RUSSIA: TERRITORY AND POPULATION

A PERSPECTIVE ON THE 1926 CENSUS

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After the discovery of America by Columbus a vast colonization movement sprang up among the nations of Europe in two directions, westward towards America and eastward to Asia. The late Russian geographer, P. P. Semenov-Tian-Shansky, has calculated that of all emigrants beyond the Atlantic and the Asiatic frontier from the end of the fifteenth century to the end of the nineteenth 72 per cent, consisting principally of Western Europeans, went to America, and 28 per cent, chiefly Slavs, emigrated eastward to the interior of Eurasia (Alexander von Humboldt's term), if the ethnographic boundaries within the territory of the Russian plain between the European and Asiatic nations of those days be taken into account—for Russia has never recognized the artificial division of the northern continent of the Old World into Europe and Asia.

The importance of the great Slavonic colonization eastward into the interior of Eurasia has not been duly appreciated in Western Europe and America. And yet if there had not been this movement, Western Europe would have been obliged to spend so much energy in fighting the Asiatic hordes of invaders from the East that sufficient strength would not have been left to colonize America. It was only under cover of the Slavs on the east that Western Europe was able to retain the classical purity of its civilization. This is confirmed by the famous invasion of the Huns in the fifth century, which caused a panic throughout all Western Europe, as also by later ones, the strength and impetus of which are so vividly described by the traveler G. E. Grum Grzhimailo (in a new work of capital importance, "Western Mongolia and Uriankhai") that even now, several centuries after these nomads' invasions have ceased, we shudder in reading of them. The repeated attempts of Western Europe to vanquish the specter of "Russian Imperialism," so-called (1604–1617, 1700–1721, 1812, 1854–1855, 1904–1905, 1918–1920), were ill-advised and invariably amounted to little, even when Russia was defeated, for they were attempts against the natural geographical conditions of the country, rather than its population. Napoleon's campaign to Moscow in 1812 is illustrative. The situation was well expressed by an Austrian prisoner sent to eastern Siberia in 1916. Appalled by the great distance he said: "You
Russians cannot be conquered, because, in case of defeat, you can always escape so far that it would be impossible to overtake you."

**The Vast Extent of Russia**

Whilst the movement towards the east was proceeding, accompanied by an armed struggle of the settlers with the Asiatic nomads, the Russian Empire was formed. In continuous extent of state territory from west to east, this Empire holds the record in the whole history of humanity. While Alaska was still a Russian possession the Empire measured 11,000 kilometers from Kalisz to Mt. Adams. Even now, when it has decreased to 9000 kilometers (Proskurov to Bering Strait), it exceeds the other great territorial units that the world has known—the medieval states of Mongolia and Arabia, 7000–8000 kilometers; ancient China, Persia, Macedonia, and Rome, as also the modern United States of America and Canada, 5000–6000 kilometers. Moreover, the great empires of antiquity in the Old World and the medieval Arabian caliphate were situated between the annual isotherms of 10° C. and 30° C., and the Mongolian Khanate between 0° C. and 30° C., while Russia extends between the isotherms of 20° C. and 20° of frost—a range such as occurs in the continuous territory of no other state in the world. In Canada this range attains 30°, in the United States without Alaska 20° and even with Alaska not more than 38°, in China less than 30°. This enormous range is illustrated by the accompanying map of the thermal zones of Russia, showing the annual duration of frost (Fig. 1).

**The Great Extremes of Climate**

From this map it may be seen that about half of the territory of the present Soviet Union has frost during more than half the year, while in the remaining part of the country approximately as far as the northern limit of hot summers (above 20° on the average) a long period of the year, about one-third, consists of transitional seasons—a spring, with its protracted period of bad roads and river floods caused by the melting of snow, and a rainy autumn, also with its long period of bad roads. Moreover, throughout the greater part of the Soviet territory, as a result of its being geographically unprotected from north winds, a temporary and sharp return of cold weather not infrequently occurs. A considerable part of the territory of northern Russia is characterized by a permanently frozen subsoil, the area so occupied being more extensive than similar tracts in North America, if Greenland and the North American archipelago be excluded as being separate islands. This condition is a considerable drawback to agriculture and to construction that penetrates to any depth. Only some inconsiderable districts of the coasts on the Murman and on the
Fig. 1—Climatic features of Russia, compiled by B. and I. Semenov-Tian-Shansky. 1, sea almost completely ice-covered; 2, sea with floating ice; 3, sea ice-free in summer; 4–8, duration of frost—4, 9 months; 5, 6–9 months; 6, 3–6 months; 7, 1–3 months; 8, less than 1 month; 9, limit of permanently frozen ground; 10, limit of cold winters (more than 20°C of frost); 11, limit of hot summers (more than 20°C of heat); 12, January "Pole of Cold" (−45°C). Mean annual isotherms 0°C and 10°C are shown and isobys of 300 millimeters and 1000 millimeters.
Fig. 2—The natural landscape of northern Eurasia, compiled by B. Semenov-Tian-Shansky. 1, tundra; 2, semifornest and forested plains; 3, semisteppe and steppe plains with black soil; 4, dry steppe and semidesert; 5, sand desert; 6, marshes; 7, hilly morainal landscape; 8, dissected plateau; 9, plateau with tabular uplands; 10, waterless plateau; 11, limit of lake-studded plains of interior drainage; 12, mountain landscape.
Black and Caspian seas have access to waters that never freeze. Even Canada is favorably distinguished from Russia by possessing a longer coast line on the never freezing Pacific Ocean, not to mention the Atlantic, while having no extensive inland territory with a hot summer season. The Pole of Winter Cold (more than −40°) is situated in northern Greenland, not in the interior of Canada, whilst within the Soviet Union it lies in the interior near Verkhoyansk.1 Within the boundaries of the Soviet Union frostless areas occupy but quite insignificant tracts on the coasts of the Black and Caspian seas.

On the other hand the territory of the Union with a hot summer has a low rainfall, less than 300 mm., and belongs to the region of semideserts and deserts (see Figs. 1 and 2). It is thus not astonishing that these severe natural conditions have reacted unfavorably upon the history of the country and that a low level of culture and slow progress have characterized the Slavonic colonizing movement towards the east. The country is, however, distinguished by the extraordinary adaptability of the race as recognized long ago by Élisée Reclus. During their eastward migrations the Slav settlers have shown a disposition to miscegenation with the primitive aborigines of the forest and of the polar regions, earlier acclimatized, as also with the nomads of the southern deserts. In this respect Slav colonization exhibits common features with that of the Spaniards of America who mixed with the natives. But the miscegenation of the Spaniards with the chief Indian peoples—those of the Aztec and Incan Empires for instance—was culturally more favorable, as the latter were already in possession of their own original fairly high civilization, while the cultural level of the tribes of Eurasia with whom the Slav mixed was for the most part very low.

And yet, even under these various adverse circumstances, nowhere but in Russia, as pointed out by Woikov, is there such a dense population in such high latitudes. The yearly isotherm of 4° C. passes through Peter the Great’s city, which had before the World War more than 2,000,000 inhabitants.

Centers of Territory and Population

Great Russia had its birth in the center of the plain of eastern Europe in the triangle between the Volga and the Oka, where was the cradle of the Muscovite dominion. From here it spread on all sides, though unequally, reaching the Arctic, Baltic, Black, and Caspian seas and the Pacific Ocean. This growth of the state territory was at times accompanied by losses on the borders, partly voluntary, partly enforced. Hence, the geographical centers of territory and population

have always been subject to change. The positions of these centers according to the general census of 1897 were calculated by the distinguished chemist Mendeleev in 1906 not long before his death. Later some corrections in his calculations were made by the physicist Weinberg, who also calculated the historical transpositions of the centers of the territory of the country and those of its population from the foundation of the Muscovite dominion until 1914.

The second general census of population took place in 1926. In connection with this census a special "Centrographical" Laboratory, named after Mendeleev and attached to the statistical section of the Russian Geographical Society, was founded under my direction. The mathematicians Sviatlovsky and Bobrik are there occupied in the determination, by weighing and numerical calculation, of the modern centers of territory, population, and various economic phenomena both for the whole Soviet Union and for the separate republics composing it.

As may be seen from Figure 3, the eastward movement of the center of territory was especially rapid in the seventeenth and at the beginning of the eighteenth century when the Russian Cossacks had reached Alaska, having rapidly succeeded in covering without check a space of thousands of kilometers in uninhabited high latitudes. In the eighteenth century the geographical center of the country lay almost on the watershed of the basins of the Yenisei and the Lena. Later, as lands in the west and south were annexed and Alaska was sold to the United States in 1867, that center began to recede in a southwestern direction and in 1914 reached Tomsk. The most extensive loss of border territory occurred in 1918 on the northwestern, western, and southwestern frontiers of the state, when Finland, Estonia, Latvia, Lithuania, Poland, Bessarabia, and a part of Armenia and Adjaristan were lost. But, as in 1918 only a strip of land, narrow as compared with the entire extent of the country, was lost, the center has not moved far, being now situated east of the river Tom between the Ob and the Yenisei.

The historical movement of the center of population was towards the southeast from Moscow, the movement being considerably slower than that of the center of territory. Thus from the beginning of the fourteenth until the beginning of the twentieth century, i. e. during 500 years, the center of population had moved from Moscow altogether a distance of little over 400 kilometers, as far as the government of Tambov, including a deviation to the west in connection with the annexation of the territories of the former Polish-Lithuanian state. The southward movement of the center of population was due to migration to the fertile black earth steppes. Here the nomadic population presented a serious obstacle. During the armed fight with the nomads in the sixteenth and seventeenth centuries, the Russian settlers built wooden turreted walls and earth ramparts and put up
Fig. 3—Historical development, compiled by B. Semenov-Tian-Shansky. Territory acquired by Russia in: 1, sixteenth century; 2, seventeenth century; 3, eighteenth century; 4, nineteenth century; 5, twentieth century; 6, lost territories; 7, over 50 per cent Slavs in the population (twentieth century); 8, movement of center of territory from 1500 to 1926; 9, movement of center of population; 10, northern and western boundaries of the Mongolian-Tatar dominion of about 1300; 11, defensive lines against nomads and Caucasian mountaineers in sixteenth to eighteenth century.
DENSITY OF POPULATION AND CHIEF TOWNS, 1926

Fig. 4—Density of population and chief towns according to the census of 1926, compiled by P. Semenov-Tian-Shansky. Towns with over 100,000 are shown; the numbers correspond with the list of towns given in the text, Table 1, on p. 63. The heavy lines enclose the three regions having the greatest development of urban settlement.
barricades in the forests. These fortifications, known as "watch lines," extended for more than three thousand kilometers from the Desna, a tributary of the Dnieper, to the Altai, with an interval in the Ural Mountains, i.e. throughout a distance nearly equal to the famous Great Wall of China. A sample of such a wooden fortification in the shape of walls with towers (ostrog, "keep") still existed in the far-away north at Yakutsk till the last revolution, when with the exception of one tower it was pulled down to be used for fuel.

The watch lines by their very existence caused a concentration of the population behind them. And as at that time Siberia was being colonized in an eastern direction under the cover of similar fortifications, the resultant of the center of the population was a short line directed to the southeast of Moscow. The Polish territory lost in 1918 in particular was thickly populated, hence in 1926 the center of population of the Soviet Union has been moved comparatively rapidly and very markedly in an east-southeastern direction, and now lies in the German republic on the Volga. Thus, owing to historical and geographical causes, the center of the territory of Russia as seen on the map is more than three thousand kilometers distant from the center of population, whilst in the United States of America the distance between the two centers is only about a hundred kilometers. Russia must needs increase the colonization of Siberia to lessen the discrepancy.

The Peoples of the Soviet Union

The territory of the Soviet Union, as has been shown by the latest investigation of the Academy of Sciences, is inhabited by 169 ethnic groups belonging to ten major divisions: Indo-Europeans (36); Japhetic or Caucasian tribes (40); Semites (6); Finns (16); Samoyeds (1); Turks (48); Mongols (3); Tungus-Manchurian tribes (6); Paleoasiatics (9); and groups of tribes (4) from the Far East with an ancient culture (Fig. 5). So many different peoples throughout a continuous territory with no oversea colonies is hardly to be found in any other state of the world. Since the white race forms about three-fourths of the whole population of the Union, the yellow race only one-fourth, the country should be assigned to the Western civilized world of Eurasia, though not without a distinctly eastern cast. On Figure 6 are shown the boundaries of the republics and autonomous provinces constituting the Soviet Union. From this map and Figure 5 it may be seen that the republics are territorially so distributed that in each of them as far as possible there predominates one of the most numerous nationalities of the Union, while at the same time into each there enters a Slavonic element in greater or lesser degree. This occasionally gives rise to a markedly sinuous character in their boundary lines and even to a discontinuity of territory, parts of a
state being separated from the main body, as is the case in the Bashkir, the Buriat, and the Caucasian republics: but such is the inexorable working of the national principle laid down as the foundation of the territorial distribution.

INCREASE OF POPULATION

According to the second general census of December, 1926, Russia had 146,000,000 inhabitants. Thus, notwithstanding the losses caused by the World War, the civil wars, and the Revolution and despite the loss of territory with 27 millions of population now entering into the composition of seven independent states (Finland, Estonia, Latvia, Lithuania, Poland, Rumania, and Turkey) and also the loss from death by epidemics and famine, the population of the Soviet Union still exceeds by 17 millions that of the Russian Empire as it was almost thirty years ago, when according to the first general census of February, 1897, the population numbered 129,200,000.

This increase in the population is very unevenly distributed: it amounts to 164 per cent in the Far East, 140 per cent in Siberia, and 58 per cent in the northern Caucasus. It is true that these are districts of interior colonization; still the natural growth of the local population has also been great. In former times natural increase was checked by the great mortality of children under one year of age. In recent years this has been visibly lessened, and progress in this respect will be more rapid in the future. The growth of the population in the central parts of the Russian plain (24 per cent) was not high, nor was it in the Usbek and Türkoman republics (28 per cent), nor in Daghestan (8 per cent). The famine of 1921 caused a decline of population between the years 1920 and 1926 in the areas affected: in the government of Samara, as much as 18 per cent; in the German republic of the Volga, 17 per cent; in the Troitsk district of the Ural province and the government of Orenburg, 16 per cent; in the Tatar republic, 14 per cent; in the Bashkir republic, 12 per cent.

Among the federal republics forming the Soviet Union the first place in number of inhabitants goes to the Russian republic with 100.5 millions; then follow the Ukraine with 28.9; Transcaucasia, 5.8; Usbekistan, 5.1; White Russia (abnormally diminished by territorial loss), 4.9; Turkmenistan, 1.

GEOGRAPHICAL DISTRIBUTION OF THE SEX RATIO

The geographical distribution of population according to sex is an important question to which too little attention is paid. In 1897 the population of the Russian Empire was equally divided as regards sex. In the northern half of the western part of the country women predominated, irrespective of race, and vice versa in the southern half.
Fig. 5—Principal races of Russia, compiled by B. Semenov-Tian-Shansky from maps of the Special Commission of the Academy of Sciences of the U. S. S. R. 1, Slavs; 2, Rumanians, Germans, and Greeks; 3, Japhetic peoples and Ossetes; 4, Iranians; 5, Turkic peoples; 6, Finnic peoples and Samoyeds; 7, Mongol peoples; 8, Tungus and Paleoasians; 9, Koreans and Chinese; 10, uninhabited or practically uninhabited territory.
Climate is apparently responsible. It is well known that female infants endure the inclemencies of the season better than male infants who, in particular, are susceptible to the catarrhal diseases that are more prevalent in a cold and damp climate. The territorial limit of the numerical predominance of women in European Russia in 1897 may be said to correspond roughly with the annual isotherm of 7° C. According to the 1926 census it has moved southward to about 14° C. This is largely to be attributed to the series of calamities that overwhelmed the country from 1914 to 1921 and which affected chiefly the male population. The Transcaucasus alone has retained an insignificant excess of men, the ratio being 50.8 per cent against 54 per cent in 1897.

In all Asiatic Russia except the government of Tobolsk, which was first colonized (last quarter of the sixteenth century), there was a considerable predominance of men in 1897, as is characteristic of pioneer regions. On the shores of the Pacific the ratio of men to women was 68.4 to 31.6; and on the island of Sakhalin, then a convict colony, 72.9 to 27.1. Now the tables are turned, and throughout all Siberia proper the ratio of women to men is 50.9 to 49.1. In the Buriat-Mongol republic the members of the sexes, however, are almost equal. East of the Baikal the male population is still in excess. In the Far Eastern republic the ratio is 52.5 to 47.5. In the Yakutsk republic the ratio of men to women is 54 to 46, whereas in 1897 it was 51.9 to 48.1. The decline in the proportion of women is to be ascribed to the high mortality among women in their prime, the cause of which is now being investigated. In general it may be observed that the recent loss of man power has overburdened woman with work with injurious effect.

Climatic and historical factors affect most broadly the distribution of the sex ratio. As to the influence of the racial and economic factors the census returns have not yet been sufficiently worked out for analysis, though this is contemplated as one of the first problems to be treated by the Academy of Sciences.

**Geographical Distribution of Population**

The geographical distribution of population in Russia has depended on three major factors: climate, natural fertility of the soil, and the direction of the colonization movement. The net result has been a settlement very far from uniform: it differs from that of Western Europe in the existence of sharply alternating belts of densely inhabited and uninhabited tracts. Such a distribution cannot be properly shown on statistical cartograms, which usually are based on extensive administrative areas.

For an adequate presentation I have resorted to what I call the "dasymetric" map. Thanks to the active cooperation of Professor
P. A. Palchinsky and the Scientific Institute (for the study of "Surface and Mineral Resources") under his charge, such a map, "Dasymetric Map of European Russia," is in course of publication under my direction.\(^1\) It is based on the 1897 census, with revisions up to 1915, and is on a scale of 1:420,000. Up to date more than 40 sheets have appeared. A new dasymetrical map of the whole Union on the scale of 1:1,000,000 for the European area and the Caucasus, of 1:2,000,000 for the more densely populated southern half of the Asiatic portion, and of 1:4,000,000 for the whole Union, based on the data of the 1926 census, is now being prepared by the Academy of Sciences under my editorship and will appear in the course of a few years.

**Types of Settlement in European Russia**

On the basis of the studies for my book "Town and Village Life in European Russia" (1910) and the dasymetrical map I recognize ten different types of settlement on the Russian plain. Three of these are widespread.

Settlement in the northern belt is preeminently concerned with the collective industries—hunting, fishing, and extraction of the forest products; only in small degree is it agricultural. Settlements occur exclusively in river valleys and on the shores of lakes and seas, while the watersheds with their peat bogs remain entirely uninhabited. This type is well developed throughout the basin of the northern Dvina, Onega, and other northern rivers.

Settlement on the central watershed region on glacial soils is characterized by the cultivation of flax and cereals. Here the valleys are very humid and the frost season of long duration; hence the population prefers small sheltered villages on the clayey morainic hills and hillocks, warmer and drier but still with the ground water at no great depth. On an average the season for ripening of field crops is ten days longer on the higher land than in the valley bottoms. This

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\(^1\) See the review by Professor Sten De Geer (Geogr. Rev., Vol. 16, 1926, pp. 340–341) in which he makes comparison with his own dot method. Professer Max Friedrichsen in "Die dasymetrische (dichtemessende) Karte des Europaischen Russlands," Petermanns Mitt., Vol. 70, 1924, pp. 214–215, and Professor Palchinsky in the journal Poverkinost i Nedra (Surface and Mineral Resources), Vol. 4, 1926, pp. 50–55, also discuss the matter and point out the suitability of my method to conditions obtaining in Russia.
type is found in the northwest of the Russian plain and in the center between the Volga and the Oka.

Settlement of the southern type occupies the valleys of the black earth region of wooded and grass steppes. Agglomerations are considerably larger and are situated on the high and often precipitous banks of streams, safe from inundation by the melting snows of spring. In places the settlements practically adjoin, so that they seem to form a narrow band stretching for tens of kilometers and making it difficult to distinguish where one ends and another begins. And yet the inhabitants when compelled to move through stress of growing numbers very unwillingly take to the watersheds, preferring emigration to Siberia or the northern Caucasus. Settlements of this type may be attributed initially to the conflict with the Asiatic nomads who grazed their herds on the vegetation of the watersheds and drove the settlers to the wooded valleys. Now the population does not care to dig the deep wells that are necessary to reach the ground water far below the surface.

The other forms of settlement are: the highroad type on causeways and ancient highways; the railway type, near railway stations, commercial or summer-residential in character; health resorts, a variety of the summer-residential type; the factory type of industrial districts; the metallurgical and mining type of the mining districts; the fishing type; the southern orchard type on the slopes of the Crimea and the Caucasus, where conditions are specially favorable to the growth of fruit trees.

Density of Settlement

On the whole the density of settlement on the Russian plain increases regularly from northwest to southeast. In the glaciated districts of the northwest with slightly dissected relief the average
is 30 to 100 inhabitants per settlement; on the clay tracts bordering on the black earth zone from 100 to 200; on the black earth zone 200 to 600 and frequently more, up to 1000. The limit of the black earth is at the same time that of large settlements en masse. The largest settlements of this zone, though numbering more than 10,000 inhabitants in individual cases, nevertheless often retain a purely rural character and cannot be ranked as towns. This peculiarity, as Woeikov has pointed out, also occurs in Hungary, Sicily, and the Balkan countries with similar agricultural character.

In Russia dispersed settlement has always met with some or other obstacle, natural or historical. To the former category should be assigned the depth of the water table on the watersheds of the southern half of the Russian plain and the winter frosts with snowdrifts which compel the people to congregate in rather large settlements for mutual warmth and protection. To historical causes may be referred the necessity of defense from the nomads as well as the unwillingness of the communes to allow their members to settle on independent plots. In the forest zone, where the forest is itself a shelter from the cold winter winds, the settlements are smaller, but the danger of losing cattle from wild beasts has in this case also caused close settlement.

The northern limit of the black earth zone generally forms the boundary between the watershed type of settlement and the ribbon-like valley type; and about the boundary is the zone of densest village population on the Russian plain, extending from Podolia to the estuary of the Kama, which I call the principal axis of colonization because it yields the greatest number of emigrants to the Asiatic part of the Union and to the northern Caucasus.

The American economist Carey\(^2\) formulated a law regarding the pioneer: that agricultural settlers in colonizing a virgin country do not at first occupy the most fertile soils but those that can the most easily be worked with the tools available to them. This law has proved true in relation to Russia. Even now the densest population is not to be found on the black earth of the steppes but on the less fertile clay

soils near the northern limit of the zone. Only as these soils have become exhausted through continuous cropping has the population moved southward into the black earth steppe proper. In the country of clay soils the growing population has turned to industry. Here in the geographical center of the Russian plain originated the Moscow industrial district, which has politically assimilated the whole plain and occupied Siberia.

**The Development of Towns**

In the history of the development of towns in Russia four periods may be distinguished. In the first, or ancient, period the towns were exclusively founded as military settlements. For the most part they were surrounded by wooden turreted walls and ditches. Because of the abundance of wooden fences in ancient Russia the Scandinavian writers till the fourteenth century called Russia "Gardhariki," the country of fences. From the wooden town walls in the direction of the radiating roads extended the settlements of the soldiery. The greater number of towns being of military origin, they still have a concentric form with radial streets. The center, if built of stone, has retained the name of Kreml, "keep," as for instance in Moscow, Nijni Novgorod, and Smolensk.

During the middle period of town development western Russia gradually annexed lands belonging to the Polish-Lithuanian realm, where town settlements enjoyed the Western European medieval rights under the "Magdeburg Law," with privileges in trade and handicrafts, and where Jews were allowed to settle. Thus in Russia for the first time appear chartered towns. They are easily recognized by the tiled roofs of their buildings. They did not spread farther east.

The modern period commences when the Moscovite state became the Russian Empire, in the beginning of the eighteenth century, and when the interior of the country was now so secure that there was need for administration centers rather than military outposts. By that time nearly all the ancient wooden fortifications had disappeared, and many concentric towns had been transformed on a rectangular plan with a central market square, in which was situated the stone cathedral, surrounded by administrative buildings generally also of stone. The houses of the ordinary citizenry were still mostly wooden with iron or shingle roofs.

In the latest period, beginning in the nineteenth century, industrial towns began to arise; and in the second half of the century, commercial towns along the railways. Thus the principal stations of the old railway line between Petersburg and Moscow have during the 77 years existence of the line all become towns, and in their neighborhood many other small towns and boroughs have arisen.
The towns of Siberia, like those of European Russia, were first founded with purely military and administrative aims and had a similar appearance, but their population displayed a peculiarity in that it consisted of political and criminal convicts who afforded a supply of free labor for any kind of work. Many Siberian towns had been originally founded in haste to insure a greater hold over the natives: when they were no longer needed for that purpose and were situated unfavorably as regards geographical conditions, they simply disappeared. Potanin notes some curious features in the influence of trade on the Siberian towns. In western Siberia commerce was chiefly in cheap and bulky farm produce, such as grain and leather; whereas in eastern Siberia it was chiefly in expensive, light-weight goods, such as gold, fur, and tea. The merchants of western Siberia, before the building of the Trans-Siberian railway, restricted their annual journey to the fair of Iribit on the Ural and other Ural towns; while the merchants of eastern Siberia made longer journeys to the more highly civilized centers of European Russia—Petersburg, Moscow, the fair of Nijni Novgorod; which procedure was reflected in the greater degree of civilization in the towns of the east notwithstanding their greater distance from European Russia. Civilization here was also promoted by the Decembrists, exiled in the twenties of the last century in great numbers to far eastern Siberia.

The general conditions of the towns of the Russian plain and Siberia are still on a considerably lower level than those of western Europe; and they have not improved in the last 12 years, for many buildings that were destroyed have not yet been restored.

A particular type of town is represented by those of the southern mountainous countries belonging to the Soviet Union. In the Crimea and on the northern slopes of the Caucasus many towns are garden cities, thanks to their function as health resorts. In most of the towns of Transcaucasia the rural character of the population predominates, especially in Kolchis, central Armenia, and Azerbaijan, although it is just in these parts that the largest centers are situated—Tiflis and Baku. The towns of Transcaucasia have a rather pronounced eastern character, and with the exception of the greater number of the newly built towns on the Black Sea between Novorossiisk and Batum, which have an entirely European aspect, they are not distinguished for cleanliness.

TOWNS IN TURKESTAN

Slavonic colonization on reaching Turkestan found numerous populous ancient towns of the type of Samarkand, Tashkent, Bukhara, Khiva, and the like in the oasis of the river valleys. Without infringing on their integrity the Russian authorities founded side by side with the
native towns spacious Russian settlements of the garden-city type. Also, for administrative purposes, a series of new towns, originally purely Russian, was founded in former wastes, such as Vernyi, Askhabad, Krasnovodsk. When the Central Asian and Tashkent railways had been built and artificial irrigation increased, colonists from the Russian plain were induced to emigrate thither, whence these towns acquired a new economic importance and grew rapidly. In the former Khanates of Bukhara and Khiva, which attracted few Slavonic colonists, the town population was less numerous. With the exception of Bukhara there were then no big towns, though the number of towns in both these Khanates, reaching as many as 35 to 40 in comparison with only 100 towns in the whole of Asiatic Russia, must be considered large. Here rural Asia, according to Woelkow’s expression, has made itself felt. The native towns of central Asia have on the whole a rustic appearance, are dirty and crowded, and have but few stately monuments of Moslem antiquity: they contrast sharply with the adjoining Russian garden towns.

Classification of Towns

After the Revolution a considerable change was made in the official classification of towns. Now every place in which industrial life is developed, though it may have fewer than a thousand inhabitants, is regarded as a town. A distinction, however, is made between a "town" and a "settlement of the town type." A greater number of fairly populous towns have made their appearance, of which nobody formerly was aware; but, as the names of many of these places have also been changed without their previous names being indicated in the official records, it is a matter of extreme difficulty to compare them in detail with their originals.

Increase of Town Population

The town population of the Soviet Union according to the census of 1926 amounted to 25,734,418 persons, or 17.6 of the total population. In 1897 the returns gave the town population, which included their suburbs, as 13 per cent. This calculation, however, fell below actual conditions, since many important centers of the town type were ignored in the official list. In my book "Town and Country in European Russia" (1910) I attempted to introduce the necessary correction for European Russia without Finland and Transcaucasia, whence I obtained 15 per cent, beside which 3.5 per cent constituted a semi-municipal population and 31 per cent that part of the entire population that was engaged in other than rural occupations. As in the Asiatic part of Russia, which did not enter into my calculations, the town population was less developed, the general percentage of the town
### Table I—The Principal Towns of Russia: Population in 1897 and 1926*

<table>
<thead>
<tr>
<th>Town</th>
<th>1897</th>
<th>1926</th>
<th>Per Cent Increase</th>
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<tbody>
<tr>
<td>Moscow</td>
<td>1,035,664</td>
<td>2,018,286</td>
<td>95</td>
</tr>
<tr>
<td>Petersburg (Leningrad)</td>
<td>1,267,023</td>
<td>1,611,103</td>
<td>27</td>
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<tr>
<td>Kiev</td>
<td>247,432</td>
<td>493,873</td>
<td>99</td>
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<td>Baku</td>
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<td>446,832</td>
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<td>405,041</td>
<td>411,111</td>
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<td>211,765</td>
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<td>187,644</td>
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<td>116,576</td>
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<td>Tver</td>
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<td>Yusovka (Stalin)</td>
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<td>Samarkand</td>
<td>34,900</td>
<td>100,182</td>
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*For location see Figure 4.

The population of the Empire would be somewhat lower than the 15 percent but in any case higher than the official 13 percent.

Since the year 1918 the thickly populated territory in the west, with a considerable part of its population town dwellers, has been separated from Russia. Moreover, immediately after the Revolution not a few townspeople deserted the towns for the villages. Yet it appears that the percentage of town dwellers is higher than it formerly was. This may be accounted for by the present federative organization of Russia, local autonomy requiring a considerably greater number of administrative centers. The newly formed or enlarged town centers attracted the town population back from the country and gave them
work. Suburban settlements at the beginning of the Revolution were completely deserted and partly destroyed, but during the years 1923–1926 their population increased 39 per cent in consequence of the housing crisis. Workers’ settlements increased by 38 per cent at the same time, and settlements along railways and waterways as well as industrial towns by 32 per cent. The mean growth of the population of all towns of the Union for that period was 24 per cent, or an increase of 6 per cent a year. The town population is greatest in the central region, with an offshoot towards Leningrad, and in the southern and the Ural regions (see Fig. 4).

Immediately after the October revolution of 1917 the population of Petersburg fell to 700,000, and a considerable number of the wooden houses on its outskirts were torn down and used as fuel. Now the population has again increased to over 1,600,000 and continues growing, but meanwhile the present capital Moscow has taken first rank. Kiev and Baku likewise have overtaken Odessa, which, owing to the decline of its commercial port since 1914, shows the smallest increase of all the large towns. The record in growth may be accorded to Novo-Nikolaevsk with 2310 per cent, which after the Revolution, under the name of Novo-Sibirsk, has become the principal administrative center of Siberia and its largest railway-and-waterways junction. It is situated on the Ob in the center of the black earth region north of the Altai plain, the most densely populated in all Siberia. As late as the year 1895 on the site now occupied by Novo-Nikolaevsk grew a pine forest with a forester’s cottage where I chanced to spend a night. Since the census the rapid growth of the town continues, and in the neighborhood small wooden houses often spring up in the course of a single night. By its growth Novo-Nikolaevsk retards that of its neighbor, ancient Tomsk (92,485 in 1926), the geographical situation of which is less favorable, and has all but smothered another ancient town, Kolyvan on the Ob (8000). Next in rapidity of growth is Omsk, also a railway-and-waterways junction on the Irtysk. In eastern Siberia, which is more thinly populated, the growth of towns has not been so rapid; so far none has reached 100,000, though Irkutsk is not far short (98,979). On the Pacific, Vladivostok exceeds 100,000. Generally speaking the Siberian towns and those on the borders of the Union grow more rapidly than those of old Great Russia, as is the general rule in any colonizing process. Within European Russia Yuzovka, in the basin of the Donets, with its metallurgical works exhibits the most rapid growth.

Communications as Affecting Population Spread

The gradual occupation of the territory of the Soviet Union by Slavic agriculturists was accomplished when ways of communication
were very poor. Through a third of the territory transport is still effected by means of dogs and reindeer, through about one-sixth by camels, through about one-half by horses and oxen, and in quite an insignificant part of the southern territory by mules, asses, and buffaloes. On Western European maps, it may be remarked, the northern limit of the range of the ass in Russia is generally shown too far north, where it cannot endure the severity of the winter. A more or less considerable network of railways is developed only in the western part of the territory, within the range of the horse, while some two or three trunk lines provide for the needs of the remaining area. Rivers freeze over for a large part of the year throughout the greater extent of the Union, and little has been done towards connecting them by canal. The vast Siberian rivers inconveniently fall into the Arctic Ocean, a dead sea: and even the best water artery of the Union, the Volga, flows into a closed salt lake, called "sea" by courtesy. Communication by motor, owing to the bad state of the unmetalled roads, is feebly developed: according to official information the country possessed only 12,000 motor vehicles in 1927 (in 1928 the United States had over 23,000,000 motor vehicles). The colonization of these vast spaces therefore deserves the greater credit.

**House Types**

Slavonic colonization of the Eurasian continent, peculiar for its severe winters, has produced in the course of many centuries types of small but warm dwellings heated in winter with wood in the forest-clad north and with straw and dry dung in the southern treeless steppes. These dwellings are built of wood with shingle roofs in the north, of wood roofed with thatch in the center, of clay and earth, covered with thatch, reeds, or earth in the south. Transition from such types to those of Western Europe has been accomplished slowly and unwillingly, especially the transition to several-storied buildings, in which the heating problem is much more difficult. For this reason and because of the general poverty of the people the towns of the Union, except the largest, often possess a considerable number of rural buildings, creating an aspect very different from that of the towns of Western Europe.

**Some Relationships between the Members of the Soviet Union**

The Soviet Union encloses within its bounds vast spaces that are thinly inhabited by native trappers of the forest or steppe nomads, from whose mode of life native towns could never spring. But now, with the introduction of the autonomous federative organization, towns are needed even here. The only expedient for the local popu-
lation, therefore, was to utilize such Russian towns as already existed on the borders of their territories. These have been made into capitals, their names being changed according to the local taste. Thus the Zryrians made the small Russian border town of Ust-Syolsk (8000 inhabitants) the capital of the republic, Komi; the Kirghiz in the republic Kazakstan did the same with the Russian border town of Perovsk (22,000), giving it the name of Kzil-Orda; the town of Vernyi (45,000) has had its name changed into Alma-Ata; the capital of the Bashkir republic is the large Russian town of Ufa (97,000), and so on. The Western European might be inclined to regard such facts as denoting decolonization, but in fact they are rather features of a novel peaceful symbiosis.

Similarly, although no general compulsory official language has been declared, the international language within the limits of the Soviet Union and consequently the general language of the Union remains Russian. At the same time every one of the united republics and autonomous provinces uses its own state language for its own needs. As the greater number of these units hitherto had either no literary language or one little developed, an active manufacture of such languages is now in progress.

Great efforts are also being made to promote regional survey. The newly formed republics of Yakutia, Kazakstan, Bashkoria, Karelia, Buriatia have spontaneously requested the Federal Academy of Sciences in Leningrad to institute a thorough investigation of their territories and population by Russian scientists at their own expense. The Federal Geological Committee in Leningrad is exploring the mineral resources of all countries within the Union; the Central Statistical Administration in Moscow coöperates with the local statistical bodies of all the republics, amongst other functions conducting the federal census: this was accomplished by means of the local statistical institutions of the separate republics, returns being made in the local languages. The Planning Committee of the Federal State in Moscow projects economic measures for all the republics, as for example electrification, communications. Hence, and also because of the contrasted natural character of the federal republics constituting the Union, their relations are founded on the principle of mutual help in their economic life.

The human agglomeration of the 146 millions inhabiting the Soviet Union originated and has grown under difficult conditions, climatic, historical, and economic, and has always been distinguished by its lack of stable equilibrium. Yet it has always managed its internal affairs independently of foreign interference, and, as has been well pointed out by Woeikov, nowhere in the world but in Russia and China has internal trade played so important a part in the economic life of the country.
The Russian geographer Silinich has justly observed that before the World War imperialism in Russia was purely geographical, consisting in the search for natural physical boundaries, and not economic or national as was the case with other European states. Having acquired extreme mobility in sustaining so long a conflict with nomads, Russia in the course of time, when its interest clashed with those of other states, yielded territories which it had occupied with the ease that characterizes the nomad. Historically Russia has confined itself, according to the expression of our greatest poet Pushkin, "to cutting windows" looking out on the never freezing seas. But our people's chief energy has been spent colonizing the vast thinly populated country and struggling with its rigorous natural conditions.

Russia has always had and still has its own Eurasian interests which are neither purely European nor purely Asiatic. One of these interests was the pacification of the aborigines and reconciliation of the nomad tribes with the agriculturists. The problem has been solved successfully, and the former rivals have become friends; they have managed to draw boundaries between their territories so as not to hinder each other, and the nomads have gradually begun of their own free will to turn to the once hated occupation of husbandry whose tools they used in the old days to destroy, annihilating entire well irrigated districts.

The general trend of that colonization as here set forth is so worthy of respect as to call for general sympathy. If to this be added the heroic struggle with rigorous natural conditions, the feat performed by the eastern Slavic colonization stands out the more prominently in the history of humanity. It was not altruism that guided reconciliation with the savage aborigines but the extremely harsh natural conditions, which involuntarily unite people in their struggle against nature and lead them to mutual assistance.