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POPULATION REDISTRIBUTION AND THE
ETHNIC BALANCE IN TRANSCAUCASIA

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Among the important changes in the populations of Soviet Transcaucasia in recent decades has been a reduction in the ethnic heterogeneity of the region. Three main factors have led to this reduction: high fertility rates of the indigenous populations, especially of the Armenians and Azeris; emigration from Transcaucasia by members of non-Transcaucasian nationalities (primarily Russians); and migration by members of Transcaucasian nationalities from neighboring Transcaucasian republics to their own Soviet republics. The goal of this paper is to document the operation of these three factors and to explore the link between shifts in the ethnic balance and the degree of antipathy or affinity among major nationalities in Transcaucasia. This paper will not concern itself with all topics commonly falling under the rubric of "demographic change." Instead, it will focus more narrowly on the types of demographic change that have affected the numerical balance and the relations among nationalities; and the primary data employed in the analysis will be data on the demographic characteristics of ethnic groups, not on the population of Transcaucasia more generally.

Population Growth and Distribution

Despite their high rates of population growth (Table 1), the titular nationalities of the three Transcaucasian republics together comprised only 5 percent of the population of the Soviet Union in 1979.¹ Even the very high levels of educational attainment of the Transcaucasian nationalities means that the three nationalities contributed (in 1975) only 5.5 percent of the "specialists with higher education" and 3.1 percent of the "specialists with secondary specialized education" to the Soviet labor force.² Of

course, these figures underestimate the importance of Transcaucasia to the Soviet economy, especially to certain sectors; and they certainly do not reflect the importance of Transcaucasia to Russian and Soviet historical development, but they should help us to keep in mind that the population of the Transcaucasus is probably less important for its contribution to the Soviet economy than for its strategic location and its historic ties to Russia and the Middle East. Yet these very factors of strategic location and historic ties also help to justify our focus here on population distribution and ethnic mixing; from a demographic perspective, numerical dominance is a vital factor in the relations among ethnic groups, for it is both a consequence and a cause of ethnic antipathies and alliances.

Place Table 1 About Here

Armenians, Azeris, and Georgians are all concentrated residentially in the Transcaucasus (see Table 2) and all very low in geographical mobility. Data from the 1970 census reveal that, compared to a USSR-wide average of 5.7 percent, only between 1.3 percent (for the Azeris) and 1.9 percent (for the Armenians) of the three major indigenous Transcaucasian nationalities had changed their place of residence in the two years prior to the census date (January 1970).³ Nonetheless, evidence of interrepublican migration flows between 1959 and 1972 reveals that both Georgia and Azerbaijan experienced net outflows of population due to migration.⁴ During that period

TABLE 1. POPULATION INCREASE OF MAJOR TRANSCAUCASIAN NATIONALITIES
IN USSR AND TRANSCAUCASIAN REPUBLICS: 1959 TO 1979

In Entire USSR	Population (in thousands)			Percentage Change	
	1959	1970	1979	1959 to 1970	1970 to 1979
Armenians	2,786.9	3,559.2	4,151	+ 27.7	+ 16.6
Azeris	2,939.7	4,379.9	5,477	+ 49.0	+ 25.0
Georgians	2,692.0	3,245.3	3,571	+ 20.6	+ 10.0
Russians	114,113.6	129,015.1	137,397	+ 13.1	+ 6.5
All nationalities	208,826.6	241,720.1	262,436	+ 15.8	+ 8.6
Armenian SSR					
Armenians	1,551.6	2,208.3	2,725	+ 42.3	+ 23.4
Azeris	107.7	148.2	161	+ 37.6	+ 8.6
Georgians	0.8	1.4	...	+ 76.3	...
Russians	56.5	66.1	70	+ 17.0	+ 5.9
Azerbaijan SSR					
Armenians	442.1	483.5	475	+ 9.4	- 1.8
Azeris	2,494.4	3,776.8	4,709	+ 51.4	+ 24.7
Georgians	9.5	13.6	...	+ 42.7	...
Russians	501.3	510.1	475	+ 1.8	- 6.9
Georgian SSR					
Armenians	442.9	452.3	448	+ 2.1	- 1.0
Azeris	153.6	217.8	256	+ 41.8	+ 17.5
Georgians	2,600.6	3,130.7	3,433	+ 20.4	+ 9.7
Russians	407.9	396.7	372	- 2.7	- 6.2

only two other republics experienced such net outmigration (the RSFSR and Belorussia). Armenia, on the other hand, experienced a net immigration of population. But what can one say about the ethnic makeup of the migrating populations?

Unfortunately, the published data on migration flows do not record the nationalities of the migrants but instead only the place (region or republic, urban or rural area) of origin and destination. But on the basis of circumstantial evidence, we can make a fairly strong case that particular nationalities have been the primary contributors to the net outmigration from Azerbaijan and Georgia and the net immigration to Armenia.

Place Table 2 About Here

The last two columns in Table 1 report the percentage change in the population of major Transcaucasian nationalities between recent census dates--for the USSR as a whole (in the top part of the table) and for each Transcaucasian republic (in the lower portions of the table). First, note that in the Azerbaijan SSR and the Georgian SSR, Russians declined in absolute numbers between 1959 and 1979. This decline is probably due almost entirely to outmigration of Russians, not to changes in mortality and fertility or to assimilation of Russians by the local nationalities. Even in Armenia, while Russians have increased in number in recent years, their rate of increase lags behind the rate of increase in the number of Russians in the country as a whole. Because the rate of increase in the number of

TABLE 2. REGIONAL DISTRIBUTION OF MAJOR TRANSCAUCASIAN NATIONALITIES

	<u>Percent of Nationality Located In:</u>					
	Own SSR	Other Transcaucasian SSR			RSFSR	Remainder of USSR
		<u>Armenia</u>	<u>Azerbaijan</u>	<u>Georgia</u>		
<u>Armenians</u>						
1959	55.7	--	15.9	15.9	9.2	3.3
1970	62.0	--	13.6	12.7	8.4	3.3
1979	65.6	--	11.4	10.8	8.8	3.3
<u>Azeris</u>						
1959	84.9	3.7	--	5.2	2.4	3.8
1970	86.2	3.4	--	5.0	2.2	3.2
1979	86.0	2.9	--	4.7	2.8	3.6
<u>Georgians</u>						
1959	96.6	0.0	0.4	--	2.1	0.9
1970	96.5	0.0	0.4	--	2.1	1.0
1979	96.1	...	...	--	...	...

Russians in Armenia has also lagged behind the rate of increase in the number of Armenians in Armenia, the Russian share of the population of each of the three Transcaucasian republics has declined in recent decades. The Russian shares of the urban and rural populations taken separately have also declined in each republic.

Second, comparison of the population increases for each Transcaucasian nationality within its own republic with the population increases in the other two republics reveals that the rate of increase of population for these nationalities is much greater in their own republics than in the neighboring Transcaucasian republics. (See Table 1.) For example, between 1959 and 1970 Armenians increased by 42.3 percent in the Armenian SSR but only by 9.4 percent and 2.1 percent in Azerbaijan and Georgia, respectively; between 1970 and 1979, the 23.4 percent increase of Armenians in Armenia contrasts with net decreases of Armenians in the other Transcaucasian republics. Once again, the differences in population growth almost certainly cannot be accounted for by differences in mortality and fertility between Armenians in the various Transcaucasian republics. Furthermore, between 1959 and 1970 the rate of increase in the number of Armenians in Armenia exceeded the rate of increase in the number of Armenians in the USSR as a whole by 53 percent, while between 1970 and 1979 the rate of increase in the number of Armenians in the Armenian SSR exceeded the USSR-wide increase in the number of Armenians by 41 percent.

The above evidence suggests a strong net migration of Armenians to the Armenian SSR in the past twenty years. Most of the migrants have apparently come from the neighboring Transcaucasian republics; these republics, in

which 31.8 of all Armenians resided in 1959, now contain only 22.2 percent of all Armenians in the USSR. (By contrast, the proportion of Armenians residing in the RSFSR remained fairly constant between 1959 and 1979.)

Immigration to their own republics by the Georgians and Azeris is less easy to demonstrate. The Georgians have long been so highly residentially concentrated in their own republic that at best the immigration of Georgians from elsewhere could be very limited in scale. Between 1959 and 1979, about 96 percent of Soviet Georgians lived in the Georgian SSR, while less than half of 1 percent lived in each of the other two Transcaucasian republics; about 2 percent lived in the RSFSR; and 1 percent, elsewhere in the Soviet Union. There is no clear evidence (or even any obvious possibility) of net migration of Georgians to the Georgian SSR in recent decades. The net outflow of population from Georgia noted above must have consisted primarily of non-Georgians: Russians, Armenians, and Azeris. (There is no evidence, by the way, of emigration of Abkhazians or Ossetians from Georgia; possibly some of the latter have moved to the North Ossetian ASSR, however.)

On the other hand, the rates of population increase among Azeris residing in the Georgian SSR and the Armenian SSR (see Table 1), which are lower than the rates of increase in the number of Azeris in either Soviet Azerbaijan or the USSR as a whole, suggest a moderate level of outmigration of Azeris from Georgia and Armenia to Azerbaijan over the past two decades. Judging from the fact that the proportion of Azeris residing in the RSFSR has increased slightly in the past ten years (and the rate of increase in the number of Azeris in the USSR as a whole is slightly greater than the rate of increase in the number of Azeris in Soviet Azerbaijan), there may

have been a small net migration of Azeris (from somewhere in the Transcaucasus) to the RSFSR. But it seems likely in any case that Azerbaijan has received net increments of Azeris from the other two Transcaucasian republics.

In sum, the net outflow of people from Georgia and Azerbaijan has probably consisted primarily of Russians, Armenians and Azeris (from Georgia). The net inflow of population to Armenia from other republics has probably principally involved Armenians arriving from elsewhere in Transcaucasia. In the absence of a primary investigation of the motives of migrants, we can only speculate about the motives for the cross-migration of Armenians and Azeris. One plausible explanation is that the historic antipathy between members of the two groups has crystallized in recent years to encourage mutual avoidance and resettlement. Despite cultural policies in the Transcaucasian republics that have been aimed at reducing ethnic tension--such as the provision of native language schooling to Azeris and Armenians in Georgia, to Armenians in Azerbaijan, and to Azeris in Armenia⁵--an unfavorable cultural, administrative, or work environment for Armenians in Azerbaijan and for Azeris in Armenia may have encouraged resettlement to their official homelands.

Alternatively, perhaps the cross-migration in Transcaucasia has another, less nationalistically tinged explanation. Namely, the very rapid rate of urbanization of Armenia in recent years, which has advanced that republic's level of urbanization ahead of the USSR as a whole, may have created significant opportunities for urban Armenians residing in Georgia and Azerbaijan to move out of those republics to Armenia. (Note that in 1959, 55 percent of Armenians in Georgia and 61 percent of Armenians in Azerbaijan

lived in urban areas--well ahead of the average for each of those republics.) At the same time, those rural Armenians in Georgia and Azerbaijan who decided to move to an urban location could more readily find work in fast developing urban Armenia than in the more slowly urbanizing Georgia and Azerbaijan. (See Table 3 for data on urbanization in Transcaucasia.) In

Place Table 3 About Here

addition, of course, in Armenia Armenians are more likely to be assured of Armenian schools, mass media, and religious facilities--all of which may be regarded by local authorities in Azerbaijan and Georgia as a special burden and something of an indulgence for an unwanted or unwelcome Armenian population. Thus, Armenian migration to Armenia might be motivated primarily by economic factors but be reinforced by cultural ones.

That Azeris may have left Armenia and Georgia for Azerbaijan could have a similar explanation; but the potential pull of Azeris to the Azerbaijan SSR may be moderated by both the relatively low rates of urbanization of Azerbaijan and the very low levels of urbanization of Azeris in Armenia and Georgia (where only 11 percent and 18 percent, respectively, of the local Azeri populations lived in urban areas in 1959).

Ethnic Dominance

The impact of both natural and mechanical increases in population on the ethnic homogeneity of the Transcaucasian republics is apparent in

TABLE 3. POPULATION SIZE AND URBANIZATION OF TRANSCAUCASIAN REPUBLICS,
1926 TO 1979

All Population	<u>Armenian SSR</u>		<u>Azerbaijan SSR</u>		<u>Georgian SSR</u>		<u>USSR</u>	
	Total Pop. (x 1000)	Percent Urban	Total Pop. (x 1000)	Percent Urban	Total Pop. (x 1000)	Percent Urban	Total Pop. (x 1000)	Percent Urban
1926	881	19	2,314	28	2,677	22	127,028	18
1939	1,282	29	3,205	36	3,540	30	170,557	33
1959	1,763	50	3,698	48	4,044	42	208,827	48
1970	2,492	59	5,117	50	4,686	48	241,720	56
1979	3,031	66	6,028	53	5,015	52	262,436	62
<u>Titular Nationality</u>								
1926		20		17		16		
1959		52		36		35		
1970		63		41		43		
<u>Russians</u>								
1926		25		80		73		
1959		71		88		79		
1970		79		92		83		

Tables 4 and 5. Table 4 reveals that in each republic between 1959 and 1970, the titular nationality increased its share of the population in both urban and rural areas, while Russians--the largest non-Transcaucasian nationality in the zone--have declined as a proportion of the population. The change is particularly striking in Azerbaijan, where between 1926 and 1979 Azeris increased from comprising less than three-fifths to comprising over three-fourths of the population. In both the rural and urban populations, Azeris have come clearly to dominate numerically; Russians, always a minuscule proportion of the rural population, now comprise less than one-fifth of the urban population.

Place Table 4 About Here

An alternative measure of ethnic heterogeneity, which takes into account the relative weights of all nationalities in each republic's population, is presented in Table 5. The figures are based on a formula that calculates the probability that two randomly selected persons from a given territory will not be of the same nationality. The resulting Index of Ethnic Diversity can range from 0 (minimum diversity) to 1 (maximum diversity). The increasing ethnic homogeneity of all of the Transcaucasian republics is clearly reflected in Table 5.

Place Table 5 About Here

TABLE 4. INDIGENOUS ETHNIC DOMINANCE IN TRANSCAUCASIAN REPUBLICS:
1959 TO 1979

Titular Nationality as Percent of Population (In parenthesis: Russians as Percent of Population)			
	All Population	Urban Population	Rural Population
<u>Armenian SSR</u>			
1926	84 ()	89 ()	83 ()
1959	88 (3)	92 (5)	84 (2)
1970	89 (3)	93 (4)	82 (1)
1979	90 (2)	...	...
<u>Azerbaijan SSR</u>			
1926	62 (10)	38 (27)	72 (3)
1959	67 (14)	51 (25)	82 (3)
1970	74 (10)	61 (18)	87 (2)
1979	78 (8)	...	...
<u>Georgian SSR</u>			
1926	67 (4)	48 (12)	72 (1)
1959	64 (10)	53 (19)	73 (4)
1970	67 (8)	60 (15)	73 (3)
1979	69 (7)	...	...

TABLE 5. ETHNIC DIVERSITY IN TRANSCAUCASIAN REPUBLICS:
1926 TO 1979

	Index of Ethnic Diversity ^a (1=maximum; 0=minimum)		
	All Population	Urban Population	Rural Population
<u>Armenian SSR</u>			
1926	.276	.189	.294
1959	.224	.154	.279
1970	.210	.126	.316
1979	.191	...	...
<u>Azerbaijan SSR</u>			
1926	.572	.732	.462
1959	.511	.651	.312
1970	.435	.578	.239
1979	.376	...	...
<u>Georgian SSR</u>			
1926	.552	.687	.454
1959	.561	.662	.458
1970	.533	.606	.449
1979	.497	...	...

^aThe Index of Ethnic Diversity is calculated like Greenberg's Index of Linguistic Heterogeneity and measures the probability that two randomly selected persons from one republic (or the urban or rural population separately) will not be of the same nationality. See Joseph H. Greenberg, "The Measurement of Linguistic Diversity," Language 32 (1956): 109-115.

Thus, the high rates of natural increase of the Transcaucasian nationalities (especially of Armenians and Azeris), the cross-migration into their titular republics by Armenians and Azeris, and the departure of Russians (especially from Azerbaijan and Georgia) have combined to reduce ethnic intermingling. Not only are all of the Transcaucasian republics clearly dominated numerically by the titular nationality, but so are the urban and rural areas and the leading industrial and political centers. Even in Baku, where Russians (and other non-Azeris) played a major role in industrial (not to mention revolutionary) development and which is now the fifth largest city in the Soviet Union, Russians became a numerical minority in the 1960s and have no doubt continued to lose ground since then. It is important to note also that the urban populations of each of the three republics are highly concentrated in the capital cities: in 1979, 41 percent of the urban residents of Georgia resided in Tbilisi; 51 percent of the urbanites of Armenia lived in Yerevan; and 48 percent of the urbanites of Azerbaijan lived in Baku. Since the local populations currently dominate these urban centers and the urban populations as a whole, the planned emphasis on the development of small and medium sized cities in the Transcaucasus is likely only to increase further the indigenous population's numerical supremacy in the urban areas.⁶

The indigenous populations of Transcaucasia thus appear to be reasonably secure from inundation by Russians. This security is perhaps buttressed by the growing labor shortages in the Soviet West and in the Central industrial zones.⁷ The departure of Russians from the Transcaucasus may even be viewed as an advance signal of similar reductions in the Russian (or slavic)

presence in other non-Russian republics--although the 1979 census figures reveal a strong persistence of Russians in the Central Asian republics, where one might expect a Russian exodus to have begun. Of course, security from Russian numerical dominance does not necessarily mean security from the incursion of Russian culture and language. But for various reasons, the increased ethnic dominance by the titular nationalities of the Transcaucasian republics seriously limits the possibility of Russian cultural and linguistic diffusion.

The Balance of Skilled Manpower

Because of their comparatively high rates of natural population increase, over the next two decades Armenians and Azeris will add a larger number of workers to the USSR-wide labor force than their overall population sizes might suggest. Both nationalities are characterized by large families --a result of both early female marriage (especially for the Azeris) and high marital fertility. Although both the incidence of early marriage and the rates of marital fertility have apparently declined significantly for both the Azeris and the Armenians in recent years, the populations of both nationalities are still quite young. At the time of the 1970 census, for example, 49 percent of Armenians residing in the Armenian SSR were under the age of 20. The comparable figure for the Azeris was 58 percent; for the Georgians, 39 percent; and for USSR as a whole, 38 percent.

Such a high proportion of young people also implies special economic demands, however. Child-bearing and child care reduce the availability of women for employment outside the household. Employment of women in the economy is low in all three Transcaucasian republics--attributable in

Armenia and Azerbaijan to the large family sizes, but attributable in Georgia (as well as the other two republics) also to the significant involvement of women in private agriculture and other spheres of the private or nonsocialized economy.⁸ High proportions of children in the population also create the need for greater state expenditures and manpower allocations for education and other social services. Both because of their high population growth rates and their underutilization of women in the public economy, the Transcaucasian republics are regarded by Soviet economic planners as having significant reserves of labor. These untapped reserves are to be found primarily among the indigenous populations. Fully using the reserves would doubtless shift the balance of the labor forces of each republic even further toward the indigenous nationalities and perhaps free up even more Russians and other nonindigenous nationalities to move elsewhere.

The educational systems of the three republics have created a strong capability of the local populations to meet the manpower needs of the region. In 1970, Georgians and Armenians ranked first and second out of the fifteen union republic nationalities in the proportion of the population that had attained at least "incomplete secondary" education (7 or 8 years of formal schooling). The Azeris ranked seventh among the fifteen nationalities--only slightly behind the Volga Tatars as the most highly educated Muslim nationality in the USSR. Georgians and Armenians also ranked first and second among union republic nationalities in the per capita number of "specialists with higher education" in 1970. If one adjusts these per capita figures for the age distribution of the population (i.e., by basing the figures on the number of people aged 20 and over), Georgians and

Armenians still exceed the totals of all other Union Republic nationalities, and the Azeris rank third.⁹ Thus, the educational systems of the Transcaucasian republics appear to have done well over all in providing highly skilled indigenous manpower (at least as far as one can judge from such aggregate figures). But they also lag significantly in the training of skilled workers in vocational and technical schools. Hence when new industrial plants are started up they often must recruit manpower from outside the region.¹⁰

Unfortunately, how many of the indigenous population are trained in particular specialties cannot be determined from available data; consequently, we are not able to say how well the needs of particular sectors of the economy are satisfied by indigenous labor. We can speculate, however, that one reason the loss of Russians from the Transcaucasus may be affordable is that the supply and training of indigenous populations in most important specialties is quite high.

That Russians are declining as a proportion of the manpower of the Transcaucasian republics may signify that they are being drawn elsewhere or that the indigenous populations are able to compete effectively for the types of jobs that the Russians had occupied. Published Soviet reports have not broken down statistical data on specialized manpower by nationality for each republic in recent years. Recent census reports also fail to provide data on occupations for particular nationalities. But perhaps a crude hint of the supply of specialized manpower among particular nationalities can be derived from available data on "scientific workers," which are more abundant than data on "specialists." This category of workers is a very

narrow one, and comprises only a small proportion of skilled manpower, but it may serve as a rough surrogate for a broader measure of specialized manpower.¹¹ The data on scientific workers for all three republics (Table 6) suggests a shift between 1947 and the late 1960s toward increasing indigenization of the "scientific worker" category; this shift is especially marked in Azerbaijan.

Place Table 6 About Here

A final aspect of the supply of specialized manpower also deserves attention here: the degree to which the specialized manpower within each Transcaucasian nationality is concentrated in its own republic. In 1960, 91 percent of all Azeri "specialists with higher education" worked in the Azerbaijan SSR, and Azeris comprised only 60 percent of all specialists with higher education working in the republic. Similarly, in 1960, 95 percent of all Georgian "specialists with higher education" worked in the Georgian SSR, and Georgians comprised 79 percent of the specialists with higher education working in the republic.¹² Thus, for both the Azeris and the Georgians, there was probably little need in 1960 to move outside the republic to find highly specialized work. The local economy could even absorb large increments to the indigenous specialized manpower pool-- assuming either (or both) significant industrial growth or the departure of Russians and other nonindigenous manpower from the republic.

Armenian specialists, on the other hand, faced a different set of options. In 1960, at a time when Armenians comprised over 92 percent of the "specialists with higher education" in the Armenian SSR, over half

TABLE 6. Ethnic Composition of "Scientific Workers" in Transcaucasian Republics
in Selected Years (in percents)

	1947	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Armenian SSR														
Armenians	91.4	95.7	93.6					94.7	94.1	94.3	94.4			
Russians	...	2.7	4.5					3.6	4.0	3.8	3.6			
Georgians	...	0.1	0.1					0.1	0.1	0.1	0.1			
Azeris	...	0.4	0.1					0.1	0.1	0.1	0.1			
Jews	...	0.6	0.7					0.5	0.6	0.7	0.7			
Azerbaijan SSR														
Azeris	48.6		64.6			65.7							70.9	71.3
Russians			16.2							14.5	14.4
Armenians			8.2							6.2	6.1
Georgians			0.3							0.3	0.3
Jews			6.5							4.8	4.8
Georgian SSR														
Georgians	79.0		83.8					84.1	84.3		83.8	84.4	84.1	
Russians	...		6.3					6.0	6.2		6.5	6.2	6.3	
Armenians	...		4.4					4.1	4.3		4.2	4.0	4.0	
Azeris	...		0.1					0.2	0.1		0.2	0.2	0.2	
Jews	...		1.9					2.2	2.2		2.2	2.1	2.2	

(51 percent) of all such specialist Armenians worked outside Armenia. Of those working outside, 29 and 21 percent worked in Azerbaijan and Georgia, respectively, and 34 percent worked in the RSFSR.¹³ Thus, the great success of the Armenians in gaining specialized education perhaps also has (or had in 1960) saturated the Armenian economy with specialist Armenians and encouraged migration (or continued residence) outside the republic. Regrettably, we have only scanty data on the distribution of specialists by nationality after the mid 1960s, and we can only speculate that the rapid urbanization of Armenia in the past twenty years has helped to draw not only large numbers of Armenians generally but also a larger proportion of specialist Armenians to work in the Armenian economy.

Intermarriage Rates

Although the evidence on migration between Transcaucasian republics may not definitely reflect ethnic antipathies, one type of evidence that is commonly regarded as a reliable measure of ethnic antagonism or rapprochement is ethnic intermarriage rates. The possibilities for ethnic intermarriage are obviously constrained by the levels and patterns of ethnic group mixing in a region or social setting. Quite apart from their attitudes toward other nationalities, few Azeris should be expected to marry non-Azeris, for example, because Azeris are so heavily concentrated in their own republic and because Azeris constitute a large (and increasingly larger) proportion of the population of the republic.

Soviet sociologists have developed techniques for taking into account the degree of ethnic mixing when measuring preferences for ethnic endogamy. Essentially, the technique measures the attraction or repulsion between

nationalities against a standard of random selection of marriage partners: when the number of marriage partners selected from a particular nationality exceeds or falls short of what one would expect if spouses were selected at random from the population of potential spouses, one can speak of a special attraction or aversion to marriage between particular nationalities. According to one such measure reported by L. V. Chuiko, based on marriages that took place in the 14 non-Russian union republics in 1969, the titular nationalities of these republics scored as follows (from highest to lowest) in their preference for ethnic endogamy:¹⁴

Kirgiz	95.4	Tajiks	77.3
Kazakhs	93.6	Lithuanians	68.2
Turkmens	90.7	Moldavians	62.0
Azeris	89.8	Latvians	61.4
Uzbeks	86.2	Belorussians	39.0
Georgians	80.5	Ukrainians	34.3
Estonians	78.8	Armenians	33.4

The scale runs from +100 (highest possible preference for ethnic endogamy) to -100 (highest preference for ethnic exogamy), with 0 representing indifference to the nationality of the spouse. According to this measure, both the Azeris and Georgians display a high preference for ethnically homogeneous marriages, while the Armenians have the lowest preference for ethnic endogamy of any union republic nationality. Armenians would thus appear to be rather susceptible to assimilation through intermarriage-- that is, although they did not show a preference for exogamy, they were more open to exogamy than any other union republic nationality.

Nevertheless, because of the extremely high ethnic homogeneity of Armenia, the actual proportion of ethnic intermarriages taking place in Armenia (and among Armenians) is probably much lower than in most other

republics of the Soviet Union. Indeed, in 1970 only 3.7 percent of all married couples in Armenia were ethnically mixed, much lower than the proportion of mixed marriages in any other union republic and than the USSR-wide figure of 13.5 percent.¹⁵ (At the same time, Azerbaijan ranked second from the bottom and Georgia fourth from the bottom among union republic nationalities on the same measure.) Of course, one must be wary of such aggregate figures, because they do not tell us which nationalities in each republic are intermarrying--for example, Kazakhstan ranked second among the union republics in 1970 in the proportion of mixed marriages in the population; but we know from other evidence that the overwhelming majority of mixed marriages concluded in Kazakhstan are concluded between members of different slavic nationalities, not between Kazakhs and slavs.¹⁶ In any case, the extreme ethnic homogeneity of Armenia means that the Armenians' apparent openness (lack of prejudice) regarding mixed marriage results in very few actual mixed marriages.

This conclusion finds support also in a study by A. E. Ter-Sarkisants published in 1973, which examined intermarriage rates in Armenia for the years 1967, 1969, and 1970.¹⁷ This study revealed that between 93 and 98 percent of marriages concluded in Armenia in 1967 to 1970 were between spouses of the same nationality. Four-fifths of the mixed marriages occurred in urban areas of the republic. The most common type of mixed marriage was between an Armenian man and a Russian woman (or a member of another non-Transcaucasian nationality). By contrast, Armenian women married non-Armenian men only very rarely. Furthermore, marriages between Armenians and Azeris were also much less frequent than marriages between

Armenians and Russians. Finally, Armenians displayed a strong preference for ethnic endogamy overall (perhaps in contradiction to the Chuiko data).

Language as a Measure of Ethnic Accommodation

Language use represents another measure of the strength of ethnic attachments and of interethnic group accommodation. It is well known that the Soviet regime has long sought to spread Russian as a lingua franca (the so-called "language of internationality communications") among the non-Russian nationalities. Efforts to improve and to expand the Russian language curriculum have been particularly intense in the past ten years, spurred perhaps both by the 1970 census report's disappointing evidence (from the regime's perspective) of the levels of knowledge of Russian among non-Russian nationalities and by the regime's concern about the recent and impending dramatic (southerly) regional shifts in the source of new recruits into the civilian and military manpower pools. At the same time, Soviet leaders have long been committed in both theory and practice to conducting basic instruction in schools in the native languages of the non-Russian nationalities. This policy of encouraging the study of Russian language and conducting basic instruction in the national languages is especially characteristic of the fourteen titular nationalities of the non-Russian union republics--where instruction in most subjects is conducted in the native language for most indigenous non-Russian pupils through secondary school and often into higher education, while Russian is taught as a separate subject in school, typically from the first or second year.

If successful, such a language policy could be expected in the long run to lead to a form of widespread and stable bilingualism, with Russian

not necessarily displacing the non-Russian languages as principal ("native") languages but rather serving as an auxiliary language for use in certain functionally specific settings or roles. Yet the results of this policy have been mixed. The most obvious shortcoming (from the regime's perspective) is the low levels of knowledge of Russian that have been achieved, especially among many of the larger non-Russian nationalities. Another shortcoming (not necessarily from the regime's perspective) is that among some nationalities, especially the smaller ones and the non-Muslim ones, Russian language is gradually becoming not a second language but a primary one.

Place Table 7 About Here

The language behavior of the Armenians, Azeris, and Georgians exemplifies the first "shortcoming": fluency in Russian is limited in scope, while the traditional national tongues are thriving. An understanding of Soviet language policy makes it clear why the Transcaucasian nationalities have been able to preserve their native tongues. In the Soviet context, the major Transcaucasian languages have been favored: Armenian and Georgian use their own alphabets; for all three nationalities, institutions of secondary and higher education use the native languages extensively; and for all three, publication in the native languages has been abundant. When Armenians and Azeris reside outside the borders of their own republics, if they live in neighboring Transcaucasian republics or in certain provinces of the RSFSR (e.g., Armenians in Rostov; Azeris in rural Dagestan), they may have native language schools. To be sure, not all Transcaucasians

TABLE 7. Percent of Transcaucasian Nationalities Claiming Knowledge of Russian:
1926, 1939, 1959, 1970, 1979^a

Place of Residence:	All USSR			Own Republic			Outside Own Republic		
	(1) Native Language	(2) Second Language	(3) Native or Second	(4) Native Language	(5) Second Language	(6) Native or Second	(7) Native Language	(8) Second Language	(9) Native or Second
Armenians									
1926	2.3	...	...	0.0	...	...	4.4	...	...
1939	6.3	...	...	...	...	...	...	...	...
1959	8.3	...	...	0.7	...	...	17.9	...	...
1970	7.6	30.1	37.7	0.2	23.3	23.5	19.6	41.2	60.8
1979	8.3 ^b	38.6	46.3	...	...	...	...	...	...
Azeris									
1926	0.1	...	...	0.0	...	...	0.2	...	...
1939	0.5	...	...	...	...	...	...	...	...
1959	1.2	...	...	0.8	...	...	3.7	...	...
1970	1.3	16.6	17.9	0.7	14.9	15.6	4.9	26.7	30.7
1979	1.6 ^b	29.5	31.1	...	...	...	...	...	...
Georgians									
1926	0.4	...	...	0.1	...	...	16.5	...	...
1939	0.9	...	...	...	...	...	...	...	...
1959	1.3	...	...	0.4	...	...	25.3	...	...
1970	1.4	21.3	22.7	0.4	20.1	20.5	27.2	54.2	81.4
1979	1.5 ^b	26.7	28.2	...	...	...	...	...	...

^aSources. 1926 data are from Tsentral'noe statisticheskoe upravlenie, Otdel perepisi, Vsesoiuznaia perepis' naseleniia 1926 goda (Moscow: 1928-1931). 1939 data are from A. A. Isupov, Natsional'nyi sostav naseleniia SSSR (Moscow: 1961), p. 34. 1959 data are from Tsentral'noe statisticheskoe upravlenie, Itogi vsesoiuznoi perepisi naseleniia 1959 goda (Moscow: 1962-3); 1970 data are from Tsentral'noe statisticheskoe upravlenie, Itogi vsesoiuznoi perepisi naseleniia 1970 goda (Moscow: 1972-3); and 1979 data are from Tsentral'noe statisticheskoe upravlenie, Naselenie SSSR (po dannym Vsesoiuznoi perepisi naseleniia 1979 goda) (Moscow: 1980).

^bThe percentages claiming Russian as a native language in 1979 (see source in footnote a, above) are estimated on the basis of the proportion of the population that gave the traditional national language as native.

benefit from (or choose to attend) native-language schools. But by contrast with the languages of such other union republic nationalities as the Belorussians and the Ukrainians and with the languages of most nationalities whose official homelands rank lower in the federal hierarchy, the major Transcaucasian languages have been treated well.¹⁸

The impact of Soviet language policy cannot be understood in isolation from the demographic and cultural settings in which it occurs. That bilingualism (knowledge of Russian as a second language) is not widespread among the major Transcaucasian nationalities must be attributed in part to the low levels of interethnic mixing in the Transcaucasus. The increasing ethnic homogeneity of Armenia and Azerbaijan, as well as the continued limited presence of Russians in all three Transcaucasian republics can only help to retard the spread of Russian as a second language.

In seeking to identify the causes and possible solutions to the low levels of knowledge of Russian among the non-Russian nationalities, however, Soviet educators and language planners typically devote almost all of their attention to the language curriculum, methods of instruction, and staffing of schools. Although sometimes observing that the extent of bilingualism in the community as a whole or among the parents of schoolchildren may affect the ease with which non-Russian pupils can learn Russian, these educators and planners typically neglect to mention that teaching of Russian as a second language is quite a different pedagogical problem when Russian is being taught in a small, isolated non-Russian village from when it is being taught in a large, multinational city. The pedagogical problem of rural schools is not simply one of finding well-trained teachers or of compensating for the general cultural disadvantages of rural children.

Perhaps because language and educational planners cannot do anything about the larger social or ethnic settings within which pupils are located, they tend to ignore the special opportunities or problems afforded by the ethnic setting. Even recent language surveys, such as those conducted by M. N. Guboglo, give only a partial picture of the importance of social context for the growth of bilingualism. For example, in a large-scale multi-republic survey of language practices respondents were asked, "Where did you learn your second language?" Majorities of the titular nationalities of Moldavia, Estonia, Uzbekistan, and Georgia all named "school" far more frequently than any other source (alternative sources given were "army," "family," "friends," and "higher educational institution").¹⁹ The younger the respondent, the more frequently "school" was named as the leading source of the learning of Russian. One should scarcely be surprised that school is named most frequently as the source of learning of Russian: it is in schools that non-Russians usually first engage in the formal study of Russian grammar, literature, and culture. But gaining fluency in Russian is probably rather difficult when school is virtually the only source of learning Russian. It is clear from writings of the distinguished Soviet linguist A. N. Baskakov, for example, (although Baskakov does not emphasize it) that the difficulty that Azeris have in learning to pronounce Russian words correctly, let alone to speak the language grammatically correctly, is linked to the limited contact between Azeris and Russian speakers outside the classroom.²⁰ Without intensive interethnic contact, teaching Russian is more akin to teaching a foreign language than it is to teaching a "second mother tongue" (as Soviet officials sometimes label the Russian language).

As the data in Table 7 reveal, the knowledge of Russian among Armenians, Azeris, and Georgians residing in their own republics is rather low (see columns 4, 5, and 6). Shift of mother tongue to Russian is especially limited. On the other hand, both knowledge of Russian as a second language and shift of mother tongue to Russian occur much more frequently among Transcaucasians who reside outside their official homelands. In both 1959 and 1970, for example, over one-fourth of the Georgians who resided outside the Georgian SSR claimed Russian as a native language. The corresponding percentages for the Azeris and Armenians were lower than the percentages for the Georgians; but the contrast in the knowledge of Russian between those Transcaucasians who resided inside their own republics and those who resided outside is quite marked for all three nationalities.

Another indication of the importance of context on language use is the sharp differences in linguistic russification between urban and rural residents. Among residents of their official republics, urban-rural differences in the adoption of Russian as a native language are quite small in percentage terms for all three Transcaucasian groups (see Table 8). But urban-rural differences in the knowledge of Russian as a second language are extremely large. The very limited shift to Russian as a native language,

Place Table 8 About Here

even in urban areas, attests to the strength of the ethnic identities of these nationalities and is consistent with the evidence of limited inter-ethnic marriage. Although urban settings are more conducive to assimilation than are rural settings, in Soviet Transcaucasia they are not fertile ground

TABLE 8. Urban-Rural Differences in the Knowledge of Russian Among Transcaucasian Nationalities:
1959, 1970 (in percents)

Place of Residence:	All USSR		Own Republic		Outside Own Republic	
	Urban	Rural	Urban	Rural	Urban	Rural
<u>Knowledge of Russian as Native Language</u>						
Armenians						
1959	13.5	1.6	1.3	0.1	26.5	4.0
1970	11.0	1.2	0.3	0.0	27.0	3.5
Azeris						
1959	3.2	0.2	2.1	0.1	11.4	0.9
1970	3.0	0.2	1.8	0.0	14.0	1.0
Georgians						
1959	3.1	0.3	1.1	0.1	30.8	11.7
1970	2.8	0.2	0.9	0.1	31.7	11.2
<u>Knowledge of Russian as Second Language</u>						
Armenians						
1970	37.6	16.4	31.6	9.5	46.6	29.8
Azeris						
1970	31.9	6.5	29.7	4.6	51.2	16.4
Georgians						
1970	40.0	9.0	36.7	8.4	90.0	51.3

for the assimilation of the local population by Russians. At the same time, the rather extensive bilingualism (knowledge of Russian as a second language) among urban Transcaucasians demonstrates the importance of the higher levels of contact between Russians and the indigenous populations in the urban areas (see Table 4, above). That the urban populations are also more highly educated and have therefore both obtained more formal instruction in Russian and perhaps found Russian to be useful at the workplace, may also help to account for the urban-rural differences in bilingualism.

A final aspect of the patterns of language preference or use is the rate of change. As the data in Table 7 (above) reveal, there has been a gradual increase in the levels of linguistic russification of the three Transcaucasian nationalities over time. But at least as far as shift of mother tongue (native language) is concerned, demonstrable change has occurred only among the segment of each nationality that resides outside its official homeland. Within the segment of each nationality that resides within its own republic, long-term shift of mother tongue has been negligible.

Because at present only limited data have been published from the 1979 Soviet census, it is difficult to speak of trends in the spread of Russian as a second language, especially for the population segments that reside within their official republics. But an age breakdown of the data on language preferences reported in the 1970 census reveals that bilingualism is more common among the younger age cohorts than the older ones (and reaches its peak for most nationalities among persons in their twenties). At the same time, there is virtually no age related tendency to shift the mother tongue to Russian. Table 9 summarizes the age-specific data on linguistic

russification, using the Armenians as an example. (The Armenian pattern is closely replicated by the Azeris and the Georgians--although the aggregate levels of linguistic russification are higher among the Armenians, especially knowledge of Russian as a second language.) These data very

Place Table 9 About Here

convincingly reveal that even when bilingualism reaches very high levels, knowledge of a second language need not lead to displacement of the traditional national tongue. The growth of bilingualism among the Transcaucasians may therefore even represent the type of linguistic accommodation that Soviet language planners have said they are trying to achieve.

Conclusion

The evidence on population composition and change examined here provides a fairly clear picture of a Soviet Transcaucasia that is becoming increasingly more self-sufficient. Of course, such a demographic self-sufficiency does not necessarily signify political or economic self-sufficiency or autonomy. In fact, the demographic situation can be fully understood only in the context of the political relations among all nationalities in the region--which shape the environments in which such demographic processes as migration and fertility occur. Moreover, the ability of the Transcaucasian republics to supply necessary manpower to the public economy depends also on rates and locations of investment in capital, natural resources, and human resources; and such investment decisions are probably strongly influenced by both central and local political processes (which we have made

TABLE 9. PERCENTAGES OF ARMENIANS IN CATEGORIES OF A SCALE OF LINGUISTIC RUSSIFICATION, BY AGE IN 1970 (AMONG RESIDENTS OF THE ARMENIAN SSR ONLY)^a

Scale Type	Language Combinations		Age in 1970							
	Native Language	Second Language	0-10	11-15	16-19	20-29	30-39	40-49	50-59	60+
Parochials	Armenian	None or not Russian	97.1	87.9	66.3	51.5	60.2	62.0	71.3	84.5
Unassimilated Bilinguals	Armenian	Russian	2.7	11.8	33.4	48.2	39.6	37.8	28.6	15.4
Assimilated Bilinguals	Russian	Armenian	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0
Assimilated	Russian	None or not Armenian	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0

^aThe figures are derived from the 1970 census report according to methods described in Brian Silver, "Methods of Deriving Data on Bilingualism from the 1970 Soviet Census," Soviet Studies 27 (October, 1975): 574-597.

no attempt to examine here). Thus, the data examined here should perhaps be regarded just as much as outcomes of a set of political and economic decisions as they are potential constraints on such decisions.

Finally, however, it is important to acknowledge that demographic processes often have a certain dynamic of their own, more or less independent of conscious, planned policy intervention. One should be cautious about inferring that processes of migration, fertility, and the spread of bilingualism are explicable only (or even primarily) in political terms. With some justification, then, we may regard demographic processes that occur on a mass scale as reflecting the sentiments and perceptions of the masses of the population--and the evidence in this paper may therefore be interpreted as demonstrating a strong popular preference for ethnic consolidation and independence among the Transcaucasian nationalities.

- ¹ Tsentral'noe statisticheskoe upravlenie [Ts.S.U.], Naselenie SSSR (po dannym Vsesoiuznoi perepisi naseleniia 1979 goda) (Moscow: 1980). In this and other references to statistical sources, I will not always provide page numbers because many of the figures reported are derived from information printed on several pages in the source.
- ² Ts.S.U., Narodnoe obrazovanie, nauka, i kul'tura v SSSR: Statisticheskii sbornik (Moscow: 1977), p. 296.
- ³ Ts.S.U., Itogi vsesoiuznoi perepisi naseleniia 1970 goda (Moscow: 1972-3), Vol. 7.
- ⁴ A. V. Topilin, Territorial'nye pereraspredelenie trudovykh resursov v SSSR (Moscow: 1975), pp. 38-39. For similar evidence covering the period 1959-1969, see Frederick A. Leedy, "Demographic Trends in the USSR," in U.S. Congress, Joint Economic Committee, Soviet Economic Prospects for the Seventies (Washington: 1973), p. 455.
- ⁵ See, for example, Ts.S.U. Armianskoi SSR, Kul'turnoe stroitel'stvo Armianskoi SSR (statisticheskii sbornik) (Yerevan: 1962), pp. 52-3; Ts.S.U. Azerbaidzhanskoi SSR, Azerbaidzhan v tsifrakh: kratkii statisticheskii sbornik (Baku: 1964), pp. 192-193; and Ts.S.U. Gruzinskoi SSR, Narodnoe khoziaistvo gruzinskoi SSR v 1962 godu (Tbilisi: 1963), p. 336.
- ⁶ V. M. Kostennikov, Razvitie ekonomicheskikh raionov SSSR (perspektivy i problemy) (Moscow: 1977), pp. 114-124.
- ⁷ See Murray Feshbach and Stephen Rapawy, "Labor Constraints in the Five-Year Plan," in U.S. Congress, Joint Economic Committee, Soviet Economic Prospects for the Seventies (Washington: 1973), pp. 485-563; and Murray Feshbach and Stephen Rapawy, "Soviet Population and Manpower Trends and Policies," in U.S. Congress, Joint Economic Committee, Soviet Economy in a New Perspective (Washington: 1976), pp. 113-154.
- ⁸ V. G. Kostakov, Trudovye resursy: sotsial'no-ekonomicheskii analiz (Moscow: 1976), pp. 130-133.
- ⁹ Stephen Rapawy, "Regional Employment Trends in the U.S.S.R.: 1950-1975," in U.S. Congress, Joint Economic Committee, Soviet Economy in a Time of Change (Washington: 1979), p. 603.
- ¹⁰ Kostakov, Trudovye, p. 73.

- ¹¹The category "Scientific Workers" consists of employed persons to whom the Ministry of Higher and Secondary Specialized Education has granted a degree and/or an academic title, plus persons lacking such a degree or title if they are employed in certain occupations or organizations (such as scientific research institutes or higher educational institutions). For further discussion, see Murray Feshbach, The Soviet Statistical System: Labor Force Recordkeeping and Reporting Since 1957, U.S. Bureau of the Census, International Population Statistics Reports, Series P-90, No. 17 (Washington, D.C.: 1962), pp. 29-31.
- ¹²Ts.S.U., Vysshee obrazovanie v SSSR: statisticheskii sbornik (Moscow: 1961), pp. 70-71.
- ¹³Ibid.
- ¹⁴L. V. Chuiko, Braki i razvody (Moscow: 1975), p. 69.
- ¹⁵Itogi vsesoiuznoi perepisi naseleniia 1970 goda, Vol. 7.
- ¹⁶A. P. Eburnev, "Mezhnatsional'nye braki i ikh rol' v sblizhenii natsii i narodnosti SSSR," Nauchnyi kommunizm, 1973, No. 4, pp. 28-34; and Iu. A. Evstigneev, "Mezhetnicheskie braki v nekotorykh gorodakh severnogo Kazakhstana," Vestnik Moskovskogo universiteta, Seria istorii, 1972, No. 6, pp. 73-82.
- ¹⁷A. E. Ter-Sarkisants, "O natsional'nom aspekte brakov v Armiianskoi SSR," Sovetskaia etnografiia, 1973, No. 4.
- ¹⁸For some comparisons of native language schooling among the 14 union republic nationalities, see Jonathan Pool, "Soviet Language Planning: Goals, Results, Options," in Jeremy R. Azrael (ed.), Soviet Nationality Policies and Practices (New York: 1978), pp. 230-231. For a particularly low estimate of the availability of native language schools in Belorussia, and for a contrast with Armenia, see K. Kh. Khanazarov, Reshenie natsional'no-iazykovoii problemy v SSSR (Moscow: 1977), pp. 136-137. For figures on Azeris and Armenians in Azerbaijan, see A. N. Baskakov, "O funktsionirovanii russkogo iazyka v Azerbaidzhanskoi SSR," in F. P. Filin et al. (eds.), Russkii iazyk kak sredstvo mezhnatsional'nogo obshcheniia (Moscow: 1977), p. 164.
- ¹⁹S. I. Bruk and M. N. Guboglo, "Faktory rasprostraneniia dvuiazychiia u narodov SSSR (po materialam etnosotsiologicheskikh issledovaniia)," Sovetskaia etnografiia, 1975, No. 5, pp. 17-30; and M. N. Guboglo, "K izucheniiu perspektiv razvitiia dvuiazychiia u narodov SSSR," Istoriia SSSR, 1978, No. 1, pp. 27-42.
- ²⁰Baskakov, op. cit.