In the wake of the Napoleonic wars, the nineteenth century was the age of industrialization, spreading nationalism and standardization. The multiplicity of pre- and early modern systems of measurement and calendars were replaced by fewer, as typically adopted by the West’s great powers and tacitly enforced on the rest of the world through commerce and imperialism. Trains, in order to ply seamlessly from Paris to Moscow and from London to Istanbul, needed compatible timetables, exactly the same gauges, and the same system of measures and weights. Obviously, this homogenizing ideal of a single set of standards as needed by technology and trade have not been achieved to this day, but the number of different systems was radically reduced. In 1851 the British decided to establish a prime meridian at London’s Royal Observatory in Greenwich. In the subsequent three decades two thirds of maps began to be produced with the use of this “Greenwich meridian,” which became accepted by virtually all cartographers by the turn of the twentieth century. In 1875, at Paris, all the great powers (bar Britain), including the Ottoman Empire, and alongside a clutch of independent nation-states from all around the world, signed the Metre Convention. This was the beginning of the metric system as it is known today. The United Kingdom with its worldwide empire preferred to stick to the mile and pound, or its own “imperial system” of weights and measures. In 1582 Pope Gregory XIII promulgated a New Style Calendar, also known as “Gregorian,” in contrast to the former Julian (Roman) Calendar (“New Style”) calendar, originally proposed by Julius Cesar in 45 BCE. Because the sixteenth century was the high point of the religious strife between Catholics and Protestants, at first only Catholic polities adopted the Gregorian Calendar, namely Poland-Lithuania and the Habsburgs in Central Europe. Apart from Prussia, which adopted the new calendar in 1610, other Protestant polities within the Holy Roman Empire vacillated for a century longer, while Britain and Scandinavia’s kingdoms followed suit even later, only in the mid-eighteenth century. The Ottomans, the Russian Empire and the Balkans’ Orthodox nation-states desisted until after the Great War. Bolshevik Russia adopted the already two and a half centuries old “new” calendar in 1918, Greece in 1922, and the post-Ottoman Turkey as late as 1926. However, within Greece and the European Union, the Autonomous Monastic State of Mount Athos continues using the Julian Calendar to this day.

Writing is a technology of graphic representation of speech and the main instrument of producing Einzelsprachen. In Europe and the Middle East, until the early modern period the use of different scripts (writing systems) had been typically coordinated with a religion or denomination. The literate faithful had been expected to write, print and read with the use of this script in which their “holy book” had been written. All the faithful of a religion had been expected to be able to recognize their “holy script,” and to disparage all others, seen as “infidels’ letters” or the “devil’s alphabets.” The employment of vernaculars for written purposes often led to the sidelining of this or that “holy book’s” antiquated Einzelsprache as a language of administration and book production. However, the unspoken norm was to use the “holy book’s” writing system for creating and writing vernacular languages. Hence, Armenian Monophysites wrote their Einzelsprachen in Armenian characters, Catholics in Latin letters, Jews in Hebrew characters, Muslims in Arabic letters, and Orthodox Christians in Cyrillic or Greek characters. The split in Western Christianity, where the Latin alphabet was in exclusive employment, introduced a scriptal (typographic) cleavage between Antiqua preferred by Catholics and Fraktur (Gothic type, Blackletter) by Protestants. In the early eighteenth century, the modernizing (Westernizing) reforms in Muscovy (Russian Empire) resulted in the new script of Grazhdanka (“New Cyrillic”) modelled on Antiqua. It was employed for non-religious books and administrative purposes, while Church (Old) Cyrillic was kept for religious publications and ecclesiastical administration until the turn of the twentieth century. During the first half of the nineteenth century, this Grazhdanka-Church Cyrillic split for secular and ecclesiastical uses spread from Russia to the Slavophone Balkan nation-states (Bulgaria, Montenegro, and Serbia) and Romania.

Due to the invention of ethnolinguistic nationalism in the early 1810s, a new political logic of ethnolinguistic homogenization was added to the thinking about the use of scripts in Central Europe. This logic of *cuius regio, eius lingua* (whose realm, his language) either merged with the older religious one of *cuius regio, eius religio* (whose realm, his religion), or trumped the latter; all in the service of building an ethnolinguistically defined nation and winning a carved nation-state for it. The process was quickened by the gradual adoption and implementation of the ideal of compulsory elementary education for all from the turn of the nineteenth century to the mid-twentieth century. The founding of a German Empire as a German nation-state in 1871 led to the abandonment of Fraktur in favor of Antiqua for writing in Scandinavia’s Lutheran na-
tion-states and among other non-German-speaking Protestant nations. Additionally, among the Germans and other German-speakers, a functional divide appeared of Fraktur for administration, everyday writing purposes, fiction, newspapers and the humanities, and Antiqua for natural sciences and mapmaking.

In the Russian Empire, after the 1830–1831 anti-tsarist uprising of the Polish-Lithuanian nobility, not only was Polish replaced with Russian as the language of administration in the Empire’s partition zone of former Poland-Lithuania, but also the idea appeared in the 1840s that all Russia’s language should be written and printed in Cyrillic. With time this idea faded but reappeared in the wake of yet another uprising staged by Polish-Lithuanian nobles in 1863–1864. This time Polish was banned from the administration of Russia’s autonomous (Congress) Kingdom of Poland, and it was forbidden to print any Latvian- or Lithuanian-language books with the employment of Antiqua or Fraktur fonts. Cyrillic was prescribed for this purpose, leading to mass smuggling of Lithuanian books printed in Latin letters from Germany’s East Prussia. Also, orthographic (spelling) differences fell afoul of tsarist censors, and they banned the use of the Little Russian (Ukrainian) style Cyrillic for producing publications in this language, before banning the use of Little Russian and White Russian (Belarusian) in publishing altogether. St Petersburg’s policy of centralizing and homogenizing the European part of the Russian Empire tactically adopted yet another principle of *cuius regio, eius descedarium* (whose realm, his alphabet). However, this effort at the scriptal homogenization of the Russian Empire came to nothing when, in the wake of the liberalization triggered by the 1905 Revolution, all scripts and languages desired by the Tsar’s subjects were allowed back into use, including the phenomenon of bicoptalism, for instance, the use of Antiqua (“Polish letters”) and Grazhdanka (“Russian letters”) for publishing in White Russian for Uniates and Orthodox Christians, respectively.

The introduction of full male suffrage in the Russian Empire (1906) and in Austria-Hungary’s Cisleithania (1907) led to the rapid coalescence of the linguistic and political dimension of Yiddishland (Map 16). The secular book production in Yiddish grew exponentially. But any official use of Hebrew characters had been long banned in the Habsburg lands (1846), Prussia (1848), and the Russian Empire (1862). When an uneducated Yiddish-speaker wanted to communicate with the administration in Austria-Hungary or Germany, he had no choice but to resign himself to the use of the “gentile” Latin letters for writing in “bad German,” as Yiddish was assessed by German-speakers, when they did not disparage it openly as a lowly “jargon,” not worth writing or reading. A series of the West’s and Russia’s unilateral impositions (“capitulation treaties”) on the Ottoman Empire, among others, led to France’s growing influence on the education of this Empire’s Spanyol-speaking Sephardik Jews since 1860. Under the example of the French language, widely used as the medium of education in their schools, Ottoman Sephardik began gradually switching from Hebrew letters to Antiqua for writing and publishing in their language. This switch was sealed, when in 1928 in Turkey the Latin alphabet superseded the Arabic script for writing and publishing in the Turkish language. This example convinced most Sephardik to ditch the Hebrew script for writing and publishing in Spanyol (also known as Ladino and Judeo-Spanish).

In the Balkan nation-states, which emerged during the nineteenth century at the expense of the Ottoman Empire, the nationalized millet (religious) logic of the politics of script was followed. Bulgaria, Montenegro, and Serbia were founded as national polities for Slavophone members of the Rum (Roman) Orthodox millet, living in the territories of various historical or current Orthodox patriarchates. Obviously, these three states adopted Cyrillic for writing and publishing in their official languages. Because all three looked to Russia for aid and culturally (religiously) acceptable models of modernization, they quickly adopted Grazhdanka in place of Church (Old) Cyrillic, especially for secular uses. The main problem was not the question of script, but whether to write in (Church) Slavonic, a vernacularized version of Church Slavonic (as exemplified by standard Russian) or in a local vernacular. While the vernacular-based Serbian, as standardized by Vuk Karadžić, had been employed in the Austrian Empire for local administration and education since the 1820s, in Serbia itself this “Vukovite” Serbian language was repeatedly banned in 1832, 1850, 1852, and 1860. Belgrade allowed for the unrestricted employment of the vernacular-based Serbian only in 1868, but it took almost two decades more before it replaced, in 1886, the still prestigious Slaveno-Serbian, especially preferred by the Orthodox clergy. Obviously, the concept of the common bicoptal Serbo-Croatian language for the Catholic Croats and the Orthodox Serbs (and Montenegris) was proposed at Vienna by a small group of Croatian and Serbian intellectuals in 1850. But it was a minority pursuit until 1882, when the Yugoslav Academy of Sciences published the first volume of the multivolume dictionary of the “Croatian or Serbian language,” tellingly printed in Antiqua. In Austria-Hungary the variously named Croatian, Serbian and Serbo-Croatian were officially used with the employment of Latin and Cyrillic letters, while in Bosnia books and newspapers were also published in this language with the use of the Arabic script for Slavophone Muslims. In addition, between 1890 and 1907 this language was known as Bosnian in Bosnia, though the official policy was to use Antiqua to write and publish in it. On the contrary in Serbia and Montenegro Cyrillic was in exclusive use, and this language was known invariably as Serbian. The Great War changed the observed lines of the politics of script and language dramatically. In Austria-Hungary, in 1915, Cyrillic was banned for writing and publishing in Serbo-Croatian or Serbian. The Austro-Hungarian armies occupied Serbia, and the country’s government found itself in exile on the Greek island of Corfu, under the Allies’ protection. With no Cyrillic printing press available, this Serbian government-in-exile had no choice but to use Latin fonts for publishing in Serbian. Subsequently, in interwar Yugoslavia, the 1921 Constitution provided that the name of the country’s national and official language was the tripartite Serbo-croatoslovenian, written in the two equal official scripts, namely, Cyrillic and the Latin alphabet.

The politics of script and language developed differently in the two other post-Ottoman Orthodox nation-states in the
Balkans, that is, Greece and Romania. The Rum (Orthodox) millet’s main official language was the New Testament (Byzantine, Medieval) Greek (Ἐλληνική, Elliniki), obviously written in Greek characters. Both this language and its script were adopted in independent Greece. But the Einzelsprache was removed almost two millennia from the Greek vernacular (Demotic [Δημοτική Demotiki or Ρωμαϊκή Rhomaikē “Roman”]). This deep diglossia between writing and speech, also doubling as the pronounced cleavage between the tiny literate elite and the illiterate peasant masses, hampered any efforts at developing popular elementary education with the employment of such New Testament Greek as the medium of instruction. Hence, since the turn of the nineteenth century, the Russian solution had been followed of adding some Demotic elements to the New Testament Greek, which yielded Katharevousa (or “Purifying language”). Katharevousa remained Greece’s national and official language until 1976, when Demotic superseded it. But none of these changes impacted the Greek script. The modernizing pressure brought about similar developments in the case of Osmanlica (Ottoman Turkish), infused with Arabic and Persian lexical and syntactical elements that it was unintelligible to an uneducated Türkic-speaker. This diglossic tension between the former known as fasih türkçe (“correct Turkish”) and the latter dubbed as kaba türkçe (“vulgar Turkish”) led to the rise of a compromise form orta türkçe (“middle-style Turkish”), which was codified in the latter half of the nineteenth century and in widespread use until the Young Turk Revolution of 1908. Obviously all these three varieties were unified by the same Arabic script.

As remarked above, this model of “compromise Einzelsprache” constructed from an antiquated “holy tongue” and a cognate vernacular was followed in Serbia and Montenegro, where Slaveno-Serbian (or vernacular Serbian heavily influenced by Church Slavonic) was in official use until the 1890s. Prior to this change, due to military and financial aid flowing from Russia since the eighteenth century, the Church Slavonic elements in Slaveno-Serbian had been standardized in line with the ecclesiastically and politically dominant Russian re-daction of Church Slavonic. A similar situation was observed in Bulgaria, founded by the Russians in 1878. Initially, under the continued Russian cultural and military influence, the Church Slavonic elements in Slaveno-Bulgarian were replaced with Russian lexical and syntactic loans, before the modern vernacular-based Bulgarian emerged in its own right during the early twentieth century.

In the Danubian Principalities of Walachia and Moldavia, at the turn of the nineteenth century, the literate boyar (noble) elites first emulated the example of official Latin (obviously written in Latin letters), as employed in Hungary’s Transylvania with its plurality of Walachian (Romanian)-speakers. In the 1830s, Florentine/Tuscan (Italian) became another model to be followed, due to the Einzelsprache’s prestige connected to its use for official and commercial contacts between the Ottoman Empire and the European powers. But soon afterwards, because of its unprecedented military, economic and political achievements, France and its official language of French became a permanent point of reference for the Romanian elite until the fall of communism in 1989. But in this quest for a French-inflected Western-style modernization, the traditional use of Cyrillic for writing and publishing in Walachian caused frustration among literati, even though it was Russia’s repeated attacks on the Ottomans in the first half of the nineteenth century that actually made it possible for Romania to emerge as a unified nation-state in 1866. At the same time, the language was firmly renamed as Romanian, and its official script was changed as well, from Cyrillic to Antiqua, or the “French alphabet.” But even earlier, since the early nineteenth century proponents of modernization had employed quite fluid and unstable idiosyncratic varieties of the “mixed,” or rather bi-alphabetic, Cyrillic-Latin script for Walachian (Romanian).

Traditionalists had tended to use fewer Latin letters in such a mix, while modernizers used more. Obviously, Cyrillic remained firmly in use for limited publishing in Moldavian (today’s Moldovan or Romanian) in Russia’s province of Bessarabia (present-day Moldova). After 1905 any restrictions on the use of Moldavian were lifted, but tradition, censors, and political pressure required the overwhelming employment of Cyrillic, nevertheless. This changed only in the interwar period when in 1918 Bessarabia became part of Romania; Cyrillic was replaced with Antiqua for writing and publishing in Romanian across the entire interwar Romania. But interestingly, to this day, within the Romanian Latin alphabet a subset of letters typographically transformed to resemble Cyrillic is preserved, especially for the titles of Orthodox religious and theological books, alongside wall inscriptions in Orthodox churches. This practice is similar to the British penchant for using the decorative Blackletter for professional titles on university diplomas and for the titles of liturgical books.

In 1912 an Albanian nation-state was proclaimed. In contrast to other post-Ottoman Balkan national polities, it did not follow the religious logic of turning millets into nations, but that of ethnolinguistic nationalism. Their language and specific customs overrode the fact that Albanian-speakers were members of the three different millets of Muslims, Orthodox Christians, and Catholics. Obviously, those few who were literate wrote in the “holy tongues” and dominant Einzelsprachen of these three religions with the use of the confessionally specific scripts. Educated Albanian Muslims wrote and read with the use of Arabic letters in Arabic, Osmanica (Ottoman Turkish), and Persian. In the southern Albanian-speaking (Tosk) lands, educated Albanian Orthodox Christians wrote and read with the use of Greek letters in Greek (namely, New Testament Greek and Katharevousa), while their northern (Gheg) counterparts with the use of Cyrillic letters in Church Slavonic, alongside Slaveno-Serbian and Slaveno-Bulgarian. In addition, in what today is western Macedonia, the Greek alphabet was also employed for writing in (Church) Slavonic (at present reinterpreted as Macedonian). In turn, educated Albanian Catholics preferred Latin letters, which they employed for writing in Latin and Tuscan (Italian). As a result, when some began writing and publishing in Albanian, they variously employed Arabic, Cyrillic, Greek and Latin characters for this purpose. In the wake of the 1877–1878 Russo-
Ottoman War, the Albanian-speaking area was connected to the rest of the Ottoman Empire only by a narrow land bridge with the anti-Ottoman Greece in the south and the anti-Ottoman Montenegro, Serbia and Bulgaria in the north. In addition, from the territory around the city of Niš (Niš) granted to Serbia, Muslim Albanians—or a plurality of the inhabitants—fled or were expelled. A realization dawned on the Albanian-speaking elite that they must unify their language and rally around it for the sake of their own autonomous, or even independent, nation-state in order to prevent a potential partitioning of the Albanian-speaking territory among the neighboring millet-based national polities. A feverish period of experimentation followed, marked by “mixed” (biscriptal) alphabets and some scripts invented from scratch for writing and publishing in Albanian. Although the plurality of Albanians professed Islam, and many—irrespective of religion—went for education and found gainful employment in Egypt ruled by the ethnically Albanian elite connected to the Muhammad Ali (Alawiyya) dynasty, the rife Western stereotype associated the Arabic script with “backwardness.” On the other hand, the modern secular Albanian Einzelsprache developed among the Catholic Albanian diaspora in Italy since the 1860s. They wrote and published in Albanian with the employment of Latin letters. In addition, another Western (imperialist) stereotype claimed this script to be the “alphabet of progress and modernity.” Also, the mid-1860s Romanian example of the switch from Cyrillic to the Latin script weighed heavily, since from this time Romania had developed a dense network of schools for Romancephone Vlachs (Aromanians) across the Ottoman Balkans. Bucharest saw them as ethnic “Romanians.” Previously, as Orthodox Christians, Vlachs had predominantly used Greek letters for writing and publishing (though some also used Cyrillic and the Latin alphabet), but under this Romanian influence they switched to the Latin (“Roman,” “Rum,” or “Romanian”) alphabet. Unsurprisingly, in the context of these scriptal (“modernizing”) changes, in 1908, the Latin alphabet was officially adopted for writing and publishing in Albanian.

As a rule of thumb, modernization and the founding of nation-states gradually limited the number of official, state-recognized scripts. Empires were more relaxed in this regard (especially Austria-Hungary and the Ottomans), but between the 1880s and 1905 the Russian Empire did pursue the policy of quite strict scriptal homogenization in Cyrillic. Such a policy of normative monoscriptalism was typical for nation-states. As a result, the Jewish writing system of Hebrew and the Armenian alphabet, which had been part and parcel of Central European history for centuries, had been largely pushed out of state-approved official use by World War One. If compared with Maps 6 (1570) and 8 (1721), it is readily visible that the officially approved scripts became increasingly coordinated with state frontiers, reflecting the increasing politicization of writing systems and Einzelsprachen.

In 1910 the area of Latin-Cyrillic biscriptalism in the west of the Russian Empire mainly coincided with the Russian partition zone of former Poland-Lithuania, in the north with the former Swedish former provinces of Finland, Estland and Livonia (Lifland), and in the south with the province of Bessarabia, which had been wrenched away from the Ottoman vassal principality of Moldavia. With the exception of Crimea, where the official use of the Arabic script for writing and publishing in Crimean Tatar (and Arabic) was preserved, the northern Black Sea littoral became homogeneously monoscriptal in Cyrillic, following the flight, expulsion, and genocide of the region’s Turkic- and Caucasian-speaking Muslim populations between the late eighteenth century and the mid-1860s.

The employment of Cyrillic alongside the dominant Latin alphabet in the northeastern corner of Austria-Hungary coincided with the presence of Slavophone Greek Catholics (Uniates) in this region. In the Crownland of Galicia, they stemmed from Poland-Lithuania’s Uniate Church, while in Hungary from this kingdom’s Uniate Churches. In Hungary’s Transylvania, the region’s considerable Romancephone Greek Catholic population had abandoned Cyrillic in favor of Latin letters between the mid-eighteenth and mid-nineteenth centuries, under the example of Transylvania’s Catholics and Protestants, and Romania’s state-approved switch from Cyrillic to the Latin alphabet.

In the Ottoman Empire, the tradition of the official use of “holy scripts” for different millets was maintained. When Austria-Hungary occupied the Ottoman province of Bosnia in 1878 and finally annexed it three decades later, in 1908, Vienna retained there the millet-based system of multisciptalism. However, all the post-Ottoman nation-states opted for strict monoscriptalism in the writing system of their own millet, which was molded into a nation. The atypical official employment of Arabic letters alongside dominant Cyrillic in the nation-state of Bulgaria was connected to the international guarantees of religious and cultural rights for the country’s Turkic- and Slavic-speaking Muslims who constituted around one-fifth of the country’s population.

In 1910, outside the Ottoman Empire and Bosnia, in Central Europe there were no areas where more than two scripts were in official use. Obviously, the situation looks a bit different if the Fraktur and Antiqua types of the Latin alphabet are seen as different scripts. Actually, some contemporaries did perceive Antiqua and Fraktur as different writing systems. From this perspective, the northeastern (Slavophone Greek Catholic) corner of Austria-Hungary and Russia’s post-Swedish provinces (Finland, Estland, Livonia), alongside the post-Polish-Lithuanian provinces of Courland, Kovno (Kaunas) and Suvalki (Suwalki, Suvalkai), were also triscriptal. Hence, Denmark, Norway, the German Empire, or Cisleithania were not monoscriptal, but rather biscriptal, with Antiqua and Fraktur brushing sides in writing and publishing a variety of official and national languages.