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The Outlook for Regional Development in the Soviet Union

The natural inclination of most "area" scholars—not to mention others—is to become preoccupied with the personalities, institutions, and achievements of the dominant culture, through the nationally aggregated values and norms. The justification for this approach is a belief in the supposedly inexorable process of the "homogenization" of the national culture and the inevitability of greater centralized control as a result of the technology of mass communications and organization. But it is increasingly apparent that even in "developed" countries, such as the United States, Canada, and the United Kingdom—let alone Italy, Nigeria, or Pakistan—some of the more insistent and intractable "national" problems turn out to be basically regional in origin and character. At least as important in the long run as conflict of ethnic or religious origin is the increasingly familiar deepening of regional inequalities in the richer nations as a result of more perfect interregional competition, diffusion of information, and the high potential mobility of educated and affluent populations. At first glance the Soviet Union, with its traditional practice of centralized control over the bodies and souls of its citizens and the all-pervading pressure toward national coherence and uniformity, might appear more appropriate than most countries for study as a national system with national character and goals. Yet here, too, some of the more interesting and thorny problems facing the Soviet leaders and planners concerning the health and general viability of their country resolve themselves into essentially regional ones.

Thus, along with all the other valid ways to study a country—the historical, literary, social-science, and natural-science approaches—there is one that seems, oddly enough, to have been more neglected in the United States than in most other literate countries, including Russia. That is the geographical approach. In some sense it may be said to be basic to the whole enterprise of area studies—focused as it is explicitly and primarily on the character of the area itself. Since the term "geographical" is often considered, by historians and others, to be synonymous with "physical" ("At least geography does not change," it is sometimes asserted), it may be desirable to suggest to a general readership the nature of the geographical point of view. Essentially it is a kind of philosophy of man—in his role as an inhabitant and transformer of the
earth. This approach requires comprehensive studies of regions and countries and of the factor of location—broadly interpreted—in human affairs. No undue stress is placed on natural phenomena in themselves, and still less on an assumption that they are necessarily the chief determinant of the location and nature of human settlement. The natural environment is seen as a complex of interacting physical and biological processes which not only has been pervasively humanized but is also constantly changing and thus presenting a fresh face to each generation.

It follows that concepts such as "environment," "location," "resources," and "regional potential"—that is, geographical values—have to be understood in relation to the perception, priorities, and technological capabilities of the inhabitants of a particular region at a particular time. Since the map of population is a cumulative expression of these geographical values as they have operated through time, a true understanding of the present geographical "systems" demands broad historical perspective as well. This discussion, therefore, whose chief aim is to evaluate the present and future regional problems, trends, and policies in the Soviet Union, will begin with a historical sketch, followed by an appraisal of the relative strength of various factors affecting current development and dilemmas. Of course, the vast range of the subject matter pertaining to this discussion necessitates a measure of gross simplification and selection which can be justified only on the ground of space limitations.

**The Formation of Distinctive Regions**

A difficult step in this kind of endeavor is to select those units which would seem to define most clearly the distinctive regions which those who are familiar with their functioning, past development, and present problems would recognize as sharpening the analytical focus.

It would certainly be easier to settle—as many regional geographers do—for a given system of division, such as the natural zones (forest, steppe, etc.) or the Soviet scheme of administrative-economic regions at any particular time. In view of their significance in Russian history, the natural zones might seem to be appropriate divisions. But as cities and industry increasingly loom larger than agriculture, these zones become less and less coincident with the more important and dynamic human regions. Similarly, though some of the administrative units may serve reasonably well as divisions, many of them tend to be anachronistic and irrational rather than coherent functional regions. For instance, the republic and "economic region" of Kazakhstan disrupts the natural unity of the wheat and metal region of the West Siberian plains on the one hand and the irrigated oases of Middle Asia on the other, and its center is an empty desert. This geographical violence is done on ethnic grounds that are now quite invalid, since the Kazakhs are only a small minority in the northern
half of the republic. Geographical reality is also distorted by cutting the Donbas coal and steel region in half and by including in the Soviet official regions some enormous underdeveloped areas (for example, in Siberia) along with permanently settled and developed areas. Thus, although superficially the use of the official regions has some clear statistical advantages, they are often vitiated by the distortion of reality inherent in the units themselves. This disability is, of course, by no means peculiar to the Soviet Union.

What we need is some reasonably refined articulation of the broad regions which are clearly part of the public consciousness, built up over the years of colonization—like New England, the South, or the Midwest in the United States. Their long-term character is a compound of a succession of cultures and technologies in a particular natural environment and location in relation to the changing significance of other regions. Stage of development in itself is an important component of regional character, combined with distinctive, current attributes such as population (especially city), growth rates, the extent of accessible resources, economic specialization, and ethnic characteristics.

On this basis, one can distinguish three primary “worlds” in the Soviet Union—European, Asian, and “North American”—representing as great a range of the major world cultural-geographical types as one can find in any country. The European world, bounded by the western frontier, the northern coniferous forest, and the Caucasus mountains and the Volga, whose agricultural and industrial foundations were laid down before the Soviet time, is still the core of the country. This area accounts for about half the nation’s population and its agricultural and industrial production, and forms the established base of its broadly settled triangle, comparable in national significance to the northeastern quadrant of the United States. In contrast, the tapering end of this triangle, or “effective national territory,” between the southward flowing reaches of the Volga (below Kazan) and Lake Baikal, wedged between the northern forest and the southern desert, bears—in terms of the total inhabited complex and its age and stage of development—close resemblance to parts of North America. The enormous and more or less empty expanses to the north of this settled strip, from the European North to the Soviet Far East, have their only meaningful analogues in northern Canada and Alaska. It may thus be observed that much the greater part of the Soviet territory classified traditionally as Asiatic Russia, with its overwhelmingly Slavic population and its still raw, pioneering character and characteristically extensive industrial and agricultural enterprises, has nothing in common with “Asia,” if that word is taken to mean anything beyond an arbitrarily defined expanse of land. It may also be noted that China, over the past decade, has vigorously denied the Soviet Union’s claim to be an Asian country, conceding only that the Russians have been “conquerors of Asian peoples.”
Map 1. Population distribution and regional divisions as defined in the text.
Be that as it may, there is a third “world” of the Soviet Union, which can justifiably be characterized as Asian because of its ethnic distinctiveness, its common colonial history at the hands of the Russians, and the age and density of its settlements. This comprises the Transcaucasian and Middle Asian republics (including southern but not northern Kazakhstan), which are separated from the Russo-Siberian world by the Caucasus ranges and the Kazakh desert. Despite legitimate objections to dubbing the Georgians and Armenians “Asian,” the common denominators of the whole of this southern fringe of peoples (which has been called the “Soviet Middle East”), compared with the Russians, are obvious enough to mark them off as a truly distinctive “world” of the Soviet Union.

In many respects the first and second worlds, the European and the “American,” or “western and eastern regions” in common Soviet parlance, together comprise the vital “effective national territory.” They have a certain complementarity, for the east is a vast reserve of natural resources and the west has the more favorable long-term assets of population concentration and accessibility to the whole Soviet bloc market. They are also competitive in the sense of giving rise to a perennial tug of war between the “European” and “Siberian” lobbies among the planners, where ideology and economics, the long and the short run, and many other imponderables contend. The third, southern “world” is patently more dispensable and contributes much less to the national economy than either of the other two. However, as a region of ethnic minorities with a disproportionately high rate of population increase at a time of impending national labor shortage, and as an area that increasingly attracts Russian immigration, apparently because of its subtropical climate, quite apart from its specialized agricultural role, it is not only an interesting “world” but potentially a crucial one for the Soviet Union.

Ten Subregions. These primary “worlds” of the Soviet Union have been further divided into regions which embody—at least to this observer—a certain coherence and distinctiveness in terms of the cumulative results, to date, of the organization of space and a particular environment, expressed in the patterns of population, economic activity, and circulation. These characteristics have been discussed in some detail elsewhere,¹ and space here forbids anything more than the merest sketch of the regions (numbered on map 1) so that they can be referred to in the discussion of regional policy later in this article.

The European world has three components—the Moscow region (no. 1), the Greater Ukraine (no. 2), and the Baltic region (no. 3)—each basically different from the other two. Poor in natural resources, the Moscow region’s coherence and importance stem from its early establishment of power at the

hub of the river systems of European Russia, and the subsequent growth of the empire. In contrast to the Moscow region, whose poor and transitional natural endowments are overlain by the unifying power of the national metropolis, the Greater Ukraine (including the lower Don and Kuban lowland as well as Moldavia) is physically homogeneous—almost all black earth (chernozem)—and rich in a variety of industrial resources and productive activities. It is clearly the region most nearly indispensable to the Soviet Union and conversely the only one comparable in population and potential to the great nation-states of Western Europe.

The Baltic region, including Leningrad and Belorussia as well as the three Baltic republics, much more closely resembles the Moscow region than the Ukraine in its paucity of natural resources. Since the Revolution, with the diminishing importance of St. Petersburg, the shrinking of international trade, the strong national emphasis on heavy industry and interior development, and the interwar truncating of the western frontier of the Soviet Union, the region has suffered a severe decline in national importance. The recent industrial renaissance, coupled with a resurgence of nationalism, has moderated the decline, but a basic change probably has to await a wholehearted Soviet plunge into the international economy and the world of consumerism.

The Volga-Baikal zone—the viable, contributing portion of the vast “eastern regions” and the chief growth and reception area of the 1940s and 1950s, now containing a quarter of the Soviet population—can be divided into three regions. First, the one between the Middle Volga and the Urals (no. 4), which was something of a backwater before World War II, has been transformed into the chief oil-producing region of the country, in addition to producing natural gas and hydroelectric power, and is an important center of growth industries such as petrochemicals and automobiles. It encompasses the main east-west connecting links, as well as the chief Soviet river route, and has become the hub of a network of oil and gas pipelines running throughout the “effective national territory.” Moreover, the center of gravity of the national population lies in this region.

Between the crest of the Urals and the Ob River (no. 5), and the northern forests and the southern deserts, is a region with two dominant elements in its landscape and economy. One is the extraordinary variety and richness of metal and mineral objects and the industries based on them, both on the eastern flank of the Urals and spread out across the Siberian plains. This area, the major destination of the great Siberian migration of the late nineteenth and early twentieth centuries, has also become the great breadbasket reserve of the Soviet Union. The final phase of colonization was the extravagant Virgin Lands project of the late 1950s (mostly in this region). A recent addition to

the region’s economic life is the refining of oil brought in from beyond the area’s northern edge and piped in from the Volga fields. Gas is also being piped in from Middle Asia for the Ural steel furnaces.

At the furthest reaches of the inhabited triangle, in Central Siberia (no. 6), from the Ob River to beyond Lake Baikal, is the region which seems to contain the richest store of accessible energy in the country. The black-coal mining of the Kuznetsk basin, developed mostly in connection with the resuscitation of the Ural steel industries in the 1930s, has been followed in the last decade or two by extensive and economical open-pit brown-coal operations near Krasnoyarsk and the construction of giant hydroelectric stations on the upper Yenisey and Angara rivers. Although these operations have transformed the industrial resource base and potential of the region, most of the area is beyond the range of the better farmland, is a long way from the main markets, and has serious problems of labor recruitment. These disadvantages raise doubts about whether this frontier region has “taken off” to self-sustaining, permanent growth.

Such doubts are compounded in the case of the Soviet Far East (no. 7). Its isolation from the mainstream of the Soviet population is extreme, and its loneliness has been accentuated by the freezing of Sino-Soviet relations. Much depends on the attitude—still equivocal in practical terms—of Japan toward trade and development in the area. At present fish is its only important contribution to the Soviet national market, and except for timber no nationally important land resources have been developed. Self-sufficiency at least seems called for, but is by no means attained. The natural environment is difficult, even if somewhat less so than the vast Northlands.

The North (no. 8), covering almost half of the Soviet area but containing only 2 percent of its population, is by definition a negative zone from the human standpoint. Its southern boundary coincides in general with the northern limit of permanent and continuous settlement. In this area, as in any other part of the world, the reasons for establishing industries or exploiting natural resources far from an agricultural base, in a difficult environment and with high-cost labor, have to be compelling. The gold and diamonds of Yakutia and the nickel of Norilsk, as well as the new reserves of oil and gas in the Ob basin, apparently offer such compelling reasons, at least for the present. It was mainly the North that filled the coffers of early Novgorod and Moscow, and today it is still a considerable latent asset—unpopulated though it is—as a reserve bank, a strategic insulator, and an integral part of the national image.

Although Transcaucasia and Middle Asia, together with the Far East, share the experience of having been under Russian control only since the nineteenth century, they have quite divergent assets and liabilities. As late as World War II the fate of all Russia depended on the oil of Baku and other
essential products of Caucasia (no. 9), but this region is now more or less dispensable in terms of physical resources of vital national importance. Its present assets and liabilities can be seen as stemming from more basic factors. Nowhere else in the Soviet Union are the patterns of nature and man so complex. The area’s mountainous character has long disrupted communications and unity. Ethnically it is a microcosm of Eurasia, and the latent fires of nationalism are at least as intense there as anywhere else in the USSR. But its scenic and historico-ethnic variety and richness, coupled with a relatively mild and sunny climate, provide the essential ingredients for lucrative tourism on a national and international scale, as well as a magnet for internal migration, as national living standards rise. This may well prove to be its chief national role.

The desert and oasis lands of Middle Asia (Turkestan) (no. 10) are the home of the most isolated group of people of any size in the Soviet Union, surrounded by hostile neighbors and exhibiting many features of a colonial economy and society. The chief surplus products, such as cotton and natural gas, are shipped out of the region to be used in Russia proper rather than locally. Though the area’s isolation is a barrier, its historical monuments and the sunshine are attracting growing numbers of tourists. But nationalism must be accounted a potential threat to the Soviet authorities, and the disproportionately high natural increase of the population (relatively rural and immobile as it is), even in the face of national labor shortages, would give rise to apprehensions even if China were not next door.

General Factors in Soviet Regional Development

The excuse for taking time to define and attempt a characterization of the regional units used in this discussion (though by any measure these thumbnail sketches are impossibly brief) is that not all of them are common currency. Yet it is maintained throughout that regional analysis will be bedeviled from the outset if it is locked into units that are meaningless, vague, or actually distorting. The scheme used here is designed to embody geographical value judgments about the changing relative importance, significant links, and character differences between the various parts of this enormous country. It should be reiterated that such regional units are inevitably neither self-contained nor permanent, but only tools of analysis, to aid—like the historian’s periodization—in recognizing essences or cores, with no pretensions of precision at the boundaries. Since the ultimate and most valid unit today (apart from the world itself) is the sovereign state, a brief attempt will be made to evaluate on a national scale, but using the regional units as appropriate templates, certain factors basic to regional development policy.
Stabilization of the Agricultural Frontier. Apart from limited schemes for irrigation or drainage or subsidized projects for special purposes, it seems clear that the agricultural oecumene has been essentially marked out and stabilized for the foreseeable future, in broad adjustment to the severe limits of climate and soil, and that intensification of investment in the already established optimum areas should account for most of the future increases in production. The extraordinary Virgin Lands plow-up campaign of the late 1950s, when some ninety million acres were upturned, may be regarded as the high-water mark of the long process of Russian agricultural colonization. In fact, like the reaction in the United States to the painful overextensions of the Dust Bowl era, there is evidence in the Soviet Union of a perceptible ebbing of the tide. Even after the Virgin Lands campaign, little more than one-tenth of the total Soviet area is cultivated, although in absolute terms this is the largest area under cultivation in any country. Two-thirds of the cultivated land is on black earth, to which the Russians had little access until the eighteenth century. Its axis stretches from the Ukraine to Central Siberia, but the soil productivity (and the accompanying climate) is decidedly more favorable in the former. Since long-term industrial and urban concentrations all over the world tend to be closely tied to the agricultural belts, the present "climax" situation in the USSR (with respect to the frontier) and the differential land qualities are bound to exercise an important and continuing influence on overall regional development.

Dispersal of the Accessible Industrial Resource Base. Following at one remove the gradual infiltration of agricultural settlement toward the south and east, the development of energy and other industrial resources has been equally striking over the past century and particularly since World War II. This growth is closely related to the current dilemmas of Soviet development policy. The exploitation in the late nineteenth century of the coking coal of the Donets basin and the oil of Baku signaled the beginning of modern Russian fuel production, and as late as the German invasion of 1941 these two areas accounted for a vulnerable two-thirds of the national energy output. The greatest changes have occurred in the last two decades, not only in total energy output but also in the structure of the energy "mix" and in the geographical decentralization of output. In 1950 coal accounted for (a completely outmoded) two-thirds of the total Soviet energy output, whereas oil and gas together now account for nearly the same proportion of a vastly increased total output. The chief location of this oil development has been the Volga-Ural region, which now produces two-thirds of the total supply and is much better located than Baku. But the emphasis is shifting, in a relative sense, to the newer fields in Western Siberia. The sixties have also seen
the construction of massive hydro-stations in Central Siberia and extensive opencast coal operations, as well as the extraction of natural gas in Northern Siberia and Middle Asia. Although developments have also continued apace in south European Russia, notably the Donbas, the net effect has been to spread the contributing Soviet energy base much more equally along an axis from the Donbas through the Volga and Western Siberia to Lake Baikal, throughout the length of the "effective national territory." Together with a parallel dispersal of raw-material exploitation, the details of which cannot be gone into here, these developments have presented the Soviet industrial planners not only with much more flexibility but also with more acute dilemmas than they had in the early years of the discussions of the Ural-Kuzbas Combine.

Problems of Distance and Accessibility. The grossly overloaded Soviet transport system has frequently proved to be the main bottleneck in industrial development. The railroads still haul about two-thirds of the national ton-mileage, although this is down from over four-fifths in 1950, and they are carrying thirty times as much as they did in 1913, with only double the track mileage. Unlike most of the advanced countries of the world, where railroads are closing down, in the Soviet Union the railroad building still goes on apace, mostly in the region between the Urals and Lake Baikal, in connection with mineral or energy exploitation. At the same time the country has developed in the last decade or so a network of oil and gas pipelines, mostly along the Ukraine-Baikal axis or feeding into it. One obvious way to transfer energy from the Central Siberian surplus electricity grid to the consuming European grid would be by high-voltage transmission lines. The fact that this project has long been planned but is still not completed reveals the uncertainty there is about the competitiveness of the various types of energy and modes of transfer and the indecision over whether to promote large industrial complexes at the energy sources or nearer the main markets.

Distribution of the Population. The population map (map 1) not only summarizes the cumulative geographical values conferred upon a country over time, but also provides a measure of two of the most influential factors of production—manpower and the market. Rather more than half the population is found in European Russia west of the Volga and north of the Caucasus, or two-thirds to the west of the Ural crest and north of the Turkish border. The center of gravity of the national population is found near Kuibyshev on

3. A great deal of detail on this is found in Theodore Shabad, Basic Industrial Resources of the USSR (New York, 1969), with up-dating in the monthly journal Soviet Geography: Review and Translation (New York).
the middle Volga (or near Kharkov in the Ukraine, if the whole of the Soviet bloc is considered). All this suggests the continuing strength of the European core both in population and in political centrality.

Nevertheless, it should be remembered that a substantial easterly displacement of the population has been the most distinctive geographical phenomenon of this century. During the half-century before 1960 the Volga-Baikal zone, defined above, showed a net gain of some twenty million inhabitants, or about double the net gain made by the European core to the west. No doubt the various catastrophes of that period were mainly responsible, but the scale is still remarkable, considering that the European core had about four times the population of Volga-Baikal in 1910 and had added more than four times as many people as Volga-Baikal had in the previous half-century. Over half of the cities (population of over fifty thousand) and all the really large ones, which doubled in population between 1939 and 1959, were situated in the Volga-Baikal zone. There is a rather uncanny parallel here with the pattern of city growth in the United States during this same period. Some three-fifths of U.S. cities of over fifty thousand whose population doubled between 1940 and 1960 were west of the Mississippi. It is of some interest that in no other comparable previous period had these vast "new" lands claimed a majority of the boom cities of either Russia or America. Although one can easily overstrain the parallel, it has been interesting to watch the two giant superstates of the "frontier" come of age geographically, as it were, rather more closely in time than one might have expected. Although the net easterly movement has not been in evidence for a decade or more, a permanent and significant extension in that direction was effected, and it now has to be reckoned with in decisions on regional development.

End of the Great Migrations. Over the past decade, and most probably two, the evidence points to the emergence of a relatively undramatic and indecisive "steady-state" in Soviet regional development. If this is so, and if it lasts, it will indicate the attainment of a mature and unfamiliar situation in the experience of the Russian Empire and the Soviet Union. For centuries the Russians—like inhabitants of other expansive "frontier" countries—have been very conscious of the reality, as well as the folklore, of a persistent movement of their people in one direction. The most significant of these movements was the final and thoroughgoing colonization of the long-coveted European black-earth areas in the eighteenth and nineteenth centuries. By the early eighteenth century, despite the exciting victories and adventurous journeys of the two previous centuries, about two-thirds of the population was still crowded into the relatively poor mixed forest area of the Volga-Oka region, and almost all the others were fairly recent infiltrators into parts of the neighboring
wooded steppe. By the third quarter of the nineteenth century, however, even before the development of the southern heavy-industry base, about two-thirds of the Slavic population was in the European black-earth region south of the Oka and north of the Caucasus. From the 1880s the dominant direction of settlement was an easterly one, to the “open spaces” beyond the Volga. The pressure of migration was enough to induce the Trans-Siberian Railway to cross the continent, thus creating the framework for much of the new development of the Soviet period. Although the easterly movement had probably ceased to be dominant by the 1950s (the Virgin Lands campaign was perhaps its swan song), it had by then developed persistent ideological overtones which are still frequently heard in the planning councils.

**The Record of the Sixties**

Analysis of the regional growth of both industry and population since 1959 does indeed confirm—most strikingly in contrast to the previous two decades—the end of the easterly course of national migration (see maps). Yet it does not bear out intimations, which have gained currency lately, that there has been an actual ebbing of the tide. True, it has been a somewhat becalmed period. But although a state of equilibrium prevails regarding broad east-west comparisons, one can detect significant intraregional variations (map 2). For instance, the slowest industrial growth is found in the older industrial regions (largely coal and steel areas) of both east and west, such as the Moscow industrial district, the Donets basin, the Urals, and the Kuznetsk basin, as well as some of the non-Russian republics, such as Georgia and Uzbekistan. Conversely, well above average industrial growth rates are found in very different and widely separated groupings: (1) the labor-rich and traditionally agricultural western marchlands, such as Belorussia, Moldavia, Lithuania, and the crowded black-earth belt of the northern Ukraine, and (2) an extensive resource-rich area of Siberia, based on the new oil fields, iron mines, hydroelectric developments, and new agricultural areas. One can trace a belt of average growth, or slightly above (about a doubling of industrial output in the decade), along the densely populated axis of the wooded steppe from the western border of the Ukraine to Lake Baikal, a ridge between the relative troughs of the Moscow, Donbas, Urals, and Kuzbas industrial regions, with significant outliers in the North Caucasus, Armenia, parts of Middle Asia, the North, and the Far East. The pattern is obviously much more complicated than the simple concentration of all the high-growth areas in the Volga-Baikal zone in the previous twenty years (map 3).

The growth rates of cities of over fifty thousand are remarkably uniform. The Baltic cities are almost identical to those of the Ural-Ob, the Moscow
region cities to those of Central Siberia, those of the Volga-Ural to the Far East and the Caucasus, and those of the Far North to the Greater Ukraine (map 4). As before, in a study of comparable pairs of cities from East and West, such as Novosibirsk and Gorky (or Kharkov), Omsk and Rostov-on-Don, Krasnoyarsk and Voronezh, one finds that the Siberian cities still seem to have grown slightly faster (in the intercensal period 1959-70). But of all the large cities (with a population over half a million) it was Minsk in Belorussia which showed the highest rate of growth in this period. In the aggregate, the cities of Middle Asia stand out clearly, showing about twice the average rate of growth for the Russo-Siberian belt.\(^5\) If one takes the total population into account, the shift of emphasis to the south (which is generally much more rural than the north) is striking (map 5): fully two-thirds of the net national addition of people between 1959 and 1970 accrued to the southern fringe regions—the Greater Ukraine, the Transcaucasus, and Middle Asia—which accounted for only 40 percent of the national population in 1959. Middle Asia alone increased in this decade by 50 percent, adding 8.5 million inhabitants—more than any other Soviet region. In the broad belt from the Baltic to the Far East there is a general state of equilibrium, but the eastern regions continue to increase at a slightly faster rate. The Ural-Ob region, in fact, increased at three times the rate of the Moscow region, with an even larger total increment.

Of the broad “worlds” defined earlier, the European core (west of the Volga and north of the Caucasus) added thirteen million people, roughly twice that of the Volga-Baikal zone. This accords much more closely with their relative sizes, and constitutes a complete reversal of the ratio of the previous two decades (map 5), although the Volga-Baikal region has still grown perceptibly faster than the European core. It is remarkable also that the Far East and the Far North together added two million people in the decade, even after the presumed end of the era of forced labor—a substantially faster rate of growth than either the European core or the Volga-Baikal zone. This reflects the continuing disproportionate subsidization of the east and, to a degree, the north. However the really new element in population growth owes nothing to government encouragement. Middle Asia and Transcaucasia, by far the most rapidly growing of the three “worlds” in the Soviet Union in the sixties, added thirteen million people—as many as the much more populous European core of the country. The result mainly of the high rate of natural increase, but partly also of “irrational” Russian immigration, this phenomenon obviously constitutes an increasingly perplexing problem for the Soviet Union.

Map 4. Changes in Soviet city population, by regions, 1939–1959 and 1959–1969. Radius of circle is proportional to total population at the later date. The black section indicates population at the earlier date, and the white section indicates the increase in population.
Map 5. Total population changes, by regions, in the Soviet Union, 1939–1959 and 1959–1970. Radius of circle is proportional to total population at the later date. The black section indicates population at the earlier date, and the white section indicates the increase in population. In the Baltic and Moscow areas, where population decreased during the 1939-1959 period, the radius of the circle is proportional to the total population in 1939. The black section indicates the population in 1959, and the white section the decrease in population from 1939 to 1959.
Dilemmas and Prospects

Despite the persistent and disproportionate growth of population, industry, and agriculture in marginal areas of the east, north, and south over several decades, most of the economic and other indicators of rationality point to an optimum area for future development and growth in south European Russia. Its core may be broadly encompassed within a radius of six hundred miles from Kharkov, taking in the whole of the Greater Ukraine region (including the Kuban), stretching to Kuibyshev on the Volga, and beyond Moscow and Minsk. Within this circle is contained over half the Soviet population and agricultural and industrial production, as well as a considerable range of natural resources and potential for further development. The area’s middle lies at the center of gravity of the population of the whole Soviet bloc, and it contains the densest transport network in the Soviet Union. Not only is labor relatively plentiful but its productivity per capita is in general markedly higher than in the regions to the east and south. So also is the return on capital investment in industry and agriculture, by and large. The population is overwhelmingly Slavic in ethnic composition, which is of considerable—though unacknowledged—significance. The potential resurgence of Ukrainian nationalism is a significant unanswered question. Incidentally, many people in this region, particularly the Ukrainians and Belorussians, are becoming increasingly dissatisfied with the prolonged disproportionate allocation of scarce investment capital to eastern regions, where the return tends to be lower, and with the comparative underestimation of the natural resources of their own regions. 6

Notwithstanding the apparent rationality of concentrating scarce Soviet capital resources in south European Russia, the long-standing policy of investing disproportionately in the “eastern regions” (mainly the Volga-Baikal zone) is being continued in the current Ninth Five-Year Plan. 7 Industrial growth for Siberia and the Far East is planned to be some 25 percent greater than the national average, or for the Russian republic as a whole, whereas Estonia and Latvia, which have a recent record of rapid and effective growth, are scheduled to grow considerably less than the national average in the current plan. Although labor productivity in the east is known to be substantially lower than the national average (and the turnover higher) despite generally higher wages, renewed pledges are made in the plan to up-grade the sociocultural conditions and amenities and to train skilled workers on the spot, especially in the Far East.


7. See, for example, Ekonomicheskia gazeta, 1972, no. 1, p. 4.
We might suggest some reasons for the massive subsidization of the better eastern and even some northern regions and the likelihood it will continue to some extent under present circumstances. First we cannot discount the strength of ideological inertia, buttressed by strategic apprehensions and even perhaps what might be called Great Russian chauvinism. The doctrine of equalization of economic development retains much of the ideological appeal of fifty years ago, but it is being applied largely to the outlying parts of the Russian republic rather than to other peripheral republics. The "northern vision" aspect of the national image—so important in countries as diverse as Canada, Australia, and Brazil—is still powerful in the Soviet Union. Strategically, the relative dispersal of potential industrial targets is still a compelling legacy of the experience in World War II. The combined incentives to discourage China and encourage Japan certainly now contribute to the urgency of developing the natural resources of Siberia and the Far East and at the same time improving the amenities that will bring these outlying regions to the stage of truly self-generating growth. One might suppose that these national apprehensions could be played upon successfully by local officials in support of local projects—for example, in the Soviet Far East at present. In addition, investment—say in Central Siberia—has by now been so great that it would be impossible to abandon it and difficult not to continue to capitalize on it. The greatest storehouse of accessible energy in the country can hardly be ignored, but whether to encourage population growth as well as resource exploitation in such regions is still very much an open question, as is that of transferring most of the energy to European Russia. Arguments for the development of various eastern regions characteristically are made on a much more long-term basis than for more western regions.

The probability that a shortage of industrial labor will be the most serious problem in the next decade or two lends greater significance to the question of what to do with the burgeoning population reservoirs of Middle Asia and parts of Transcaucasia. The industrial growth targets in the current Five-Year Plan for these regions, except for Armenia and Turkmenia, are not as high as those for Siberia and the Far East. And at present—apart from the natural gas piped out of Uzbekistan—their industrial contribution is not one of national significance. The continuing high birth rate and reluctance of the native populations to move out of their own regions, along with the continuing immigration of Russians, might well provide an irresistible incentive, in a time of labor shortage, to promote labor-intensive industries of national im-

portance. A further dilemma, however, arises from the fact that the immigrants have mostly congregated in the large towns (in some of which they form a majority) while the rural areas remain solidly indigenous. This dichotomy, with sharply different rates of natural increase as well as culture, is potentially sensitive enough as a general problem (the parallels with Algeria are not entirely farfetched) to inhibit the otherwise natural desire to take advantage of the labor supply for industrial enterprises of vital national importance.

One initial conclusion from all this discussion is that the horns of the Soviet regional planner’s dilemmas are indeed as sharp as those of any other country. The pressures to recognize the seemingly rational short-term economic arguments in favor of intensifying investment in the already relatively well-developed European core are undoubtedly building up. On the other hand, there are equally powerful counterpressures to continue the Soviet tradition, with its ideological overtones and its nineteenth-century foundations, of distributing development and population more evenly across this enormous territory. Even without the powerful strategic incentives to industrial dispersal and the incalculable shadow of China (and the rising sun of Japan), the immensely rich and varied resource base and the actual permanent extensions which have been accomplished in parts of the “eastern regions” in this century would have made substantial further development—not necessarily involving large numbers of people—in these areas almost inevitable. The overwhelmingly Russian component of these regions implicitly strengthens their case—even in the face of serious labor shortages—for self-sustaining national development in situ.

Despite the emphasis placed during 1972, the fiftieth anniversary of the USSR, on the idea of a progressively homogenized Soviet nationality, it seems probable that a region of predominantly non-Russian nationalities would experience more difficulties in building up a really powerful industrial base. However, the strikingly disproportionate growth of the native population in the southern fringes, combined with the apparently strong climatic and other attractions of these areas for Russians—probably the most significant new broad-scale regional change of the sixties—seems likely, in a time of looming labor shortage, to put this hypothesis to the test. On balance it looks as if noneconomic factors and policies in Soviet regional development will continue to be at least as powerful as they have been and that the play of various politico-ideological and strategic arguments, in addition to “harder” economic and social ones, will result in a more indeterminate state of regional equilibrium on the broad scale than has been seen in this enormous country for several centuries.

ANN SHEEHY

Some Aspects of Regional Development in Soviet Central Asia

Unlike Professor Hooson's "area" scholar who is inclined to view things solely from the national or metropolitan standpoint, those of us concerned with only one part of a country are in little danger of overlooking regional problems. On the contrary, we are much more likely to become too wrapped up in them, or rather in those of our particular parish. It is salutary, therefore, to be reminded that there are other parts of the country with their own very different and often competing demands, and Professor Hooson's cogently argued division of the Soviet Union into three primary "worlds" and ten geographical subregions transcending existing administrative boundaries is very helpful in providing a new perspective.

It seems to me, however, that the statement in his introductory paragraph that "at least as important in the long run as conflict of ethnic or religious origin is the increasingly familiar deepening of regional inequalities in the richer nations" requires some modification. For although regional inequalities are always likely to lead to certain strains and tensions, in a state where the population is homogeneous they are not very likely to lead to any kind of separatist movement, unless the state lacks territorial integrity. On the other hand, where ethnic and religious differences exist and have a territorial base, economic grievances can and do fuel potentially destructive nationalisms. But are they a *sine qua non* of the latter?

In the Soviet Union one would naturally expect any political problems arising out of regional inequalities to be greatest in the non-Russian republics, and any discussion of the allocation of resources between the republics must have an extra political dimension lacking in debates on whether or not Siberia should be given favored treatment vis-à-vis European Russia. In other words, like it or not, the planners have to take more account of republican than RSFSR oblast frontiers, however irrational the former may be. But of course that is not to say that in discussing the question of regional development the individual republics have to be considered in isolation, since they may well share common problems and characteristics. This is obviously the case with the Central Asian republics grouped together in Professor Hooson's sub-region 10. And the inclusion with them of southern Kazakhstan is easily justified, although the Kazakhs themselves would hardly take kindly to having the other half of their republic treated as part of Siberia. As Professor Hooson
indicates, one of the most crucial questions here in the 1970s is likely to be what to do with the region's rapidly growing labor resources, and I think it is therefore worth going into in some detail. But a brief look first at the record of development to date will help to set the scene and suggest which other factors are likely to play an important role in development policy in the future.

In addition to considerations of a straightforward economic nature, matters of ideology, the Soviet Union's obsession with autarky, and the accident of war have all played a part in the development of the Central Asian republics since the Revolution. The ideological commitment to bring the peoples of the eastern borderlands up to the level of central Russia was most clearly enunciated in the well-known resolutions on the national question adopted by the Tenth and Twelfth Party Congresses in 1921 and 1923. It probably is safe to say that, as a result of this commitment, more capital was invested in the Central Asian republics than could have been justified on the grounds of economic rationality alone. This has been particularly true in fields such as education and medical services. As regards industrialization, the ideological factor was most in evidence in the first two five-year plans and found its most symbolic expression in the construction of a huge cotton textile mill in Tashkent in obedience to Lenin's directive to take industry to the sources of raw material. But in the face of the extreme backwardness of the region and the great scarcity of capital, the amount of industrialization actually achieved before the war was little more than token.

A greater fillip was given to industrialization by the wartime evacuation of plants from western Russia (which also accounts for the presence of certain unlikely factories in Central Asia today). As for the "autarky factor," this was most obvious in the investment in irrigation and the favorable treatment accorded to the Central Asian cotton grower compared with the Russian grain grower, which stemmed not so much from a desire to improve the Central Asian peasant's lot vis-à-vis his Russian brother as to achieve self-sufficiency in cotton. (It is somewhat ironic that as a result of this policy the Soviet Union is now a major cotton exporter—Uzbekistan comes third after the RSFSR and the Ukraine for the value of its exports, 80 percent of which consists of cotton fiber—but sometimes has to import grain.)

In the immediate postwar years Moscow's efforts had to be concentrated mainly on the reconstruction of the devastated areas in European Russia. It is true that the need for a shift of industry to the east remained a priority in the plans of the 1940s and 1950s, but this concerned primarily Siberia and Kazakhstan, and no special provision was made for accelerating development

in the Central Asian republics. Indeed, theoretically there were no longer any grounds for singling out Central Asia for special treatment, since it had become axiomatic that the economic and cultural inequality of the eastern borderlands had been eradicated with the completion of the Second Five-Year Plan. However, by the end of the 1950s it was realized that, in spite of continued economic progress, particular attention would have to be paid once again to the less-developed republics, and the 1959–65 and 1966–70 plans accordingly set industrial growth rates for the Central Asian and some other republics which were higher than, or at least as high as, the average for the country as a whole. As there could be no going back on the thesis that the economic and cultural backwardness of the national borderlands had been overcome, the new policy was termed "the equalization [vyravnivanie] of the levels of economic and cultural development of the union republics." But there was not only a difference in terminology. For while the accelerated development of the eastern borderlands envisaged in the prewar five-year plans was probably motivated by ideological considerations pure and simple, the vyravnivanie policy of the 1960s almost certainly owed a lot to pressures from the republics themselves (and probably not only those of Central Asia)—pressures ironically generated by the nationalities policy and its promises of genuine economic and cultural equality.

The Central Asian republics are only too well aware that today they remain less developed than the other union republics, and parallels with the developing countries of the Third World are not hard to find. Thus their indigenous peoples are still predominantly rural, agriculture plays a larger part in their economies than in the Soviet Union as a whole, and mineral extraction and sectors linked to cotton play a dominant role in industry. Also, in three of the four republics, industrial production has not grown as fast since 1913 as in the USSR generally, despite its low original base (the exception is Kirgizia, where industry was virtually nonexistent in 1913). However, the disturbing feature of the 1960s was that although the area enjoyed a respectable rate of economic growth, the development gap between the Central Asian, and also Azerbaijan and Kazakh, republics and the rest of the country expressed in national income produced per capita increased throughout the decade.² (In 1965 the per capita national income in the Central Asian republics was 62 percent of the all-union average,³ but the disparity would have been

2. This can be seen by comparing the growth of national income produced (1960 = 100), given in the Soviet statistical yearbook, with population growth.
kolkhozniks, particularly women, and that the farms are often at a loss to know how to employ all the labor they have. In Andizhan Oblast, for instance, instead of the norm of one man per ten hectares of arable land, there are ten and often twenty. The press also leaves no doubt about the considerable reserves of labor that have built up in the small and medium-size old towns as a result of the high rate of natural population increase and the failure to develop these towns industrially. For example, half of the able-bodied population in Arys and a third in Turkestan and Cheلkar were said to be not working in the public sector in 1968. This situation has arisen there because, as elsewhere in the Soviet Union, ministries have preferred to locate factories in the larger towns where there is a developed construction industry and a skilled labor force. The consequence in Central Asia is that manufacturing industry is largely concentrated in the capitals of the four republics, with Frunze, the most extreme case, accounting for just over half of Kirgizia's total industrial output. (The one-sided development of heavy industry in some of the new industrial towns, such as Chirchik, Angren, and Almalyk, has also led to a shortage of local employment for women, but in this case mainly Russian.)

From the beginning the party pledged itself as part of its nationalities policy not only to develop industry in the backward eastern borderlands but also to create native industrial proletariats. As was true of the first half of this pledge, the most concerted efforts to fulfill the second half were made in the prewar period, particularly during the First Five-Year Plan, when the proportion of natives in the industrial labor force increased rapidly. Since then the absolute number of workers of the Central Asian nationalities has risen greatly, but it has never matched their share of the population. Moreover, the Central Asians tend to be particularly badly represented in certain sectors such as the machine-building, chemical, and gas industries, and in construction. Over the years the party has frequently called for an increase in the native element in the industrial labor force, but with little avail, although it is described as "a very important political and social task."

There are two main reasons for this. First, the development of industry has outstripped the training of local workers. When a new industry or a project such as a hydroelectric power station is involved, the organization may well have to bring in a certain number of its own skilled workers. But

it may also choose to bring in many more of its own workers than are absolutely necessary rather than lose time training indigenous workers on the spot, particularly since there may be a shortage of qualified instructors who speak the vernacular. The temptation to recruit any skilled Russian laborers who come to the region of their own accord in preference to the unskilled Central Asians is also very great. Thus the result is that any major new industrial development almost inevitably leads to an influx of Russians. This can be seen clearly in the latest census results, which show that between 1959 and 1970 the Russian population of Bukhara Oblast (exploitation of natural gas and gold deposits) increased by 60,000 or 124 percent, of Kzyl-Orda Oblast (the Tiuratam space complex) by 42,000 or 83 percent, and of Guriev Oblast (Mangyshlak oil) by 77,000 or 128 percent, compared with an average increase in the Russian population in the country as a whole of only 13 percent. Moreover, the increase in the number of Ukrainians in these oblasts over the same period was proportionately even more dramatic.\textsuperscript{9}

Second, although it is true that many undertakings do not make as much effort as they might to recruit and train local labor, it is also true that the Central Asians have shown themselves somewhat reluctant to leave the rural areas for the republican capitals, the new industrial towns, and the big construction projects, where most of the jobs are. What deters them is that these towns and construction sites are largely Russian or at least Russianized and therefore present an alien ethnic environment. Moreover, their knowledge of Russian, the language often used in the factory, is generally very poor. At the 1970 census only some 15 to 20 percent of Uzbeks, Tadzhiks, Turkmens, and Kirghiz claimed to have a good command of the language.\textsuperscript{10}

But the Central Asian kolkhoznik is not only reluctant to go to the Russianized towns. He is also unwilling on the whole to move to the new cotton and rice-growing sovkhozes, although the wages are appreciably higher there. Here, lack of housing is partly to blame. Another factor is that the new lands need mainly skilled agricultural workers such as machine operators, of whom there is a shortage even in labor surplus areas. As a result, at least in the early 1960s, some 20 to 40 percent of the labor force in some sovkhozes in the Hungry Steppe, the lower reaches of the Amu Darya, and the Karakum Canal area came from outside Central Asia.\textsuperscript{11}

But probably the main reason the Central Asian kolkhozniks have not left the kishlak in greater numbers before now is that they are still able to


\textsuperscript{10} Pravda, Apr. 17, 1971.

make a living there. Those released from work on the kolkhoz can usually do quite well out of their private plots. There has also been a certain amount of resistance to mechanization on the kolkhozes themselves, and since wage rates have risen faster than productivity, the wages of the individual kolkhoznik may not have dropped very much, even if he does work fewer days. But with mechanization remaining the order of the day (however irrational in the circumstances), with more and more youngsters reaching working age, and with wages bound to drop even if yields rise, it is doubtful that this situation can continue much longer.

On paper the obvious solution to Central Asia’s surplus manpower is to encourage it to go to labor-deficit areas such as Siberia. But, understandably in view of what has been said above, this is not being strongly urged at present. The authorities may also realize that the Central Asians would be likely to end up in the less skilled jobs, with detrimental effects on what we should call race relations. Moreover, a concerted campaign to persuade Central Asians to go to Siberia would hardly be well received by them if Russian immigration to their republics, which is already resented, was still continuing on any scale.

What then of the employment opportunities in Central Asia itself? The new sovkhozes set up as a result of various major irrigation schemes now under way will be to take a certain amount of the surplus agricultural labor. But if the Hungry Steppe is anything to go by, they will be highly mechanized and there will be a limit to the numbers they can absorb. An expansion of fruit and vegetable growing, which are labor-intensive operations, is also envisaged. The service industries also offer employment openings, since they are relatively underdeveloped at present, particularly in the rural areas. As for industry, the area has adequate energy resources, and there is scope for the expansion of the machine-building, chemical, food, and light industries. But care will have to be taken to ensure that industry is more evenly distributed within the republics, and efforts made to see that an undue proportion of the new jobs created are not taken by immigrants from outside the region, particularly in areas of new development.

A much greater dispersal of light industry in Uzbekistan is already being achieved under a crash program (approved at the end of 1968) for the development of this industry in the republic. The program is clearly designed not so much to meet Uzbek claims to a greater share of the country’s textile industry as to help mop up existing labor surpluses, and all but two of the forty-six new undertakings scheduled to be built in 1969–75 are to be located outside Tashkent Oblast in small and medium-size towns and large raion centers, where they can also absorb labor from the surrounding countryside.12 But if it is

relatively easy to site light and food industry undertakings where they can be reasonably sure of attracting indigenous labor, it is much more difficult to ensure that a majority of the new jobs in some other sectors of industry will be taken up by local people. Great efforts are being made to improve the teaching of Russian in rural schools, and there are signs that the population is becoming more mobile. In November 1971 the Uzbek Central Committee and Council of Ministers also announced that the number of vocational training schools in the republic was to be doubled by 1975 to overcome the shortage of skilled workers. But whether ministries and individual undertakings, under pressure to fulfill their plans, can be dissuaded from continuing to transfer workers from outside and giving preference to Russian and other immigrant labor is a moot point. That the party ultimately wants to keep more Russians from moving to Central Asia may also be doubted, particularly since the Central Asians increased their share of the population at the expense of the Russians in all the republics in the intercensal period, and their rate of natural increase remains high.

On the evidence available (and for a noneconomist) it is difficult to say whether sufficient steps are being taken to deal adequately with the problem of Central Asia's labor surpluses, but to judge from remarks in the local press it would seem that those on the spot do not always think so. There also remains the question whether steps should be taken to slow down the rate of population growth in the Central Asian republics. It is true that the rate of natural increase declined during the 1960s, but to some extent this was inevitable with the reduction in the number of women reaching childbearing age because of the low wartime birth rate. The recent census also showed that the average age at marriage is higher than formerly in the Central Asian republics. More education and the rising living standards might be expected to favor a drop in the birth rate, but it may not drop fast enough of its own accord to reduce the employment problem to manageable proportions in the near future. Although suggestions have been made in the Soviet press that the Central Asians should be encouraged to have fewer children, an official campaign—however justified on economic grounds—would surely give rise to accusations of racial discrimination when at the same time Russians are being encouraged to have larger families.

V. STANLEY VARDYS

Geography and Nationalities in the USSR: A Commentary

In the wake of the rising interest in Soviet nationalities and the problems that the nationality phenomenon produces for the Soviet political and economic system, it is gratifying to read a geographer's discussion of regionalism in this huge Soviet state. The nationality question can be best elucidated by interdisciplinary studies; logically it follows that the question of regionalism does not belong exclusively to the jurisdiction of geographers and economists.  

It is obvious, however, from reading Professor Hooson's article that geographers can make a considerable contribution to the understanding of the development and prospects of Soviet nationalities.

The connection between regionalism and nationalities is not artificial. Soviet regionalism, whether considered in geographical, historical, or other terms, is intertwined with the prospects of nationalities, because these groups provide much of the demographic matrix in which development occurs and to which the Kremlin's political decisions apply. The political aspect, furthermore, is especially pronounced in the Soviet case, because the large, compactly settled national groups live in regions adjacent to the borders of the Soviet state; theoretically their republics have the right to secede from the Soviet Union. The Soviet state itself was organized to accommodate these nationalities, and they are supposed to share in decision-making as well as in the benefits that the Soviet system can confer.

Geographical Values

As a political scientist, I have no quarrel with the general assumption in Professor Hooson's paper that broad geographical considerations are important for the development of civilization. History suggests diverse examples to support this point, such as the importance of the Mediterranean basin to the growth of Western civilization or the more universal experience that a given ratio between natural resources and population influences a country's political and

2. See the statement by the Central Committee of the Communist Party of the Soviet Union, Pravda, Feb. 22, 1972, pp. 1–2.
economic system. Furthermore, one can agree, as far as it goes, with Professor Hooson's view that the reduction of the geographical "factor" to a mere physical phenomenon is inadequate. Physical geography indeed ceases to be merely physical once man enters the picture. Man reacts to his geographical environment, and his reaction is expressed in changes he inflicts on this environment. Man's relation to location, landscape, and so forth, is creative and imperial. He acts upon his environment in order to preserve life and to supply his needs, and by doing so tries to subdue the elements to his will. By acting, man not only transforms his natural surroundings, but in turn he is influenced by them. Individual behavior and social organization thus are conditioned and affected by man's relation to his physical and biological environment. A number of writers of past centuries—Frederick Jackson Turner and Halford J. Mackinder of more recent years, for example—have noted this relationship and have helped to clarify it in certain circumstances. What is civilization itself if not a creative conflict between man and his geography, fed by man's need and desire to use the environment and its resources for his own survival and comfort? The products of this creative conflict are values of civilization that secure and enrich his existence.

Professor Hooson, however, speaks of geographical values and a geographical point of view. Actually, he proposes a concept of Kulturphilosophie that is rooted in geographical elements. These geographical values are to form the basis for the "philosophy of man—in his role as an inhabitant and transformer of the earth." This is a pretty large order and claim. Professor Hooson thus seeks not a better recognition of geographical factors but a recognition of geographical philosophy that some geographers informally call "geographyism." He would like to substitute values that this geographical philosophy interpolates for the geographical "factors" and establish the former as the foundation for doing away with physical or ethnic-administrative identification of geographical regions.

The concept of geographical value thus is crucial in our context. In Professor Hooson's paper the discussion of it is of necessity very limited, but it is so important for his theory of regionalization that a reading "into it" must be risked, if necessary, with the help of his other writings. Geographical value seems to be understood as the value of the industrially exploited environment, space, and resources for the needs of national power of a sovereign—that is, the ruler. Geographical value thus encompasses technological and other development. Furthermore, it is not static but changes with new discoveries of natural resources or the movement of populations. Geographical value therefore is related to resources, skills, time, and the ruler's economic and political power.
Identification of Regions

As further examination shows, this concept of geographical philosophy is used as the main criterion for identifying separate regions in the Soviet Union. In his book, *The Soviet Union*, Hooson lists six criteria for defining regions: "(1) scale of contribution to the national economy as a whole; (2) rate of population (especially city) growth; (3) relative importance of accessible resources; (4) economic specialization which will necessarily, in many cases, involve a combination of agricultural and industrial specialisms; (5) a certain community of historical associations; (6) ethnic considerations where they actually loom large in the distinctiveness of a region." None of these criteria are focused on physical features of geography, but the first four generally belong to the author's concept of geographical value. The latter two criteria deal with another kind of characteristic—the historical background—and with ethnic identity.

Thus a region is identified by a measurement that covers geographical values *as well as* cultural, social, and political characteristics. Professor Hooson's criteria are reasonably clear and meaningful and therefore acceptable. It is also understood that precision in drawing up regional borders is difficult to achieve and depends on the greater or lesser emphasis given certain of the criteria of classification. Among these criteria, however, I miss "regional consciousness," unless of course the historical community associations and ethnic considerations are supposed to cover it. If regionalization is to be of analytical as well as practical value, regional consciousness must be identified, because it "is a form of group consciousness that derives from a sense of homogeneity of the area," and an area cannot be a "region" if it does not share certain characteristics—that is, if it lacks much in homogeneity, if it includes features that are too disparate. Another point that needs to be stressed is the requirement that the geographical value and the historic-ethnic-consciousness criteria be applied in a balanced fashion that does violence neither to geography nor ethnicity, neither to geographical values nor to those of group consciousness.

Professor Hooson emphasizes the criteria of geographical values. This concentration explains why the author's regional scheme is somewhat different from others and very different from that of the Soviets. Professor Hooson's geographical and historic-ethnic judgments converge only in regard to the Ukraine, but here too he disregards not only administrative distinctions but also ethnic ones by including Moldavia (easier understood) and Volgograd.

(less clear) in the region, because, in his view, the logic of the existing industrial process demands it. Geography and ethnicity remain in conflict in the Caucasian region (no. 9), which includes not only Transcaucasia but a generous portion of the North Caucasus and the Volga delta. This region might be split in two, as it was by Soviet planners in 1963, because there are physical, industrial, and demographic characteristics that clearly warrant such division. Azerbaijan, Georgia, and Armenia constitute a concept and identity of Transcaucasia now known for more than a half-century.

After raising doubts about the southern regions, however, I find it extremely difficult to accept the lumping together of the Baltic republics of Estonia, Latvia, and Lithuania with the Leningrad area and Belorussia. It should be said that such a classification of the region is found more, rather than less, frequently in the works of Western geographers after World War II. It also is proper to point out that such identification is not new: during World War II the Germans used it for the administrative province of Ostland. It is, of course, accurate to say that there are similarities in landscape, soil, and climate, accessibility of natural resources, and also industrial development between the Baltic republics, Belorussia, and the Leningrad area. But it strikes one as rather strange to read that Gomel and Vitebsk are “Baltic” (region) cities or that the “damp, cool, podzolic conditions [of the Baltic region] can hardly support a first-rate, economical agriculture and the large rural component in many areas only reinforces the impression of agrarian depression, inviting comparison with the under-developed world.” Historically we know only of cities in the Baltic republics or Baltic provinces as “Baltic,” and Gomel and Vitebsk belong to neither. In agriculture, furthermore, Estonia, Latvia, and Lithuania certainly are not “depressed.” Their agricultural production is among the highest and the best in the Soviet Union. Estonia and Latvia, finally, are also the most urbanized of the Soviet republics. There is, to my way of thinking, an identification crisis for the Baltic republics. Better to say that geographic values here conflict with historical and ethnic consciousness.

Although there are geographic similarities in the region, it breaks up at least three ways in terms of ethnic origins, historical development, patterns of culture, and regional consciousness. Ethnically the Estonians, Latvians, and Lithuanians are not Slavs; their history only partially overlaps with that of the other areas. Culturally their heritage is essentially West European, and it is

5. See Chauncy D. Harris, Cities of the Soviet Union (Chicago, 1970), pp. 149-54.
6. See, for example, Paul E. Lydolph, Geography of the U.S.S.R. (New York, 1964), p. 103 (2nd ed., 1970, p. 125). Lydolph justifies inclusion of these disparate areas into a single region because “it is a fairly homogeneous area in terms of physical landscape and economic development.”
still very pronounced, especially when considered against a Soviet Russian backdrop. There is in the three republics a regional consciousness among the natives that is shared neither by the Belorussians nor the population of Leningrad. The Balts, furthermore, are strongly nationalistic, with a distinct sense of separateness from the Russians and Belorussians. Although in urbanization and some other indices Lithuania comes closer to Belorussia than Estonia or Latvia, their combined urban percentage is higher than that of any other region identified in Professor Hooson's scheme, their income per capita takes the first three places in the Soviet Union, their institutions provide the best services for the population compared with other Soviet areas, and their quality of life is rather different from the rest. All of these characteristics distinguish these republics from the Leningrad and Belorussian areas. The cumulative effect of this distinction has produced a Soviet view that the Baltic republics are "zagraniitsa," though "sovetska i nasha."

I suggest that in view of such conflicts between geographical and historic-ethnic values, the Soviet regionalization of 1963 and the general Soviet practice are more realistic than Professor Hooson's identification. The Soviets in 1963 settled for the Western region that included the three Baltic republics and the Kaliningrad region as an unremovable appendix.

The basic conclusion that emerges from this consideration is that not only ethnic considerations can do harm to geography, as Professor Hooson suggests about Kazakhstan, but geography also can do violence to historico-ethnic self-consciousness and identification. This is a sensitive point in the Soviet Union and may be one of the reasons why the Soviets have been cautious and slow in experimentation with regional theory.

Prospects of Regional Development and Nationalities

It is quite impossible in this brief commentary to touch on all the points raised by Professor Hooson. In my view, his geographical approach blunts the importance of ethnic-regional consciousness, and although he recognizes the influence of various non-Russian nationalisms, his regional theory does not help us to understand regional development through the eyes of regional people. For example, neither Estonians nor Latvians regret the less rapid growth rate they have now been assigned, and even the Lithuanians, whose industrial level is lower, are writing approvingly about the slower rate of their own industrial development. Industrial development, these people know, encourages Russian immigration, and the Balts do not like it.

Professor Hooson shows rather well, however, how Soviet regions are developed for the purpose of strengthening the ruler in Moscow and the dominant ethnic group, the Russians. The author speaks of the dilemma that faces the Soviet planners in choosing which regional development to pursue. Actually, under the party's dictation the planner's task, it seems, is simply to identify regions whose development would ultimately strengthen the central power. If this is so, then the planner's dilemma is to an important degree different from Professor Hooson's suggestion.

The author, however, helps us to understand changes that have occurred in the industrial and demographic make-up of the Soviet Union. He shows that the energy axis has shifted from the Caucasus to West Siberia. Along with that, industrial development has moved from Moscow in a southern direction and then into the Soviet West, attempting to reach all the way to Lake Baikal. This development is coupled with demographic changes. The population in this new energy belt is for the most part Slavic with a very strong Russian component. Russian is the *lingua franca* without competition, although it would be in competition, for example, in Georgia—that "state within a state"—or in the Baltic republics. This means that now Moscow needs to rely much less on the non-Russian regions for industrial and technological strength than in the past. The relative importance of all the important non-Russian areas, taken as a whole, has declined. Thus Hooson confirms conclusions reached by other social scientists using different approaches—namely, that the importance of the Russian-speaking population in the Soviet Union has been on the rise for decades and that the industrial backbone of the country is Russian and is found in strategically safe areas.\(^\text{10}\) The Soviets are engaged in nation-building, which is accomplished not merely through Russian migration into Central Asia or the Baltic republics or through conditioning for assimilation in autonomous, ethnically based administrative units, but independently through the development of space and resources in the south and the west of the Russian republic and in Kazakhstan. We can argue whether this process is motivated by inherent geographical considerations or by contrived political decisions, though I suggest the latter is the case in the centrally run Soviet system. Geographical analysis nevertheless confirms the results. Population movement to the new energy and industrial belt has slowed down, but there is no reason to think that it will stop completely, for the development of Siberia will go on with the help of Japanese and American, as well as European, money. Russian migration, specifically, to the Ukraine, the Central Asian republics, Estonia, and especially

Latvia, shows no signs of stopping. In any case, the economies of the non-Slavic republics have become mere appendixes to the Russian trunk.

Such economic integration and the increasing weight of the Russian element in the country's most important industrial areas (large cities in almost any region are very Russianized as well) do not augur well for the development of non-Russian groups. On the other hand, the decline of the Russian birth rate favors the non-Russians, especially the Turkic and Islamic peoples of Central Asia and Azerbaijan. It must be said, furthermore, that there is no evidence of any non-Slavic union republic losing ethnic strength by assimilation. The Balts, the Transcausians, and the Central Asians are losing strength through Russian migration, not through assimilation. The native elements of Georgia, Armenia, and Azerbaijan seem to be relatively secure at the present time. The Central Asian birth rate, we can speculate, is likely to create more problems for Soviet planners, and especially politicians, than Professor Hooson suggests. The Baltic republics are in a precarious position. Only Lithuania is left with a safe native majority of 80 percent. The Estonian majority has gone down to 68.2 percent, and the Latvian majority has already been reduced to little more than half, or 56.8 percent. More important in the long run is the decline of Ukrainians in the Ukraine, because this lessens the potential of Ukrainian competition and strength as a pressure group. To a large degree the future of non-Slavic nationalities in the Soviet Union depends on the system's ability to absorb the Ukrainians and to neutralize the effects of the Central Asian birth rate. In terms of geographical values and economic development, the waning of nationality group strength would mean next to nothing. It would affect Soviet demography, however, and strengthen the central government.

There exists a counterforce against this development—namely, the intensifying nationalism of the non-Russian groups, including the Ukrainians. Eventually this nationalism may offset the tendencies of demographic regional Russianization, stunt the Soviet Russian nation-building, and thus force Moscow to revise the Soviet state structure with a view to creating a more genuinely federated union. But this thought belongs to the sphere of hopes and can be forecast neither by geographical methods nor by those of political or social science.
Reply

The valuable commentaries by Professor Vardys and Miss Sheehy, naturally following their particular interests, have served to turn the spotlight on the question of the non-Russian nationalities, notably of the Baltic and Middle Asia respectively. My original decision not to plunge into the "nationalities question" per se in this particular article certainly did not mean to deny its perennial importance in the life and character and problems of certain regions of the Soviet Union. I find little to take issue with in Miss Sheehy's contribution, which amplifies in a most interesting and authoritative way some of the trends and problems I had briefly noted with respect to Middle Asia, and introduces further insights. I intend therefore to devote the limited space at my disposal here to respond chiefly to Professor Vardys, who takes careful issue with certain aspects of my methods of regionalization and in particular the place accorded to various nationalities.

By "geographical values" I mean simply the cumulative preferences and valuations put upon a region by its inhabitants over time, as expressed implicitly by the settlement process and the way in which people select, recognize, and organize their living space. Nothing teleological is implied here, and certainly no suggestion of environmental determinism (I am afraid, incidentally, that I have never—"informally" or otherwise—heard of the term "geographyism," which Professor Vardys mentions). My regions are essentially functional (rather than "formal," which would be based on the distribution of one feature, such as climate or an ethnic group), and they attempt to define a measure of order and homogeneity in the complex welter of phenomena occurring in a particular area. Ideally such regional constructs aim at embodying the most satisfactory combination of interpretive statements that an individual geographer can make at a particular time about the functional coherence and the distinctiveness of character of a section of the earth. Of course they are imprecise and subjective to a greater or less degree and exist, if at all, as fluid or open systems which may be seen primarily as integral parts of a relatively closed one—the Soviet state. They are distinguished from each other not only in such things as relative levels of growth, development, and urbanization, or their economic specialization, but also by ethno-cultural distinctiveness and regional consciousness, as I outlined at the outset of my article.

Few Soviet regions show as clear a coincidence of distinctive ethnic, natural, and economic characteristics as Middle Asia, with its insulating belts
of empty deserts and unresponsive international boundaries. Even if the northern part of the Kazakh Republic still had a majority of Kazakhs, however, the fundamental dichotomy between its landscape, "circulation," and economy and that of the southern part would, in my opinion, outweigh any formal ethnic pretext which might be made for including the whole republic in the Middle Asian geographical region. On the other hand, the fact that the Kuban area of the North Caucasus is ethnically and historically, as well as physically, akin to the Ukraine would seem to justify their inclusion in the same region, leaving the markedly different eastern part of the North Caucasus as in many respects more akin to the eastern Transcaucasus and the Caspian. In short, I feel that while ethnic factors obviously loom large in many peripheral regions of the Soviet Union, they alone are rarely sufficient to determine the outlines of functional regions of the all-pervading type which I have attempted to define.

However, I must confess to feeling not entirely comfortable about my Baltic region, and respect Professor Vardys's opinions about it, as an expert on the area. I remember that when I first presented this tentative scheme of Soviet regions at an international congress in 1964, this particular region was the only one to which serious objections were raised by the Soviet geographers present, notably to the inclusion of Leningrad. I would now like to point out, by way of partial justification, some rules of thumb under which this kind of effort at regionalization operates. First there is the practical matter of a manageable scale. A round figure of ten units of the Soviet Union lies somewhere between the gross national or "West-East" units and a confusing superfluity of small, local regions. The familiar divisions of the United States, arrived at in a comparable exercise, such as the Pacific Northwest, the Midwest, or New England, would, incidentally, amount to about the same number, and it is this sort of scale which regional geographers generally find most convenient in dealing with part of a large modern country.

Thus the three Baltic republics, although unquestionably distinct ethnically from Russia (if also notably distinct from each other in language and religion), do not quite come up to the scalar threshold for this kind of regionalization. There is also the practical, if a little absurd, matter of what is left after more straightforward adjacent regional divisions have been marked off. The nodal Moscow-dominated region, the coherent and rich Greater Ukrainian region, and the empty Northlands (beyond the fringe of close permanent settlement)—each has a different but compelling regional logic, and together they surround and isolate a region whose parts all range about and toward the Baltic. The "marchland," somewhat Westward-oriented character of this region, coupled with certain natural common denominators, including a poverty of natural resources (say vis-à-vis the Ukraine), seems to justify such a grouping. The fact that it inevitably breaks down on analysis into at least three subregions
—the Baltic states, Belorussia, and Leningrad—should not necessarily invali-
date the larger grouping, provided it is recognized as a fairly loose one of
convenience.

It seems that there may be a basic methodological divergence between
Professor Vardy and myself in our approaches to such regionalization. He
seems to assume that taxonomic units (such as ethnic groups) possess an
integrity which makes them not susceptible to aggregation with neighboring
areas except by "doing violence" to basic principles. In my regionalization the
process of analysis by breakdown, from nation through "worlds" to subregions,
inevitably calls for a measure of flexibility, catholicity, and compromise, looking
for a minimum of functional unities among the obvious diversity. In this process,
I recognize the powerful—possibly growing—significance of nationalisms in
the Soviet Union, but only as one facet of a larger regional consciousness
formed out of prolonged interaction between people and places. Although it
may have seemed to languish at times recently, interpretive synthesis of the
many-sided character of distinctive regions of the humanized world continues
to lie close to the heart of geography and its ways of thought.