War I and the empire's dissolution, sought to achieve a thorough transformation of Hungarian society along Communist principles. For this reason, the new Communist leaders proclaimed the "dictatorship of the proletariat" and used open terror. However, due to the military intervention of neighboring countries with strong support from France and Britain, the Hungarian Soviet Republic, also challenged by widespread contempt among a broad spectrum of Hungarian society, collapsed after 19 weeks.

Fig. 10.4 Strangers within:
The “new” geographers –
Sándor Radó (1899–1981)
(Source: From Wikipedia
(http://upload.wikimedia.org/wikipedia/hu/1/10/Rado_shandor.gif))



led overall to thoroughgoing changes in Hungarian geography whose implications are still felt.

Perhaps an even more curious career was that of Sándor Radó (1899–1981; see Fig. 10.4), who succeeded Markos as head of the department after 1958. Markos had been transferred from the University of Economics after the Hungarian Revolution of 1956; nevertheless, he was able to pursue his scientific work at the academy’s Geographical Research Institute. Like Markos, Sándor Radó had played an active role in the international labor movement and, as a law student, had been a political officer of the Hungarian Red Army during the Hungarian Soviet Republic of 1919. After the downfall of that republic, he emigrated to Vienna, and then to Germany. He studied geography and history at the universities of Jena and Leipzig, but official university documents prove that he did not complete his studies. After spending a semester in Jena in 1922/23 (Universitätsarchiv Jena (UAJ). Bestand Studienkartei (ca. 1915–1935)), Radó moved to Leipzig, where he began studies in the same disciplines, but he was expelled in 1925 on account of “not attending lectures” (Universitätsarchiv Leipzig, Sheet 486; see Fig. 10.5).

Finally, Radó went to the Soviet Union, where he gained a reputation as a cartographer (K L, 1960), and, according to a CIA report, was trained there for service with Soviet military intelligence (Thomas, 1968). Following some years in the USSR, he moved to Germany, then to Paris. From 1936, he lived in Geneva until 1944, where he was a secret agent of Soviet intelligence under the umbrella of the news agency Geopress. (Radó wrote an autobiographical fiction [Radó, 1971] about his service for the Soviet intelligence, which was brought to screen during his lifetime; see Fig. 10.6.) In 1945, he was evacuated to the Soviet Union, where he was accused of working for the British as a double agent and sentenced to 10 years of forced labor in 1946 (Trom, 2006). He was not released until November of 1954, although according to U.S. intelligence he spent only a short time in a Siberian coal

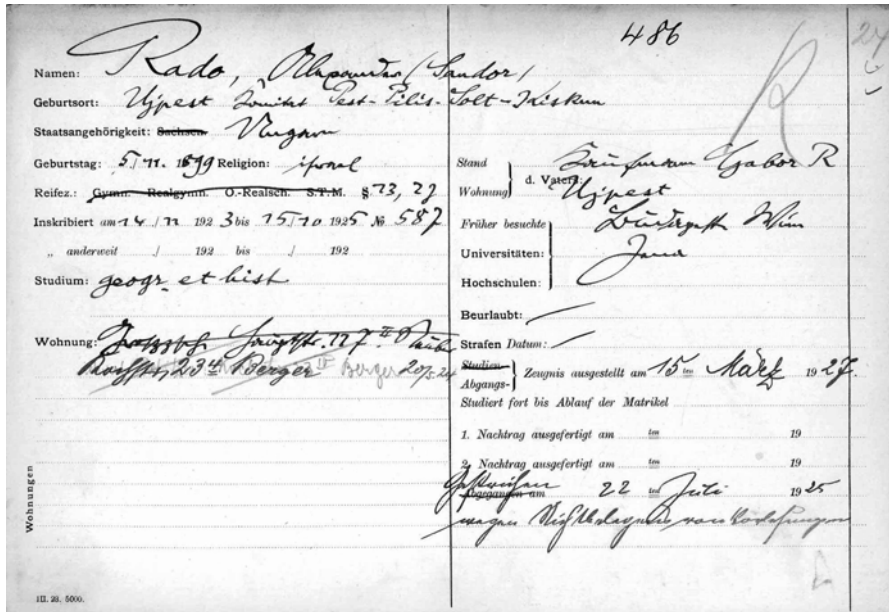


Fig. 10.5 Radó’s efforts to earn a university degree ended in failure. He was expelled from Leipzig, the last university he visited, on account of “not attending lectures.” (Source: From *Universitätsarchiv Leipzig, Quästur, Sheet 486, Alexander Rado*. Copyright by *Universitätsarchiv Leipzig, Quästur*)



Fig. 10.6 Radó as a Communist hero: His autobiographical fiction was translated into over a dozen languages (Sources: From (a) *Dora meldet*, by S. Radó, 1974, Berlin: Militärverlag der DDR; (b) *Codename Dora: The memoirs of a Russian spy*, by S. Rado, 1977, London: Abelard; (c) *Sous le pseudonyme “Dora”*, by S. Radó, 1972, Paris: Julliard; (d) *Pod psevdonimom Dora*, by S. Rado, 1973, Moscow: Voenizdat. Copyright: No information available. Permission to reprint: “With friendly allowance of Militär Verlag, Berlin.” The editors have made every effort to track down all owners of the image copyrights. However, some of the publishers no longer exist. Should such identity not have been ascertained, the customary fee will be paid by the editors if valid evidence of copyright ownership is submitted to the editors)

mine, where he managed teams of workers and thus was not subject to hard physical labor. Thereafter, he was transferred to a geographical observatory near Moscow as a “prisoner with privileges” (the CIA assumed that Radó’s transfer and special treatment were the result of “string-pulling by friends”) (Thomas, 1968).

Radó returned to Hungary in 1955. He was appointed head of the national cartographic office. Here, using his former international connections, he collected cartographic material with possible military-strategic relevance from around the world, a fact that concerned U.S. intelligence (Thomas, 1968). He was the head of the Department of Economic Geography from 1958 to 1966, and became the president of the Hungarian Geographical Society in 1973. In addition to receiving numerous prestigious Hungarian and Soviet awards, he was elected honorary member of several (e.g., Soviet, French, East German, and Bulgarian) geographical societies (Ormeling, 1982) and honorary doctor of the Lomonosov Moscow State University (Pécsi, 1982). Furthermore, he was elected honorary member of the International Cartographic Association (Ormeling, 1982) and became a commission member of the International Geographical Union (Papp-Váry, 1998). Radó, having been a Communist adventurer, continued the work in economic geography begun by Markos.

This radical transformation of geography and, actually, the whole of science was only possible due to the highly centralized power structure of the Communist dictatorship. Top party leadership, who were in fact puppies of the Soviet empire, could push through virtually all of their notions. The new leadership not only was able to suit science to its needs; it also had a decisive interest in doing so. Because politics (the power) and science are always dependent on each other, their reciprocity is hardly surprising. On the one hand, power requires perpetual legitimization, which is best served by science with its “neutral,” “objective” standpoint. On the other hand, representatives of science require continual support in both a material and a moral sense, which they can best receive from a power that both appreciates and needs them (Meusburger, 2005, 2007; see also his chapter in this volume). This mutual dependence was especially strong in Soviet science. Communist power aimed at a radical transformation of society, and Marxist-Leninist scientists followed an ideology totally incompatible with that of their predecessors. Therefore, both groups needed strong support from each other, which led to them becoming almost perfectly intertwined.

The radical changes in science were realized rather quickly, so that the era of jockeying for position in Hungarian geography ended even before the mid-1960s. The remaining “old” geographers had by then retired or died, and few of their disciples or followers continued to pursue their research issues. A kind of personal (as well as thematic) continuity could be revealed in physical geography between the interwar and socialist epochs. However, human geography (or, in Marxist-Leninist terminology, economic geography) was distinguished by interruption and break (Fig. 10.7). From the 1960s on, all important positions in Hungarian economic geography were dominated by “newcomers” loyal to the system who regarded the “old” Hungarian human geography as a reprehensible, outdated, bourgeois-reactionary science.

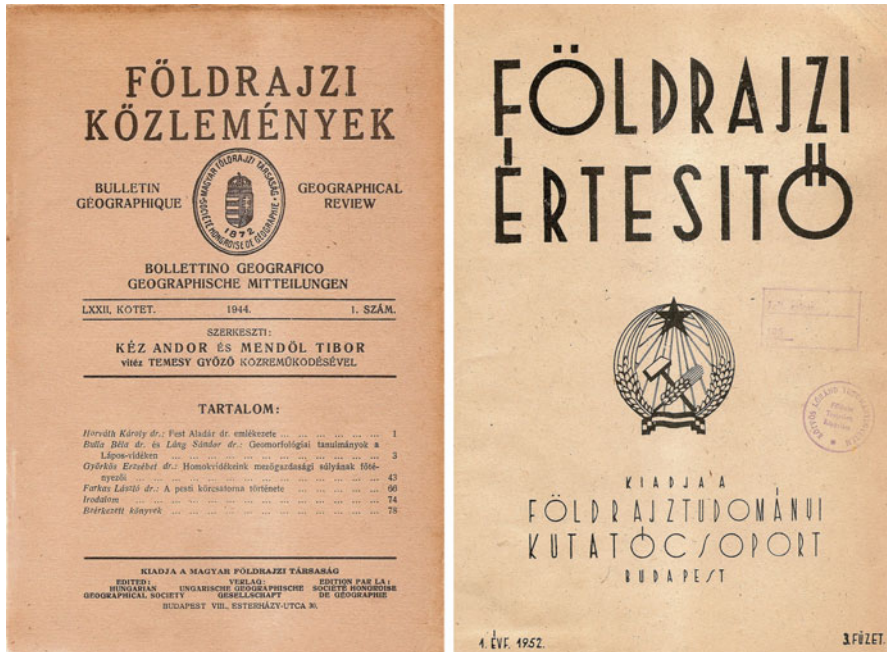


Fig. 10.7 Old and new geography: *Földrajzi Közlemények* (Geographical Review [1872–1948, 1953–]) and *Földrajzi Értesítő* (Geographical Bulletin [1952–])

New Geography – New Theory

The changes in the general context of science had major implications for geography. As the discipline's role and its basic approach were redefined, the inner structures and divisions of the discipline, and the relative weight and the content of party disciplines also changed. This process emulated the Soviet example. Hungarian geographers were expected to imitate the Marxist-Leninist approach to geography in the USSR, which had emerged in a very specific context that was thoroughly different from that of Hungary after World War II.

The first event that gave momentum to the creation of Marxist-Leninist geography was less theoretical than practical in nature. World War I and the Russian Civil War had brought the country to the brink of ruin. Lenin's aim was to revitalize the country's economy and to transform it from a small-peasant economy to a country with large-scale industrialization (Lenin, 1966). For him, the first prerequisite for this transformation was electrification, which led to the creation of GOELRO (Gosudarstvennaya Komissiya pa Elektrifikatsii Rossii, or the "State Commission for Electrification of Russia"), the first general economic/industrialization plan for the Soviet economy (Horváth, 2008). Moreover, the realization of this project necessitated the establishment of *economic rayons*, the spatial units of socialist economic planning (Radó, 1957a). Because the work on GOELRO and the creation

of *economic rayons* involved numerous Russian geographers, these projects played a key role in the formation of Marxist-Leninist geography (Radó, 1957b).

In the meantime, because Soviet geography was basically propelled by the interests of bureaucratic planning, theoretical conceptualization lagged far behind practical work. The first definition of the “fundamental object” of Marxist-Leninist economic geography was given no earlier than 1926 by Nikolay Baranskiy, in his book *Economic Geography of the U.S.S.R.* Baranskiy, an active member of the revolutionary movement since his student days and a key contributor to “the foundation of new Soviet economic geography” (Saushkin, 1962), saw the task of the discipline in “study[ing] the distribution and spatial combination of the productive forces, i.e., of the main factors that are required for production—the means of production, as well as the men themselves with their production experience and skill” (Baranskiy, 1956, p. 7).

However, the point was not only to describe the world, but also to change it. As Baranskiy (1956) put it, economic geography not only was aimed at the “fullest and strictest consideration of different natural conditions” and “the utilization of natural resources.” It also was to carry out “a radical transformation of nature” (p. 8) in order to contribute to the construction of socialism. For Baranskiy, “economic geography of the U.S.S.R. [was] an ‘active geography,’ involved in the transformation of nature carried out ... *under the leadership of the Communist Party of the Soviet Union*” (Baranskiy, 1956; italics added). This stance was based on a peculiar Marxist-Leninist interpretation of the human–nature relationship. Soviet geographers internalized Marx’s opinion that “the most basic connection between society and nature ... is production.” For them, production was a process through which the human affects and changes nature, while also changing its own nature through this process (Markos, 1952b, p. 271; Marx, 1949, pp. 191–192). But, as Stalin, refining Marx, emphasized, “The change and development of society is incomparably faster than the change and development of nature” (Stalin, 1950, pp. 648–649). The Marxist-Leninist point of view was, therefore, not that of geographical determinism but of *economic determinism*. In this approach, it was the mode of production that determined the human–nature relationship.

The belief in “a radical transformation of nature” also necessitated a firm belief in the omnipotence of science, which was a characteristic feature of Marxist-Leninist ideology. As Sergey Vavilov, the president of the USSR Academy of Sciences between 1945 and 1951 put it, “The starting point for the philosophical materialism of Marxism is that the world and its laws can be understood ... that there are no things in the world not to be revealed” (Vavilov, 1950, pp. 20–21). This attitude was common among Soviet leaders, and through various forms of mass media it also found its way into virtually every stratum of society.

Marxist-Leninists, however, were also convinced that the enormous potential of science should be exploited only if science was made to serve practical needs. Thus, scientists were expected to focus on practical issues. As Lenin stated, “Our science shall not remain a dead letter or a fashionable phrase ... science shall really become flesh and blood” (“Lenin and science,” 1970, p. 130). The same was propagated by his successor, Joseph Stalin, for whom “the guiding star of the proletariat’s

party” was “the link between science and practical activity, the link between theory and practice, and their unity” (“A Szovjetunió Kommunista,” 1949, p. 123). This concept led to an extremely practical orientation in all of Soviet science, and wiped out all initiatives concentrating on “purely theoretical” issues (cf. Ivanov, 2002).

With all of these characteristics, Soviet geography was not a direct successor of any earlier geographical traditions in Russia. The so-called branch-statistical school of V. Den in St. Petersburg had been based on German bourgeois political economy and had produced what Saushkin (1954, p. 96) called “barren, formal, metaphysical economic statistics.” Thus, it could not be tolerated by Marxist-Leninists. Other prominent figures in Russian human geography during the czarist period were usually regarded in the Soviet era as followers of Friedrich Ratzel, Alfred Hettner, or Paul Vidal de la Blache (Radó, 1957a; Saushkin, 1954, 1962). Soviet geographers often lumped these scientists together as representatives of “bourgeois” geography, who were blamed for the “scientific substantiation” of the expansive politics of “imperialistic states,” and thus for serving “imperialistic” elites (Dobrov, 1952).

Given these considerations, it is easier to understand the structure and terminology of Marxist-Leninist (and Stalinist) geography. The economic determinist view of the discipline and Stalin’s concept of the different speeds of natural and social “development” suggested that natural and social processes were not to follow the same regularities. Marxist-Leninist geographers rejected the “bourgeois” concept of geographical monism which, for them, “tries to expand the effect and validity of natural rules to human society” (Radó, 1962, p. 227). In their opinion, this argumentation only aimed to provide scientific substantiation for the expansion and conquering wars of the “imperialistic” states (Dobrov, 1952). Instead, Soviet geographers distinguished “two geographies”, *physical geography* and *economic geography*. The former, considered a natural science, was to investigate the regularities propelling the development of the geographical environment. The latter was regarded a social science, focusing on the rules that determine the spatial allocation of population and production (Gerasimov, 1959). Although it was emphasized that this dual structure entailed a dialectical—not a discrete—relation of the two geographies, this point was often ignored by Marxist-Leninist geographers who wanted to avoid being perceived as determinist, “bourgeois,” or “reactionary.” As a consequence, cooperation between physical and economic geography became extremely weak by the mid-1950s.

The Marxist-Leninist Turn in Hungarian Geography

The transformation of Hungarian geography was carried through in accord with the prevailing theories of Soviet geography in the postwar period. It affected every subdiscipline, although the turn had especially far-reaching implications for economic geography.

Before 1939, economic geography in Hungary was considered a branch of human geography, and its basic principles were in line with the conceptual framework of the French *géographie humaine* (Győri, 2001). Pál Teleki (1922) identified the

goal of economic geography as presenting human economic life as part of all life on Earth and in analyzing the relationship between economic life and life as a whole. After the Communist turn, human and physical geography were separated in accord with the Soviet practice, and human geography was renamed. From then on, the term “economic geography” embraced all aspects of the discipline which concerned society. This shift in perspective was grasped by one of the “new” geographers, Csaba Kovács (1954), who formulated it much like Baranskiy had: “The essence and main task of economic geography is the analysis of the geographical division of labor” (p. 417).

The introduction of the new term “economic geography” supported Marxist-Leninist doctrine by putting production to the fore, which was an issue of fierce debate. At a 1954 session of the academy’s scientific committee, Tibor Mendöl argued that neither population nor urban geography could be wholly regarded as a part of economic geography. He instead proposed the use of “social geography” as a general term for issues in the discipline that did not belong to physical geography (Bulla, 1955a). Mendöl’s endeavor was also supported by Béla Bulla, who became a physical geographer in the interwar period and was a personal friend of Mendöl. The idea, however, was firmly opposed by György Markos, who argued that Mendöl and Bulla were trying to bring back the old Hungarian human geography under the cover of “social geography” (Markos, 1955).

The autocracy of Marxist-Leninist economic geography led to the dismantling of several disciplines that had played a key role in the interwar period. In the case of political, ethnic, and historical geography, the direct or indirect link with such revisionist endeavors was obvious; thus, the dismantling of these branches (and their exile from canonized scientific vocabulary) did not require detailed explanation. Theoretical issues were marginalized in the new economic geography because their research results had no “practical utilization”; they did not serve production or the more efficient organization of the geographical division of labor in a direct way. As for population and urban geography, their survival was ensured to the extent that their reformulated, practice-oriented scientific goals were integrated into the tight framework of the all-embracing economic geography. These new tasks were precisely formulated by the urban geographer Március Matejka, who had returned from the Soviet Union. Population and settlement geography were considered the branches “which have as their subject the spatial allocation of the most important force of production—that of humans” (Abella, 1961, p. 123).

Such approaches were alien to the tradition of Hungarian urban geography. Humans had never before been reduced to a “force of production,” and the practical (planning) orientation of the new approach was also unprecedented. The old Hungarian urban geography had had three special interests during the 1930s. First, researchers had investigated towns and villages as the smallest kinds of landscape (along methodological principles of the French *géographie humaine*). Second, they had analyzed the regularities and the development of the urban network. Third, they had dealt with urban morphology (Györi, 2009). The latter two topics were based on German settlement geography. None of these fields of research was incorporated into the new urban geography in the 1950s. Just as in the Soviet Union, regional

geographical research along the lines of Vidal de la Blache's work was considered erroneous in Communist Hungary. From a Marxist-Leninist perspective, such research was rooted in harmful theory because it related social phenomena to physical factors. It was said to make no more than "minor corrections" on "pure geographical determinism" (Dobrov, 1952, p. 7). The quantitative and, in general, positivistic research on urban networks was thought to be deductive speculation. For Marxist-Leninist geographers, it displayed "abstract forms, geometric shapes, schemes," which hid the real reasons behind social disparities ("Vitaülés," 1954, pp. 780–781).

The apolitical urban morphology paradigm came under the most severe attack. The main accusation leveled at it was that morphology is an empty, "formalist," art-for-art's-sake investigation with no connection to practical issues such as urban network planning. According to Antal Vörösmarti, it was an especially serious misapprehension that Hungarian urban geography (i.e., Tibor Mendöl) linked social and economic characteristics of urban population to morphological types of urban layout. In the eyes of the "new" geographers, this method gave the false impression that morphological and functional research can be joined up (Abella, 1961, pp. 124–125). Another important reason for its rejection was that Mendöl—erroneously—tried to make statements about "essential" structures on the basis of investigation of the surface only. This approach was diametrically opposed to Marxist-Leninist logic. Markos had noted some years earlier:

The unitary bourgeois geography is formalist and objectivist in all of its details, as it can serve capitalism best in this way.... [It] makes do with never ending investigations of details, with analysis of small formal questions, does not see and does not desire to see the content and the process behind form; thus, it necessarily becomes formalist. (Markos, 1955, p. 362)

As a consequence, such morphological analysis was a "bourgeois trick"; its conscious aim was to divert the attention of the scientific community or broader society away from essential questions about the severe contradictions and crisis of capitalism.

Morphological studies became problematic not only in urban geography but in physical geography as well. After 1945, Hungarian physical geography had to distance itself from the morphology of Davis and Penck, as these theories traced surface development back to cyclical processes (Davis) and to quantitative change (Penck). These approaches contradicted Marxist-Leninist teachings, which regarded the concept of linear development as dogma. Béla Bulla made an attempt to reformulate the principles of geomorphology, fitting them to the needs of the times and to Marxist-Leninist dialectic. In his view, surface development is a "necessarily rhythmic process" revealed through "the realization of the dialectically controversial development of the surface and the interpretation of the essence of development" (Bulla, 1955a, p. 104). Bulla's endeavor to find a place for geomorphology among the sciences that was based on Marxism-Leninism was not successful. György Markos rejected a major section of Bulla's article, stigmatizing it as formalist and emphasizing that physical geography should also have a practical orientation. For Markos (1955), much like for Baranskiy,

The point is not only to interpret forms on the surface of the Earth, but to utilize and, if necessary, change them for the sake of society. The excess of morphology in physical geography is a bourgeois heritage here, and the task is not to perceive but to eliminate it. (p. 362)

Socialism in the Making: Practical Goals of Marxist-Leninist Geography in Hungary

The Hungarian Communist leadership was keen to emulate the Stalinist model in order to make Hungary the “best disciple” of the Soviet Union within the Communist bloc. While pursuing this aim, the chief party leader Mátyás Rákosi and his right-hand man Ernő Gerő, the minister of state, strongly argued against any divergence from the Soviet model. As they put it, “The basic features of socialist construction in the Soviet Union are universally valid,” so “there are no specific national roads to socialism” (Spriano, 1985, p. 304). Thus, Hungarian science was expected to strive for the same goals as its Soviet counterpart. However, the leadership believed this objective would be possible only after a thorough transformation of science in Hungary. In Gerő’s words, the “old” Hungarian science often “diverged from real life,” and “closed itself within its narrow ivory tower” (Gerő, 1950b, p. 345). For him, the People’s Republic of Hungary needed a science that regarded “efficient participation in the realization of our five-year plan and ten-year electrification and irrigation plans and in the ascension of our country as its decisive tasks” (p. 348).

In other words, Hungarian science—like Soviet science—had to contribute to the realization of big Communist goals. Geography was no exception. Physical geography, after identifying and understanding the rules behind processes in the geographical environment, had to change these processes in order to transform nature in relation to the needs of society. Its aim was the improvement of society’s productive forces. Economic geography was responsible for the rational allocation of the population and production in space—thus, for scientifically substantiated spatial economic planning (Abella, 1956). This task was made explicit by János Kolta, who became an economic geographer after the Communist turn, having been a rural lawyer. For him, it was the role of economic geography “to ensure the scientific substantiation and scientific character of national economic planning ... through its deep-drilling analyses, through considering the principles of the maximal development of the productive forces and of the ‘priority of production’” (Kolta, 1954, p. 200). In the case of Hungarian (economic) geography, the main aims were threefold. First, the development of Hungarian urban and rural systems, with a special emphasis on the issue of “scattered farms.” Second, scientific determination of the economic regions of the country (so-called *rayonization*). Third, the transformation of nature in order to improve agricultural production. The political leadership had high expectations, as Gerő (1950a) stressed, “We [aimed to] change the socioeconomic map of our country” (p. 576).

Objective 1: Socialist Transformation of the Urban Network

In accord with “new” geography’s main objectives, Communist urban and rural development policy in Hungary was responsible for creating a “more rational” spatial framework for production. But it was also considered a tool for radical and voluntaristic transformation of society. The main aims were the creation of “socialist towns” (new industrial or newly industrialized centers dominated by the working class), the gradual disappearance of the urban–rural divide, and the “socialist transformation” of villages—following that of cities (Hajdú, 1992). Emphasis was placed on the development of new industrial towns, which was seen as a precondition for accomplishing the first Five-Year Plan (1950–1955). (Especially big efforts were made in Sztálinváros [Stalintown], renamed Dunaújváros in 1961, as the planned new center of Hungarian iron and steel production and the symbol of the Stalinist approach to development.) This plan pushed forward the rapid industrialization of the country. As Mátyás Rákosi, radiating trust in the omnipotence of Marxist-Leninist science, pronounced in 1949, “This plan aims to develop Hungarian industry in a 5-year period as much as it grew in the 50-year period preceding it” (Rákosi, 1951, p. 14).

The most pressing issue for urban geography to solve, however, was the problem of scattered farms (*tanyas*) on the Great Hungarian Plain. The emergence of these small settlements can be traced back to the decades after Hungary’s liberation from the Ottoman occupation in the late seventeenth century. The century and a half of occupation had left vast areas of the Great Plain deserted. Several villages disappeared because their inhabitants fled to the few towns. After the end of Ottoman rule, a gradual resettlement of the deserted areas began. Peasants, although remaining inhabitants of the rural towns, established small farmsteads on the property they owned (Beluszky, 2001). According to the statistics of the Communist planning institutions, almost 900,000 people were living in scattered farms at the end of the 1940s (Hajdú, 1992).

The issue of scattered farms was a serious challenge for the Communist system. Although instructive scientific debates on the issue took place during the interwar years, no real steps were made. After the 1945 land reform, the number of inhabitants living in scattered farms dramatically increased. Furthermore, it was a main aim of the postwar political regimes (even those before the “Communist turn” in 1948) to carry out a thorough reform of the administrative system. Thus, solutions to the question could not be delayed for long.

Some initial steps from 1945 to 1948 were the creation of new local administrative units from groups of scattered farms formerly belonging to nearby agricultural towns. Then the Ministry of the Interior established the Preparatory Scattered Farm Committee in 1948. The committee and its successor from 1949 on, the Scattered Farm Council, were responsible for the solution of the “scattered farm” problem. Ferenc Erdei, who made the transition from moderate left-wing politician to Communist, and who was appointed the minister for agriculture in 1949, was personally asked by Mátyás Rákosi, the leader of the Communist Hungarian state, to lead the council (Hajdú, 1990–1991). Erdei accepted the offer, but nevertheless

the council (in accordance with Soviet notions of urban development) had to follow a strict policy of demolishing scattered farms and organizing them into villages. Such a solution was diametrically opposed to Erdei's analysis and proposals between the wars. In fact, it was more similar to a suggestion from Tibor Mendöl, who, incidentally, was suppressed by the Communist system and whose disparagement was partly due to Erdei (Gyóri, 2009).

Yet the council's initial plans for the infrastructural development of the new villages mostly remained unfulfilled. After several years of gradual decline due to a lack of proper coordination and waning interest among political leaders, the council was officially disbanded in 1954. Nevertheless, it played a decisive role in opening a new, explicitly "anti-scattered farm" (and anti-rural) chapter in the history of Hungarian urban development. This development strongly influenced related scientific concepts in the decades that followed (Hajdú, 1990–1991). For instance, an official planning document from 1951 on the Hungarian urban network argued for a total ban on any kind of investment in almost half of the Hungarian settlements, thus implicitly aiming at their gradual physical decay and destruction over the long term (Hajdú, 1992). Because Ferenc Erdei, the well-known and respected sociologist, took up leadership of the council, the "socialist solution to the scattered farm issue" (i.e., their destruction) could be legitimized as "the scientific solution" to the question (Hajdú, 1990–1991, pp. 120–121).

Objective 2: Establishing a Spatial Framework for Socialist Planning

Besides the "socialist planning" of the urban network, another practical issue of Hungarian economic geography was to identify the economic regions (*rayons* in Marxist-Leninist terminology) of the country. These regions were intended to become the effectively functioning spatial units of production. As mentioned earlier, *rayonization* had a strong tradition in the USSR. It helped bring Marxist-Leninist economic geography into being in the Soviet Union during the early 1920s, and it gained in importance there even before 1939. On the one hand, this practice was rooted in indisputably rational economic interests. The identification of economic regions, together with the review of their environmental conditions and economic potential, was a crucial prerequisite for the long-term development of the USSR. On the other hand, *rayonization* also served propagandistic goals by emphasizing the "conscious" and "methodical" character, and thus the superiority, of the Communist regime. *Rayons* were regarded as the means of improving efficient cooperation among units of production, which were obviously characterized by different conditions. To improve the spatial division of labor, *rayons* were expected to exhibit two features simultaneously: A kind of specialization of production, but also complexity. Specialization meant that each *rayon* had to contribute to the output of that or those branches which they had optimal natural conditions for to a larger extent than other regions with less favorable conditions. Complexity reflected another goal, namely, that complementary activities, supplying the basic needs of

the local population, should not be totally disregarded, but the “proportionate development of branches of production” had to be ensured (Krajkó, 1982). Yet it remained unclear to what extent *rayons* should be “complex.” Some authors argued for nothing less than a strict autarky, including self-sufficiency in food production and basic consumer goods (cf. Beluszky, 1982; Enyedi, 1961). In practice, the realization of these seemingly contradictory objectives was possible only at different geographical levels. The big *rayons*, whose number never exceeded 32 for the entire Soviet Union, had to become complex units with a broad variety of economic activities. Meanwhile, the improvement of smaller subregions involved only a few, or even just a single branch or a single mammoth company (Horváth, 2008).

About three years after the “Communist turn” in 1948, the basic principles of *rayonization* were also introduced into the Hungarian geographical discourse by György Markos. He laid down the theoretical principles of the issue in 1951, followed by his hypothetical *rayon* system for Hungary one year later (Kolta, 1954; Markos, 1952a). Markos followed the relevant Soviet ideas in all respects. In his interpretation, *rayons* were intended as “adequate spatial units of production for spatial planning” (Kolta, 1954, p. 201). Other supporters of *rayonization* went even further. János Kolta argued that after a while *rayons* should also become administrative units “unconditionally” (p. 203). The issue of economic regionalization was introduced into Hungarian economic geography very quickly. Thanks to this rapid change, to the country’s real administrative challenges, and to the political pressures prevailing in scientific life, the next 10–15 years can be characterized as “the decade of *rayonization*” in Hungary (Beluszky, 1982, p. 4). In these years, any economic geographer who wanted to matter in the discipline developed his or her own concept or at least tried to contribute to the discourse (Beluszky, 1982).

Rayonization was, however, never a successful feature of Hungarian geography. The first serious problems emerged in the early years. Some geographers disputed whether it was possible in such a relatively small country to identify “specialized” and “complex” economic regions similar to those in the USSR. In their opinion, the whole of Hungary can be regarded as one (complex) *rayon*. The main proponent of this argument was Béla Bulla, who temperately but unambiguously criticized Markos for the precipitous introduction of the issue. As he stressed, “In the absence of the necessary theoretical and practical foundation, it has been impossible to succeed in the creation of a plan that is acceptable for national economic planning” (Bulla, 1955a, p. 110). In fact, this criticism was common in several East European Communist states. For instance, the East German economic and political geographer Heinz Sanke, later a member of the academy of the German Democratic Republic, was of the same view. And so was Anastas Beshkov, the Bulgarian economic geographer and fellow of the Bulgarian academy (Bulla, 1955b). Nonetheless, others were convinced of the opposite. The most sophisticated counterargument in Hungary was made by Gyula Krajkó, a key supporter of the *rayonist* concept. Krajkó underlined that what was important was neither territorial extension nor the number of branches of production determining complexity, but rather the relations of production and the development of productive forces. For him, even a small country could be divided into complex economic subunits, at least if it was a socialist one. In capitalist countries, however, according to Krajkó, complex economic

regions could not emerge because of the existence of private property and the lack of “planned, proportionate development of the national economy” (Krajtkó, 1961, pp. 224–225).

In general, several theoretical questions remained open, and results were contradictory. The numerous studies attempting to identify *rayons* in Hungary were full of remarkable peculiarities and did not share similar findings. The number of *rayons*, for instance, varied on a broad scale from 6 to 13 (Beluszky, 1982). Due to these issues and perhaps to the fact that the question of further significant transformation in the spatial framework of public administration was dropped, most research on the matter was no longer pursued (Beluszky, 1982). Although a university research group, led by Krajtkó, continued with *rayonization* at the University of Szeged, and a few other experiments were conducted, the issue surfaced only once more—as part of a special issue in 1982 (Beluszky, 1982). Even then, authors did not reach a consensus on the issue, but researchers pointed to a fact that had not been taken into consideration previously. It was that “specialized” and “complex” *rayons* can be identified only in countries with specific circumstances: Either in a country in a relatively earlier phase of spatial division of labor (the phase of emerging large-scale heavy industry) or in special cases where new economic centers are created in formerly untouched regions, as happened in several Siberian districts (Beluszky, 1982; Enyedi, 1982). Overall, *rayonization* in Hungary and in other East European countries was a highly doubtful scientific project which completely ignored the economic conditions of the Communist “satellite states.”

Objective 3: The Transformation of Nature

The third big practical task that Hungarian Marxist-Leninist geography was set to tackle was the transformation of the country’s natural environment in order to improve agricultural production. This endeavor focused on three goals: Grandiose irrigation projects, the creation of forest belts protecting the soil from wind erosion, and the naturalization of new species of plants. The initiative was influenced by the Stalin Plan for the Transformation of Nature, which was introduced in the Soviet Union in 1948 (Brain, 2010; Hajdú, 2006). In a theoretical sense, all three goals were based on a kind of economic determinism which dominated Soviet geographical thought, and on a firm belief in science. This theoretical position was totally accepted and internalized by the Hungarian Communist leadership. For Mátyás Rákosi,

The country of socialism is the country of unlimited possibilities.... Where is the upper limit in its construction? I gave the answer: The sky is the upper limit! ... The planned construction of socialism does not have the limits of capitalism. (as cited by Hajdú, 2006, p. 250)

Marxist-Leninist geographers were keen to give scientific substantiation to leading politicians’ ideas. György Markos again played a crucial role in this respect. In 1952, he gave a detailed interpretation, from the perspective of Hungarian science, of Stalin’s theories on human–nature relations and on the transformation of nature (Markos, 1952b).

The National Planning Office was assigned to prepare a ten-year irrigation plan of Hungary as early as 1948. The plan mainly focused on the Great Plain, which is the most fertile agricultural region in the country, though it frequently experiences droughts during the summer. Particular emphasis was placed on the transformation of physical conditions in the Hortobágy region, the driest in the Great Plain. In order to solve the problems of this region, a Planning Committee for the Transformation of Nature in the Tiszántúl region (Tiszántúli Természetátalakító Tervbizottság) was established in 1952. One of the committee's members was Ferenc Erdei, who at the time also served as president of the Scattered Farm Council. Such irrigation plans were not new, earlier plans had aimed at the construction of three dams, and irrigation projects in the Hortobágy region had been underway since 1937/38. The main difference between the old and the new projects was their scale and the plan for their realization. Because the process of construction could not meet the irrational expectations of the Communist political leaders, the irrigation project could not be fully completed (Hajdú, 2006). Similar but bigger challenges were faced by the large-scale afforestation proposals: Directives were unrealistic, and the project lacked adequate theoretical preparation (Hajdú, 2006).

Still, although these projects proved impossible to carry out on account of their unrealistic scope, their overall objective was technically realistic and failed only because of a lack of money, labor, and equipment. Some other initiatives of the Stalinist regime were, however, incompatible with natural conditions that human agency cannot alter radically. The most significant example was without a doubt the naturalization of new plants. Although experimentation with the introduction of new plants has a long tradition in the history of agriculture, and attempts in Hungary had already been made before 1939, the initial phase of small-scale experimentation had always been slow and cautious. But where economic profit had motivated these smaller schemes, the Communist regime considered the naturalization of new plants a crucial political issue, and devoted considerable financial and institutional resources to its success.

Such massive effort can be seen clearly in the case of cotton, an emblematic plant in the first decade of Communism in Hungary. For economic reasons, small-scale experiments with the production of cotton had been conducted during the interwar period, but were soon ended. The issue of naturalizing cotton emerged again in the late 1940s, and became a main goal of the new regime. After the decree of the Council of Ministers in 1948, in the following year the so-called Council for Cotton Production was established. Experimentation began on some 850 acres, with a planned increase of the sown area to more than 140,000 acres in 1950 (Hajdú, 2006). The project was unique in Stalinist economic policy given that—unlike many other initiatives which were too grandiose but technically realistic (such as the creation of shelterbelts and irrigation infrastructure)—the naturalization of cotton and several other plants (e.g., citrus fruits, peanuts, and tea; see Gyenes, 1952, 1954) was profoundly incompatible with natural conditions in Hungary. Yet enormous resources were invested in these projects, and in order to inform the people about the goals and “achievements” of socialist agrobiolgy, massive propaganda campaigns were launched (Hajdú, 2006). Science was also mobilized to assist in

realizing these ends. At the Academy of Sciences, new committees such as the Agrobiological Committee, the Crop Production Committee, and the Lemon Committee were established for the purpose of scientifically substantiating the grandiose political aims (Hajdú, 2006).

Although it was mostly agronomists and biologists who contributed to this work, physical geographers were also involved. Their task was to identify those regions of the country with feasible terrain and climatic conditions. The first issue of the newly established journal of the GRI HAS, the *Földrajzi Értesítő*, devoted more than 30 pages to the question of the economic promise of new plants. The author, Lajos Gyenes, was a geographer of the “new generation.” At the same time, the subject of geography in primary and secondary education became an important tool for popularizing the new “socialist methods” in agriculture; national competitions for pupils contained several exercises on the issue (Simon, 1955).

Given such “scientific preparation,” the production of new crops gained strong impetus in 1950. Although agrobiological experiments failed, the hot weather of that year resulted in a relatively good crop yield, convincing the party leadership of the correctness of their goals. Their new initiative urged doubling the production area given over to cotton. After further progress in the likewise remarkably hot summer of 1951 (Figs. 10.8 and 10.9), Hungarian cotton production soon ended in failure. In 1953, as a result of the economic failure and of the changed political landscape given the death of Stalin, the political leadership began to give up its grand schemes on the “transformation of nature” (Hajdú, 2006), which by then was ignoring issues of physical geography and of profitability. The exception was rice, as experiments to increase its production met with significant success. The Communist regime overplayed its role in this success story, however, as naturalization and production of this crop had already begun in the interwar period (Hajdú, 2006).

As most Hungarian scientists had never become convinced supporters of the initiative, there was a greater willingness to express negative opinions following 1953. In 1956, József Bognár, the chief secretary of the Hungarian Academy of Sciences, strongly criticized the project, and Ferenc Erdei, while evaluating the scientific work of the academy’s Agricultural Sciences Section in 1957, said nothing about the issue of new plants (Hajdú, 2006). In geography, arguments for and against the large-scale production of new crops afford insight into the inner politics and structure of Hungarian science and geography. In 1954, the Economic Geographical Session of the Hungarian Geographical Society hosted a lecture by Lajos Gyenes on this issue. The lecture, together with a draft review of the comments from the audience, was published in an issue of *Földrajzi Értesítő* (Gyenes, 1954).

At the lecture, Gyenes, as the strongest advocate among Hungarian geographers of schemes for the naturalization of new plants, argued strongly for experimentation with new crops. He referred to Marxism-Leninism in making his point, arguing that science’s task lay in contributing to the construction of socialism and, thus, to the improvement of the people’s living conditions. In his words, “These new plants, serving the national economy, national healthcare, and the workers ... can significantly contribute to the improvement of our agriculture, the standard of living of our working people, and the healthcare maintenance of our workers” (Gyenes,

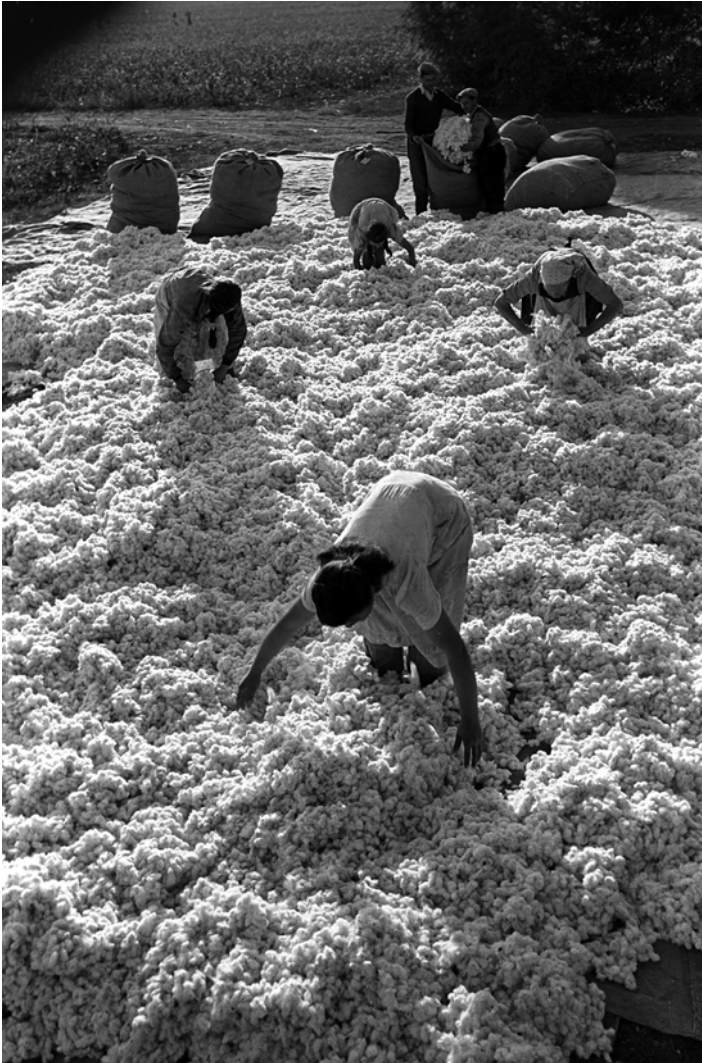


Fig. 10.8 Drying of cotton close to the town of Békéscsaba (Source: “Forgatással szárítják az asszonyok a betakarított gyapotot” (Women drying harvested cotton by turning it), by Pál Jónás. Magyar Fotó. Békéscsaba, October 19, 1951. Copyright by MTI Hungarian News Agency Corp., Media Service Support and Asset Management Fund. Reprinted with permission)

1954, pp. 102–103). In his eyes, experimentation with new plants and the participation of science in such projects was a necessity: “Soberly, but courageously, experiments shall be made! It is the very thing science wishes and waits for from us. It is the very thing being wished and awaited from us by our working people.” (p. 102). Gyenes continued, giving a long and detailed description of the physical geographical requisites of numerous “new plants,” while emphasizing their economic benefits.

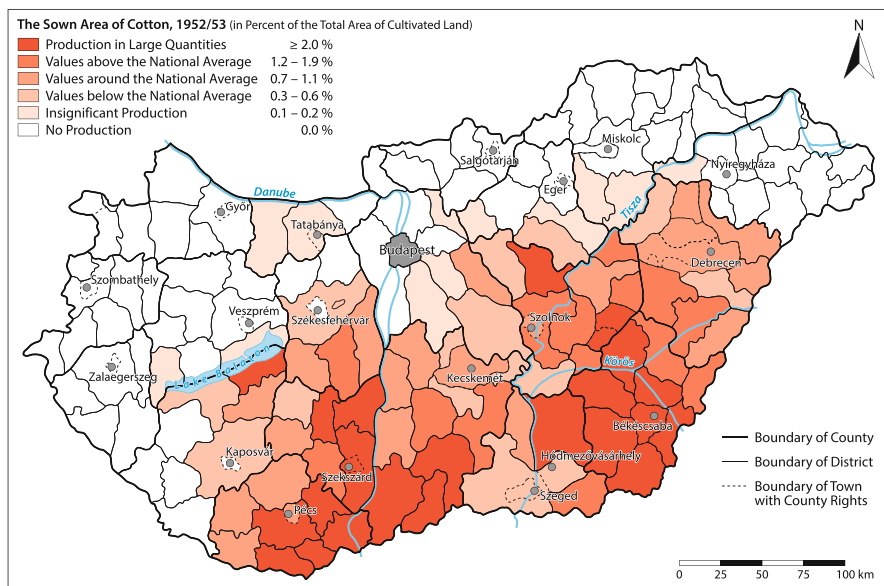


Fig. 10.9 “We aim to change the socioeconomic map of our country.” Main regions of cotton production in Hungary (Source: From *Magyarország mezőgazdasági földrajza* [An agricultural geography of Hungary] (Appendix 31), by L. Görög, 1954, Budapest, Hungary: Tervgazdasági Könyvkiadó. Map design: László Görög. Cartographer: Daniel Söder (redrawn 2013))

Other main participants at the lecture (some as representatives of other disciplines) were not at all convinced. Members of the audience who were involved in interwar academic life criticized Gyenes’s Stalinist approach because of his relative ignorance of physical geographical factors and of considerations of profitability.

An Implicit Objective: Manufacturing Political Propaganda

Several Marxist-Leninist geographers actively participated in politically motivated, grandiose planning projects, but the discipline’s practitioners did even more than contribute to such practical endeavors. Geography also played a significant role in the propaganda of “constructing socialism.” This role was especially evident in geographical education in primary and secondary schools. Pupils were expected to use theoretical knowledge in the solution of practical issues. Geographically relevant questions of economic planning (the naturalization of new plants and the optimal spatial allocation of the forces of production in Hungary) enjoyed a dominant place in the curriculum (Korzsov, 1955; Simon, 1955). At the same time, Soviet researchers’ popular science articles in Hungarian translation were published in richly illustrated books such as *A szovjet nép átalakítja a természetet* (1951; “The Soviet people transform nature”) or *A sztálini korszak nagy építkezései* (1951; “Large constructions of the Stalinist era”). These works were sent to libraries throughout the country in



Fig. 10.10 Geography as socialist propaganda: The atlas of the Three-Year Plan, written by György Markos (Source: From *Magyarország gazdasága és a hároméves terv* [The economy of Hungary and the Three-Year Plan], by G. Markos (Ed.), 1948, Budapest, Hungary: Szikra)

order to inform the masses about the “achievements” of the socialist state and to indoctrinate them in Communist ideology. The same was true for publications reporting on the goals of the economic plans, maps were used for propagandistic reasons. As the foreword of one such book emphasized, “There is nothing more convenient for letting the broad masses know and evaluate the Plan than geographical representation, which projects our economic resources and the prospect of their methodical development onto the map” (Berei, 1948, p. 2; see Fig. 10.10).

Marxist-Leninist geography thus not only contributed to practical projects, but also was a tool for propagating official ideology. In other words, although official propaganda defined the goal of science as producing factual knowledge, in actuality all disciplines were also expected to produce and disseminate orientation knowledge for propagandistic goals (cf. Meusburger, 2005). Geography was no exception, its role was not only to contribute to the realization of big projects, but to mediate Marxist-Leninist ideology and, thus, to legitimize the ruling order.

Conclusion

Hungarian geography both before and after World War II is a characteristic example of how politics (the power) and science are intertwined in specific contexts. Because Hungary suffered major territorial losses after World War I, geography became a

highly respected discipline in the eyes of political leaders because it was regarded as an important tool for the scientific substantiation of arguments for territorial revision. For the same reason, the discipline was seen as “guilty” by the newly emerging postwar Communist regime. Because it was regarded as having served “fascist” interests in the interwar period, it was an explicit goal of the new system to demolish the “old,” “reactionary,” and “bourgeois” geography and to build up a new, Marxist-Leninist one following the example of Soviet geography. This aim led to changes in the discipline’s institutional setting. Some of the leading personalities of interwar geography were suppressed, others given only limited authority. In their place, a number of “new” geographers—the most loyal supporters of the Communist regime, many of whom lacked a formal university education in geography—were given prominent positions in the discipline.

The rapid Sovietization of Hungarian geography occasioned dramatic changes in the latter’s theoretical approach and in the lives of those who worked in the field. The discipline was transformed in line with Marxist-Leninist expectations, in line with the Soviet example. The terms “human geography,” “social geography,” and “cultural geography” were erased from the new discourse, and their successor christened “economic geography.” This massive theoretical transformation left few or no places for formerly flourishing fields of interest. Geographical research on politics, religion, ethnicity, or social disparities, for instance, was banned. Several topics were criticized for concentrating on the form instead of its essence, for engaging in a “bourgeois trick” “serving capitalist interests.” Thus, urban morphology was affected, but so too was geomorphology.

After exiling “bourgeois” elements, geography absorbed Marxist-Leninist ideology and rigid scientism. At the same time, Marxist-Leninist geography was to actively contribute to the “construction of socialism.” For this reason, Hungarian geography became involved in the problem of urban network planning, large-scale economic planning (through the creation of *rayons*, or economic regions), and the transformation of nature in order to improve agricultural production. It was deemed important for geography to participate in the propaganda of these practical goals, through mass education as well as in the literature of popular science.

As for science, geography became a mouthpiece of the Communist leadership, and its “new” representatives received full support from the political leadership. In this way, geography as a science and politics (the power) became even more closely intertwined than before. This mutual support was crucial for both sides. Because Marxist-Leninists had no influence on Hungarian geography before the Communist turn, they were extremely reliant on political power as the only possible source of their legitimacy. The political leadership, however, also required strong support from science to justify its much propagated goal of transforming society. It was this constellation of interests that opened the way for radical change in both spheres of life. Although Hungarian Marxist-Leninist geography of the Stalinist period did not succeed in realizing all of its objectives, its implications were far-reaching and proved to be long-lasting in the discipline.

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