COMPONENTS OF POPULATION GROWTH IN SEOUL: 1960—1966*

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A total of 2,445,000 persons were counted within the boundary of Seoul at the time of the 1960 Census of Korea. The 1966 Census shows that the number of persons living in Seoul at the time of the census was 3,805,000, indicating an increase of 1,360,000 persons during the intercensal period of 1960—1966. This paper attempts to identify the components of this increase and their relative contributions to the growth of population within the administrative boundary of Seoul for this period.

Theoretically, the size of population in a city for a specified time period can change through an interplay of three basic processes; net balance of in and out-migration (net migration), net balance of births and deaths (natural increase), and boundary changes (annexation). The size of population will rise if the inflow of migration is greater than the outflow, if the number of births exceeds the number of deaths, and if the city expands its boundary and annexes a part of surrounding populated territory. It appears that each one of these components played an important role in making a high population growth rate for Seoul during the 1960—1966 period.

On January 1, 1963, substantial boundary adjustments were made for a large number of provinces and municipalities in Korea. Through this adjustment, Seoul annexed a large part of surrounding areas including parts of Yangju-Kun, Kwangju-Kun, Kimpo-Kun, Sihung-Kun, and Boochon-Kun from the province of Kyungki-Do.¹ It was estimated from the census data that approximately 155,000 persons were living in the areas of annexation at the time of the 1960 Census. This number in the annexed area plus the number of 2,445,000 persons counted in the 1960 boundary make up the total number of 2,600,000 persons living in the adjusted boundary of Seoul

^{1.} Dong Wha Yearbook, 1968. Dong Wha Tong Shin, Seoul, Korea, 1969, p. 665.

^{*} The author thanks Ralph Thomlinson for his valuable suggestions and comments for this paper. I am solely responsible for its content and shortcomings.

as of 1960. The number of added persons through annexation accounts for 11 percent of the total increase of 1,360,000 persons in Seoul during the 1960—1966 period.

Having adjusted the boundary changes, we find that the number of increase within the fixed boundary of Seoul during the intercensal period was 1, 205, 000 persons. This portion of increase is then entirely attributable to net migration and natural increase. Lacking reliable vital statistics on birth and death for the population of Seoul during the period, we proceed first to find the amount of contribution made by migration for the increase.

There are two possible sources of migration that could have contributed to the increase of population in Seoul. One is international migration and the other is internal migration. Available information on persons leaving and entering the country during the 1960—1966 period indicates that the amount of net international migration for Seoul during the period would have been too small to affect the growth of population of Seoul to any significant extent. Table 1 shows the number of persons who crossed the national boundary of Korea by exit and entry status for the 1960—1966 period. The net balance shows that 29,000 more people left the country than those who entered

the country during this period. It would appear that only a small fraction of this net exit is international net migration for the country and the majority constitute the persons traveling for the purpose of trade, study, official affairs, etc. Therefore, we have concentrated in making estimates of net internal migration for Seoul ignoring the negligible effect of international migration for the period.

In making estimates of net migration, I employed the Census Survival Ratio method, since the lack of reliable vital statistics prevented me from using any direct method for computing the net migration. A census survival ratio is simply the ratio of the total popula-

Table 1. Number of Border Crossers by Exit and Entry Status, Korea, 1960—1966.

Status,	Korea, 196	0—1966.
Year	Num Entry	ber Exit
1960	18,402	15,582
1961	17,994	20,846
1962	22,766	25,934
1963	29,406	34,527
1964	39, 693	44,811
1965	45,080	50,522
1966	86,349	96,484
Total	259,690	288,706
Differen Exit Entry Net Ex	288, 25 9 ,	

Source: KOREA STATISTICAL YEARBOOK 1962 and 1967, Economic Planning Board, Republic of Korea.

tion of the country at age x or age group x-x+n at a given census to the corresponding age cohort of the previous census. The age-specific survivors are computed by

multiplying the survival ratio by the provincial or city population in the corresponding age group in the first census. The expected survivors are subtracted from the observed population in the later census for each corresponding age group to make estimates of net migration.

The Census Survival Ratio method has certain built-in mechanisms to make corrections for inadequacies of the age data. However, the method requires certain assumptions and the estimates of net migration will be satisfactory only if these assumptions hold. The assumptions are: "(i) The national population is closed, i.e., entered only by birth and left only by death. (ii) The specific survival ratios are the same for each state (province or city) as for the nation. (iii) The ratio of the degree of enumerated population bears to the true population to that of the nation is the same for the same cohort in both censuses."²

As previously indicated, the level of international migration for the 1960-1966 period does not appear to be significant enough to violate the assumption of the closed population in Korea. As for the second assumption, Korea is relatively small in size, and regional variation of life style, level of living, and sanitary condition do not appear to be great. Even though Seoul appears to enjoy many advantages of rapid economic development, the large income gap existing between the rich minority and the poor majority and the adverse conditions of overcrowdedness tend to balance the advantages of the industrial development in the Seoul area. For these reasons, the level of mortality in Seoul does not seem to be much deviant from that of the rest of the country. An examination of age data for the 1960 and 1966 censuses reveals that the enumeration errors appear to be quite consistent for the corresponding age cohorts in the two censuses. Also, the built-in mechanism of the census survival ratio method is supposed to take care of the enumeration errors that might have existed in the 1960 and 1966 censuses if the extent of errors was not great. The Census Survival Ratio method, therefore, would produce a satisfactory estimate of net migration in Korea for the period.

In applying the Census Survival Ratio method, several adjustments had to be made to make the age statistics comparable for the two censuses. In 1960, simply ages were asked and recorded in the census schedule. Ordinarily in Korea, a person is given one

^{2.} The Committee on Internal Migration of the International Union for the Scientific Study of Population, Measures of Internal Migration and Their Analytical Uses, Parts I and II, Internal Migration, Provisional Text. 1968, p. 109.

year of age at the time of birth. As the calendar year changes, the person gains another year of age. Thus a person born on December 31 becomes two years old the next day. In the 1966 Census, however, date of birth instead of ordinary age was asked, and completed ages were published in the census tables. To make the data comparable, the 1960 age statistics had to be changed to completed ages. The change has been possible by applying the conversion multipliers developed by J.S. Park at the Bureau of Statistics. Comparing the completed ages obtained from the 1960 Post Enumeraiton

Age Conversion Multipliers

Age	Male	Female
0-4	1. 2571	1. 2534
5—9	0.9132	0.9084
10—14	1.0047	1.0007
15—19	0.9848	1.0035
20-24	0.9456	0.9692
25-29	0.9455	0.9669
30-34	0.9642	0.9517
35-39	1.0015	0.9835
40-44	0.9633	0.9525
45-49	0. 9768	0.9787
50—54	0.9392	0.9341
55-59	0.9373	0.9711
60-64	0.9341	0.9547
65 and over	0.8750	0.8838

Survey with the ordinary ages obtained from the main census, Park developed an equation for the age conversion and produced conversion multipliers for each age group. In the following is the list of age-specific conversion multipliers developed by Park.³

Table 2 presents the ordinary and converted ages of the 1960 Korean population; Table 3 presents the counterparts of population for the 1960 boundary of Seoul.

The next problem is to find a comparable age structure of the 1960 population for that of the 1966 population in the constant boundary of Seoul. Age statistics of the population in the annexed areas of Seoul in 1960 were not made available in the census publications, and age-sex structure for the population was indirectly constructed. A mixed pattern of agricultural and industrial land use of the annexed area leads us to believe that the population in the area would exhibit an age-sex structure of half urban and half rural character. An ideal population representing this mixed character is that of Eup. Eup is an administrative unit supposedly containing a population between 20,000 and 50,000 and normally possessing characteristics of both rural and urban areas in significant proportion. Contending that the characteristics of Eup population would vary significantly from region to region. I applied the age-sex composition of Eup population in Kyungki-Do to the population of the annexed areas of Seoul. Table 4 shows the 1960 population of Seoul by age group and sex in the 1966 fixed boundary.

^{3.} Jae Soo Park, An Evaluation Study for the Accuracy of the 1960 Population and Housing Census of Korea, Bureau of Statistics. Economic Planning Board, Seoul, Korea, 1966.

Table 2. Population of Korea by Age Group and Sex before and after Age Conversion, 1960.

	Ma	le	Fem	ale
Age	Before Conversion	After Conversion	Before Conversion	After Conversion
0-4	1,820,312	2, 228, 314	1,729,252	2, 168, 309
5-9	1, 958, 374	1,788,392	1,823,172	1,656,169
10—14	1, 480, 274	1, 487, 236	1,341,976	1,342,915
15—19	1, 248, 791	1, 229, 809	1, 134, 363	1, 138, 333
20-24	1, 175, 602	1, 111, 649	1, 103, 847	1,069,849
25-29	916,751	866, 788	996, 435	963, 453
30-34	729, 096	701,066	829, 238	789, 186
35—39	687,559	688,590	729, 178	717, 147
40-44	598,867	576, 889	588,603	560,644
45-49	518,017	505,999	515,744	504,759
50-54	444, 283	417, 271	440, 293	411,278
55—59	318,745	298,760	345, 793	335,800
60-64	257, 447	240, 481	309, 124	295, 121
65 and above	384, 490	336, 429	550,516	486,546
Unknown	7,350	7, 350	7,739	7,739
Total	12, 543, 968	12, 545, 023	12, 445, 273	12, 447, 248

Source: 1960 Population and Housing Census of Korea. Bureau of Statistics, Economic Planning Board, Seoul, Korea.

Table 3. Population of Seoul by Age Group and Sex before and after Age Conversion, 1960.

	Ma	ale	Fem	ale
Age	Before Conversion	After Conversion	Before Conversion	After Conversion
0-4	158, 809	199, 639	151,118	189, 487
5-9	179, 912	164, 298	168, 901	153, 430
10—14	124, 451	125,036	118,277	118, 360
15—19	137, 948	135, 851	138,724	139, 210
20-24	133, 956	126, 669	128,612	124,651
25-29	98, 336	92, 977	116,778	112, 913
30-34	84, 832	81,795	97, 145	92, 453
35—39	82,462	82,586	79, 126	77,820
40-44	71,557	68, 931	57,990	55, 235
45—49	53, 182	51,948	46,679	45,685
50-54	42, 471	39, 889	36,627	34, 213
55 59	22,835	21, 403	25,878	25, 130
60-64	14,021	13, 097	20, 421	19, 496
65 and over	17,032	14, 903	35,641	31,500
Unknown	891	891	790	790
Total	1,222,695	1,219,911	1,222,707	1, 220, 373

Source: 1960 Population and Housing Census of Korea. Bureau of Statistics, Economic Planning Board, Seoul, Korea.

Table 4. 1960 Population of Seoul in 1966 Boundary.

	Ma	le population	in	Fem	ale populati	on in
Age	1960 boundary	annexed area	1966 boundary	1960 boundary	annexed area	1966 boundary
0-4	199, 639	14,811	214, 450	189, 487	13,773	203, 260
5—9	164, 296	11,483	175,779	153, 430	10, 420	163,850
10—14	125,036	8,093	133, 129	118, 360	6,959	125, 319
15—19	135, 851	7,765	143,616	139, 210	7,352	146, 562
20—24	126,669	6,570	133, 239	124, 651	7, 290	131,941
25 29	92, 977	5,554	98,531	112, 913	6,744	119,657
30-34	81, 795	4,703	86, 498	92, 453	5, 168	97,621
35—39	82, 586	4,648	87, 234	77,820	4,699	82,519
40-44	68, 931	4,031	72, 962	55, 235	3, 414	58,649
45-49	51,948	3, 304	55, 252	45, 685	2,999	48,684
50—54	39, 889	2,570	42, 459	34, 213	2,361	36, 574
55—59	21,403	1,703	23, 106	25, 130	1,823	26, 953
60—64	13, 097	1,211	14, 308	19, 496	1,461	20, 957
65 and over	14, 903	1,594	16, 497	31,500	2,392	33, 892
Unknown	891	62	953	790	54	844
Total	1, 219, 911	78, 102	1, 298, 013	1, 220, 373	76, 909	1, 297, 282

Source: See Table 2

Another problem in applying the Census Survival Ratio method is related to constructing age cohorts of 1966 corresponding to those of 1960. The 1960 Census was taken as of December 1, and the 1966 Census was taken as of October 1, leaving an intercensal period of exactly 5 and 5/6 years. The necessary re-grouping of the population for the corresponding age cohort was made by the interpolation method, since the age data in the census were not broken down by months.

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After the necessary adjustments were made for the data for the application of the Census Survival Ratio method, we have proceeded to compute census survival ratios and net migration for the intercensal period of 1960—1966. Computations of survival ratios and net migration and their results are presented in Tables 5, 6, 7 and 8.

Table 5. Survival Ratio of male population by age, December 1960 - October 1966.

Dec.	1, 1960		Oct. 1, 1966	
Age	Population (in thousands)	Age	Population (in thousands)	Survival Ratio
0-4	2, 288	5 5/6—10 5/6	2, 316	1.0122
5—9	1,788	10 5/6—15 5/6	1,746	0. 9765
10-14	1, 487	15 5/6—20 5/6	1,361	0. 9153
15—19	1,230	20 5/6-25 5/6	1, 199	0. 9748
20-24	1, 112	25 5/6-30 5/6	1, 104	0. 9928
25-29	867	30 5/6—35 5/6	931	1.0738
30-34	701	35 5/6-40 5/6	712	1.0157
35-39	689	40 5/6-45 5/6	656	0. 9521
40-44	577	45 5/6-50 5/6	542	0. 9393
45-49	506	50 5/6-55 5/6	450	0.8893
50-54	417	55 5/6-60 5/6	359	0.8609
55—59	299	60 5/6—65 5/6	233	0.7793
60 over	577	65 5/6—over	340	0. 5910

Source: See Table 2.

1966 Population Census of Korea, Bureau of Statistics, Economic Planning Board, Seoul, Korea.

Table 6. Survival Ratio of female population by age, December 1960 - October 1966.

Dec.	1, 1960		Oct. 1, 1966	
Age	Population (in thousands)	Age	Population (in thousands)	Survival Ratio
0-4	2, 168	5 5/6—10 5/6	2, 147	0. 9903
5—9	1,656	10 5/6—15 5/6	1,633	0. 9861
10-14	1,343	15 5/6—20 5/6	1,272	0.9471
15—19	1, 138	20 5/6—25 5/6	1, 111	0. 9763
20-24	1,070	25 5/6—30 5/6	1, 103	1.0308
25-29	963	30 5/6—35 5/6	957	0.9938
30-34	789	35 5/6—40 5/6	793	1.0051
35-39	717	40 5/6-45 5/6	672	0. 9372
40-44	561	45 5/6-50 5/6	541 .	0.9643
45 —49	505	50 5/6—55 5/6	469	0. 9287
50-55	411	55 5/6—60 5/6	400	0. 9732
55—59	336	60 5/6—65 5/6	292	0.8690
60 over	782	65 5/6—over	533	0.6816

Source: See Table 2.

1966 Population Census of Korea, Bureau of Statistics, Economic Planning Board, Seoul, Korea.

Table 7. Net Migration for Seoul, Males, 1960-1966.

Age (1960)	Observed Population (1966)	Expected Population (1966)	Difference (Net Migration)
0-4	267, 939	217, 066	50, 873
5—9	208, 939	171,648	36, 800
10-14	214, 266	121,853	92, 413
15—19	185, 505	139, 997	45,508
20-24	180, 765	132, 280	48, 485
25-29	143, 776	105, 803	37, 973
30-34	108, 973	87,856	21, 117
35-39	96, 053	83,055	12, 998
40-44	72, 580	68,833	4, 047
45-49	52, 116	49, 136	2, 980
50-54	36, 552	36,553	-1
55—59	18, 659	18,007	652
60 <i>+</i>	20, 258	18, 206	2,052
* Total	1,605,890	1, 249, 993	355, 897

^{*} Unknown figures included in total.

Table 8. Net Migration for Seoul, Females, 1960-1966.

Age (1960)	Observed Population (1966)	Expected Population (1966)	Difference (Net Migration)
0-4	250, 411	201, 288	49, 123
5—9	206, 849	161,572	45, 277
10-14	226, 166	118,690	107, 476
15-19	195, 510	143, 088	52, 422
20-24	178, 416	136,005	42,411
25-29	140, 902	118, 915	21, 987
30—34	111,006	98, 119	12,887
35-39	87, 111	77, 337	9,774
40-44	64, 329	56, 555	7,774
45-49	52, 962	45, 213	7,749
50-54	41,599	35, 594	6,005
55 — 59	28, 283	23, 422	4,861
60+	45,024	37, 385	7,639
* Total	1,628,568	1, 253, 183	375, 385

^{*} Unknown figures included in total.

The Census Survival Ratio method cannot give estimates of net migration at ages below 5 and 5/6 years since persons in this age cohort did not exist at the time of the 1960 Census. A separate estimate was made for this age group using the following formula.

NM (m, o-5 5/6) =
$$1/2 \times \frac{P(m, o-5 5/6)}{P(f, 20-49)} \times NM(f, 20-49)$$

NM
$$(f, o-5 \ 5/6) = 1/2 \times \frac{P(f, o-5 \ 5/6)}{P(f, \ 20-49)} \times NM (f, \ 20-49)$$

where,

NM (m, o-5 5/6) is the estimate of net migration for males at ages 5 5/6 and below, 1960-1966.

NM (f, 0-5 5/6) is the estimate of net migration for females at ages 5 5/6 and below, 1960-1966.

P (m, 0-5 5/6) is the observed number of males at ages 5 5/6 and below in 1966.

P (f, 0-5 5/6) is the observed number of females at ages 5 5/6 and below in 1966.

P (f, 20-49) is the observed number of females between ages 20-49 in 1966. NM (f, 20-49) is the number of net migration for females between ages 20-49, 1960-1966.

Applying appropriate figures in the formula, we find;

NM (m, o-5 5/6) =
$$1/2 \times \frac{288,844}{777,274} \times 147,255$$

= 27,354

NM (f, o-5 5/6) =
$$1/2 \times \frac{269,981}{777,274} \times 147,255$$

= 25,567

That is, the number of net intercensal migration for male children at ages 5 5/6 and below is estimated as 27,000, and that for females is estimated as 26,000. We do not expect that the estimates made here would be very accurate. However, these crude estimates could serve several useful purposes.

Adding these estimates to those earlier estimates of persons at ages above 5 5/6 years, we find that the number of total net migration for male is 383,000 while that for females is 401,000. The total net migration for Seoul during the intercensal period is

then estimated as 784,000. This number constitutes 58 percent of the total increase of 1,360,000 persons in Seoul during the intercensal period.

We subtracted this number of net migration from the total increase of population in Seoul within the 1966 fixed boundary during the intercensal period to estimate the number of increase due to natural increase. The balance of births and deaths is estimated as 421,000 for the period, which constitutes 31 percent of the total increase of population in Seoul during the 1960—1966 intercensal period. It should be noted that the natural increase of 421,000 persons are those in the areas of 1966 boundary. The average annual percentage increase attributable to natural increase for Seoul in the fixed boundary of 1966 during the intercensal period is 2.77, which is slightly lower than the corresponding rate of 2.90 for the country during the same period.

Summing up, the population increase of Seoul for the intercensal period of 1960—1966 is accounted for by three components: annexation, migration, and natural increase. It appears from this analysis that the net migration was the single most important component, contributing 58 percent of the total increase. The excess of births over deaths contributed 31 percent of the increase and the boundary change added 11 percent of the total increase.

서울市 人口成長의 構成要素: 1960-1966

兪 義 瑛

1960年 센서스 當時 서울市界內의 人口는 2,445,000人으로 集計되었다. 그러나 1966年 센서스 當時의 서울市 居住者는 3,805,000人으로서 1960—1966年 센서스 期間中에 1,360,000人의 增加를 보여주었다. 本 論文은 이러한 人口增加의 構成要素와 同期間中에 서울市 行政區域內에서의 人口成長에 對한 이들 構成要素의 相對的 寄與度를 밝히고자 試圖한 것이다.

理論的으로 特定期間동안의 一定都市의 人口規模는 移入과 移出의 正差(net balance)〔純人口移動量〕,出生과 死亡의 正差〔自然增加〕,및 區劃變更(併合)等 세가지 基本過程의 媒介作用을 통하여 變化할 수 있다. 만약 人口移動의 流入이 流出보다 크고, 出生數가 死亡數를 능가하고, 都市가 그 境界를 擴張하여 周邊人口地域의 一部를 併合한다면 人口規模는 커질것이다. 이들 構成要素들의 각각은 1960—1966年 期間中 서울市의 高度人口成長率을 기록하는데重要한 役割을 하였다.

1963年 1月1日 大規模의 行政區劃調整이 多數의 道와 市에 對하여 이루어 졌다. 이 調整을 통해서 서울市는 京畿道內 楊州郡, 廣州郡, 金浦郡 및 富川郡 等의 一部를 包含하는 廣域의 週邊地域을 併合하였다. 1960年 센서스當時 同併合地域에 居住하고 있었던 人口는 約155,000 人으로 推定되었다. 이 併合地域內의 人口數와 1960年 市界內의 人口 2,445,000人을 合算하면 1960年 現在로 調整된 서울市界內에 居住하고 있는 人口는 總 2,6000,000 이었다는 결과가 나온다. 併合에 의하여 加算된 人口數는 1960—1966年 期間中 서울市의 總人口增加分인 1,360,000 人의 11%에 해당한다.

行政區劃變更多 調整해 놓음으로서 우리는 두 센서스 期間中 서울市 原初境界內에서의 增加數는 1,205,000人이라는 것을 가려낼 수 있다. 따라서 이 增加分은 전적으로 純人口移動量과 自然增加에 돌릴 수 있을 것이다. 同期間中 서울市 人口에 對한 出生과 死亡에 관한 信憑性있는 人口動態統計資料가 없기 때문에 우선 그 增加에 對하여 人口移動에 의하여 이루어진 總量부터 밝혀 나가고자 한다.

서울市 人口增加에 寄與할 수 있는 人口移動에는 두가지 可能한 源泉이 있다. 그 하나는 1) 同和年鑑,同和通信社,1969, p.665. 國際人口移動이며 다른 하나는 國內人口移動이다. 1960—1966年 期間中 韓國을 出入한 人口에 관한 利用可能한 資料는 同期間中 서울市의 純國際人口移動의 總量이 어떤 有意味한 範圍에서 서울市 人口成長에 영향을 줄만큼 크지 않다는 것을 보여주고 있다. 2 페지의 〈表 1〉은 1960—1966年 期間中 出國과 入國에 의하여 韓國 國境을 넘은 사람의 數를 보여주고 있다. 그正差는 同期間中 出國者 보다 入國者가 29,000人이 더 많은 것으로 나타났다. 이 純出國量 가운데서 소수만이 純海外移住이며 大部分은 貿易, 留學, 公務 等等의 目的으로 旅行하는 사람들로 이루어져 있다. 따라서 우리는 同期間中 國際人口移動의 사소한 영향을 무시하고 서울市에 대한 純國內人口移動量의 推定에 重點을 두어야 할 것이다.

純人口移動量을 推定 하는데 있어서 信憑性있는 人口動態統計資料의 缺如로 純人口移動量을 計算하기 위한 어떠한 直接的인 方法의 利用도 不可能하기 때문에 論者는 센서스生殘比 (census survival ratio)方法을 使用하였다. 센서스生殘比란 單純히 以前 센서스의 該當年齡「코호트」(cohort)에 對한 一定 센서스上의 年齡 X 포는 年齡集團 X~X+n에 있는 全國人口의 比이다. 年齡別特殊生殘者(age specific survivors)는 첫번 센서스에서 該當年齡集團에 있는 道 또는 市의 人口에 이 生殘比(survival ratio)를 곱해줌으로서 計算된다. 純人口移動量의 推定 作成을 위해서는 各該當年齡集團에 對하여 나중 센서스에 觀察된 人口(observed population)로부터 이 豫想生殘者(expected surviors)를 減하면 된다.

센서스生殘者方法은 年齡資料의 不適切性을 修正하기 위하여 만들어진 構成 매카니즘이다. 그러나 이 方法은 어떤 假定들을 前提로 要求하고 있으며 純人口移動量의 推定은 이들 假定이持支될 경우만 充足될 수 있다. 그 假定이란 첫째 全國人口는 閉鎖(closed)되어 있다는 것, 卽 出生에 의해서만 增加하고 死亡에 의해서만 減少한다는 것, 둘째 特殊生殘比(specific survival ratio)는 全國에 대한 것과 各道 또는 各市에 對한 것이 같다는 것, 셋째 全國人口에 對한 實際人口(true population)와 관계가 되는 評價人口(enumerated population)의 程度를 보여 주는 率은 두 센서스에 있어서 같은 「코호트」에 對하여 同一하다는 것 等이다.

앞서 指摘한 바와 같이 1960—1966年 期間中의 國際人口移動의 水準은 韓國의 閉鎖人口 (closed population)의 假定을 깨뜨릴만큼 큰 것으로 나타나지 않았다. 둘째번의 假定에 대해서 韓國은 生活樣式 即 生活水準面에서 그 規模와 地域差가 比較的 적으며 衛生的 條件은 甚한 差異를 보여주지 않는다. 서울市는 急速한 經濟發展의 큰 利得을 亨有하고 있을지라도 小數의 富裕層과 大多數의 貧民層間의 심한 所得隔差와 過剩人口密集이란 不利한 條件은 서울市 一圓의 產業發展의 利點을 均衡化하여주는 趨勢에 있다. 이러한 理由 때문에 서울市의 死亡力水準은 餘他의 地域과 큰 差異를 보여주지 않는다. 1960—1966年 두 센서스에 대한 年齡資料의 한 檢算에서 그 評價「에러」(enumeration error)는 두 센서스에 있어서 該當年

^{2.} The Committee on Internal Migrational Union for the Scientific Study of Population, Measures of Internal Migration and Their Analytical Uses, Parts I and II, Internal Migration, Provis ional Text, 1968, p.109.

齡「코호트」에 대하여 完全히 一致하고 있음을 보여 주고 있다. 또한 센서스生殘比方法의 構成대카니즘은 「에러」의 範圍가 크지 않을 경우 1960年과 1966年 센서스에 內包하고 있을지도 모르는 評價「에러」에 對한 注意를 要하게 해 줄 것이다. 따라서 센서스生殘比方法은 同期間中 韓國의 純人口移動量의 滿足할만한 推定을 單純하게 해 줄 것이다.

다음의 問題는 1960年 人口의 年齡構造를 서울市의 原初境界內 1966年人口의 年齡構造의 比較可能하도록 만드는 作業이다. 1960年에 서울市로 併合된 地域內 人口의 年齡統計는 센서스報告書에 나와있지 않아 그 人口의 年齡別 및 性別構造는 間接的으로 算出하였다. 이 併合된地域의 農工業의 混合된 土地利用의 類型은 同地域의 人口가 절반은 都市的 年齡一性構造를 갖고 절반은 農村的 性格을 갖고 있을 것이라는 생각을 갖게 하여 준다. 이와같이 混合된 性格을 代表하는 理想的인 人口模型은 邑의 그것이라고 볼수 있다. 邑은 대체로 人口 2萬 乃至 5萬을 갖고 상당한 程度로 農村과 都市地域의 特性을 모두 띠고 있는 行政單位이다. 그러나邑人口의 特性도 地方에 따라 매우 相異한 것이라는 點을 考慮하여 論者는 서울市로 併合된地域의 人口에 對하여 그 該當道인 京畿道內 邑人口의 年齡一性構造를 適用하였다. 6 페지의 〈表 4〉는 1966年에 確定된 서울市境界內의 1960年 年齡集團과 性別 人口를 보여 주고 있다.

센서스生殘比方法을 適用하는데 있어서 또 다른 하나의 問題는 1960年 年齡「코호트」에 該當하는 1966年 年齡「코호트」를 設定하는 것이다. 1960年 센서스는 1960年 12月1日 現在로 施行되었고 1966年 센서스는 正確하게 5年 10個月의 期間이 지난 10月1日 現在로 施行되었다. 該當年齡「코호트」를 作成하기 위하여 必要한 人口의 再集合은 센서스의 年齡資料가 月別로

³⁾ Jae Soo Park, An Evaluation Study for the Accuracy of the 1960 Population and Housing Census of Korea, Bureau of Statics, Economic Planning Board, Seoul, Korea, 1964.

分類되지 않았기 때문에 補插法(interpolation method)에 의해서 作成되었다.

센서스生殘比方法의 適用을 위한 資料를 위하여 이와같이 必要한 調整을 한 뒤에 센서스 生殘比와 1960—1966年 센서스 期間中 純人口移動量을 計算하였다. 生殘比 및 純人口移動量 의 計算과 그 결과는 7,8페지의 〈表 5,6,7,8〉에 提示되어 있다.

센서스生殘比方法은 5年 10個月 또는 그 未滿의 年齡層이 1960年 센서스 當時에는 存在하지 않았기 때문에 同年齡集團의 純人口移動量의 推定을 提供해 줄 수 없다. 同年齡集團을 위해서 下記 公式을 使用한 別途의 推定이 이루어졌다.

$$NM(m,0\sim 5\frac{5}{6}) = \frac{1}{2} \times \frac{P(m,0\sim 5\frac{5}{6})}{P(f,20\sim 49)} \times NM(f,20\sim 49)$$

$$NM(f,0\sim 5\frac{5}{6}) = \frac{1}{2} \times \frac{P(f,0\sim 5\frac{5}{6})}{P(f,20\sim 49)} \times NM(f,20\sim 49)$$

 $NM(m,0\sim5\frac{5}{6})$ 는 $1960\sim1966$ 年 期間中 5年 10個月 또는 그 未滿年齡層에 있는 男子의 純人口 移動量의 推定値

 $NM(f, 0\sim 5\frac{5}{6})$ 는 $1960\sim 1966$ 年 期間中 5年 10個月 또는 그 未滿年齡層에 있는 女子의 純人口移 60 해물의 推定値

 $P(m.0\sim5\frac{5}{6})$ 는 1966年 센서스에서 5年 10個月 또는 그 未滿年齡層에 있는 男子의 人口數 $P(f,0\sim5\frac{5}{6})$ 는 1966年 센서스에서 5年 10個月 또는 그 未滿年齡層에 있는 女子의 人口數 $P(f,20\sim49)$ 는 1966年 센서스에서 $20\sim49$ 歲 年齡層에 있는 女子의 人口數

NM (f, 20~49)는 1960~1966 사이에 20~49歲 年齡層에 있는 女子의 純人口移動量

위의 公式에 該當 數字를 代入해 보면,

NM(m,
$$0 \sim 5\frac{5}{6}$$
) = $\frac{1}{2} \times \frac{288,844}{777,274} \times 147,255 = 27,354$

NM(f,
$$0\sim 5\frac{5}{6}$$
) = $\frac{1}{2}\times \frac{269,981}{774,274}\times 147,255=25,567로 算出된다.$

卽 5年 10個月 또는 그 未滿年齡層에 있는 男兒의 센서스間 純人口移動量은 約 27,000名으로 推定된다. 여기서 算出한 推定은 매우 正確한 것이라고 期待할 수 없으나 이러한 普通推定(crude estimate)은 어떤 有用한 目的으로 提供될 수 있다.

이 推定에 5年 10個月 年齡層以上 있는 人口에 대한 앞서의 推定을 加算하여 우리는 男子의 總純人口移動量이 383,000人이며 女子의 경우는 401,000人이라는 것을 알 수 있다. 따라서 兩센서스間의 서울市 純人口移動量의 總數는 784,000人으로 推定된다. 이 數值는 同期間中 서울市의 總人口成長分인 1,360,000人의 58%에 해당한다.

1966年 確定된 서울 市域內의 自然增加數를 推定하기 위해서는 總人口增加數에서 위의 純

人口移動量을 減하면 된다. 同期間中 出生과 死亡에 의한 正差는 421,000人이며 이는 1960—1966年 센서스間의 서울市 總人口增加分의 31%를 이루고 있다. 여기에 自然增加分인 421,000人은 1966年 市界內에서의 正差임을 注意해 두어야 할 것이다. 서울市의 1966年 市界內에서 두 센서스間의 年平均 自然增加率은 同期間中 全國의 年平均 自然增加率인 2.90 보다 약간 낮은 2.77 로서 算出된다.

要約하면 1960—1966年 센서스間의 서울市의 人口增加는 併合, 人口移動 및 自然增加라는 세가지 構成要素들에 의하여 밝혀지며 이 分析에서 純人口移動量은 總人口增加의 58%를 차지하는 單一의 가장 중요한 構成要素라는 것이 나타났고 死亡을 超過한 出生數에 의한 增加는 31%를 그리고 行政區域擴張에 따른 增加分은 11%로 밝혀졌다.

SELECTIVITY OF OUT-MIGIRANTS: A CASE OF SIX VILLAGES STUDY IN KOREA

Hyun-Ho Seok

1. Introduction

Urban population in Korea has grown rapidly in the recent past years. According to the preliminary report of the 1970 census, the urban population is estimated as about 13 million, which constitutes 43% of the total population of Korea. The corresponding figure of the year of 1949 was only 17%. Table 1 shows that urban population has steadily grown since 1949. Rural-to-urban migration in Korea accounts for a significant portion of this increase in urban population.

Table 1. Population of Korea by Census Year, Whole Country and Urban Areas, 1949-1970

	Total Population (in 1,000)	Urban Population (in 1,000)	% of Urban Population
1949''	20, 189	3, 474	17. 2
19551)	21,526	5, 281	24, 3
19602)	24, 989	6,999	28. 0
1966 ²³	29, 193	9,807	33. 6
19702)	31,469	12, 955	43. 2

Source: 1) Economic Planning Board, Korea Statistical Yearbook, 1963, (1963), Table 31, Population by Urban(Shi) and Rural (Gun), p. 21.

A number of articles have appeared in professional journals concerning the selectivity and process of rural-urban migration. Some of these are concerned with an estimation of volumes and rates of inter-provincial and rural-urban migration. Others are concerned with characteristics of in-migrants to cities and their adjustment processes for city life. Still further most of the studies on migration selectivity are carried out by asking questions to those migrants who are already in the areas of destination. Few have attempted to study the characteristics and the processes of

²⁾ Bureau of Statistics, Economic Planning Board, Preliminary Count of Population and Housing Census, 1970, (1971), Table 6, Population of Cities, p. 10.

out-migration in the context of the place of origin. The motives, conditions, and characteristics of out-migrants can not be adequately understood unless they are studied comparatively with non-migrants in the context of the total community setting in the place from where they depart.

This paper attempts to study some sociological factors related to the rural outmigration. Specifically, this study is concerned with the personal network of outmigrants in the village community and their socio-economic characteristics as compared with those who left behind by using the data from a longitudinal survey for six villages.

2. Data and Method

The data was obtained as a by-product of a longitudinal survey on the social structure in six villages conducted by Professor Man-Gap Lee in 1958 and 1969. These are located about 10 to 15 miles away from Seoul in Kwangju-gun, a county of Kyonggi Province. Each village forms a hamlet with a relatively small number of households ranging from about 30 to 90. Most of people in the villages are farmers. As in other villages in Korea, they are closely related to each other in everyday life. They also have a strong sense of group consciousness.

Structured questionnaire were utilized for the survey. In 1958, all of 346 household-heads in the villages had been interviewed. Major problems in the survey include basic demographic information, land-ownership, income, migration, occupational mobility, group activities, kinship-ties, and neighborhood relationships.

In revisit survey in 1969, it was found that 82 of the 346 original households in the 1958 survey had left the villages by the time of the reinterview. Because of close personal ties these people had maintained, the areas of destination for most of outmigrants were known to the villagers. Somewhat detailed information on where they went to have been obtained from Ri-chiefs and other related persons in the villages. Of the 82 households, 41 are known to have moved to Seoul, 5 to other cities, 23 to rural villages, and 13 to unknown destinations. Table 2 shows original households in

Professor Lee conducted a survey on "Social Structure of Korean Rural Community" in December, 1958. The result was published in 1960 under the title of "Social Structure of Korean Rural Community." He carried out a revisiting survey focused on social change in rural community in December 1969.

the six villages by migration status as of 1969.

Table 2. Original Households in the Villages by Migration Status

Destination		Number	Percent
Total Original Households		346	100.0
Out-migrant Households to	Urban Areas	46	13. 3
	Other Rural Areas	23	6.6
	Unknown Destination	13	3.8
Non-migrant Households		264	76.3

Source: Interviews with Ri-chiefs and other related persons.

By using data from the original and follow-up survey, I was able to compare some important characteristics of out-migrant households with those of non-migrant households. The comparisons were made with respect to personal network and socio-economic characteristics. As for the personal network, neighborhood relationship, kinshiptie, and participation of group activities are comparatively analyzed. As for the socio-economic characteristics, migration experience, social mobility, and occupational mobility of out-migrant households are compared with those of non-migrants.

It was not possible to obtain information directly from out-migrants on why they had left the villages. Nor the data from the 1958 and 1969 structured questionnaire survey provided information on direct motives and reasons of out-migration. However, I was able to indirectly obtain information on conditions and reasons why they had moved out by analyzing social and economic characteristics of out-migrant house-holds at the time of the first survey comparatively with those who did not migrate. Additional information on conditions of out-migration were obtained by asking to the persons who had maintained close relationships with them.

3. Analysis of Data

1) Personal Network of Out-migrants

Most of Korean villages are geographically isolated, small, and compact. Individuals who live within the boundary of a compact village are known to have a close contact with each other. Their social and economic lives have not only been in need of a cooperative system but also greatly influenced by group cohesiveness based on neigh-

borhood relations or kinship-ties.² Accordingly, individuals in Korean villages have had a strong sense of group consciousness, which has strongly influenced individual behavior of the villagers.

Out-migration of rural residents, however, takes place in the context of industrial-ization and urbanization of the larger society which affect the inner-solidarity of the village and hence weaken the forces which have bound the members together within the boundary of the village. Furthermore, the fact that out-migration of rural residents takes place in the process of weakening inner-solidarity of the village suggests that an analysis of rural-to-urban migration would be greatly related with the personal network of out-migrants within and outside villages.

Above perspective leads us to hypothesize that migration from a rural village to other area will be strongly influenced by neighborhood relationships or kinship-ties within the village, since most members in the Korean village, whether it is clan village or not, have a strong sense of group consciousness. This hypothesis is tested by examining personal network such as sociometry choices, degree of social and economic participation, and kinship-ties.

Contending that those who are alienated from the village solidarity are more likely to out-migrate than others, degrees of group solidarity as measured by sociometric method are compared between the migrant and non-migrant group. Sociometric network was constructed by asking household-heads, "Whom do you feel as the most intimate neighbor among the villagers?" Persons received high score for the question were considered as having a strong group solidarity and those received a low score were considered as maintaining a weak group solidarity. Table 3 shows that about

Table 3. Households by Migration Status and Sociometric Score of the Household-heads

		Out-mig	rant Househol	ds	Non-r	nigrant	T	otal
	Urban Area	Other Rural	Unknown Destination	Total N. %	Hoi N.	useholds %	N.	%
No Score	32	18	13	63 (35.8)	113	(64. 2)	176	(100.0)
1 and more Score	14	.5	- .	19 (11.2)	151	(88.8)	170	(100.0)

Source: Data from interviews with Ri-chiefs and other related persons and the 1958 Survey on the Social Structure of Korean Rural Community.

^{2.} Robert Redfield, "The Folk Society," American Journal of Sociology, Vol. LII, January 1947, pp. 293-308 and R.P. Dore, Land Reform in Japan, (Oxford University Press, 1959), Chapter XIV.

36% of the total original household-heads who were not chosen as "intimate neighbor" out-migrated, whereas only 11% of those who were chosen as "intimate neighbor" moved out. X^2 test indicates that the migration status is significantly related to the degree of group solidarity as measured herein. ($X^2=29.02$; P<.001)

It is also noted that those who moved into other rural areas recorded lower score in sociometry than urban-ward migrants. Those whose destination were not followed up are found to have no close personal ties with people in the village.

Among six villages covered in the survey, one village was largely composed of members of a clan. Table 4 shows that among 40 clan-households only 3 left the village by 1969. On the other hand, 8 of 17 non-clan households left the village by the time. It is clear that those who do not belong to the clan group in a village are more likely to out-migrate than those who belong to.

Table 4. Households by Migration and Clan Membership Status

	Out-migrant Households	Non-migrant Households	Total
Clan Members	3	38	40
Non-clan Members	8	9	17

Source: See Table 3

In addition to the above aspects of personal ties within villages, other aspects of personal contact such as exchange work and mutual financing association (key) may be related to out-migration of rural residents. In Korean villages it is quite common that individuals who live in a village have participated in various activities within the village because most of villages are geographically isolated, compact, and small, and each village has functioned as a self-contained economic unit. Thus, the degree of participation in group activities within the village may be another factor related to migration. In fact, it was found that those who had participated less in group activities out-migrated more than those who had participated more, as shown in Table 5. X^2 test indicates that the migration status by out-migration and non-migration is significantly related to the degree of participation of exchange work ($X^2=15.55:p<.001$) and mutual financing association ($X^2=8.13:p<.001$). However, those who moved into other rural areas participated more in exchange work than those who moved into urban areas. This seems to be due to the fact that most of the out-migrants towards other rural areas were employed in tenant farming.

It would appear that in the process of weakening group solidarity those who con-

Table 5. Households by Migration Status and Participation of Group Activities

a. Participation of Exchange Work

		Out-migra	ant Households	3	Non-migrant	
	Urban Areas	Other Rural	Unknown Destination	Total N. %	Household N. %	Total N. %
Participated	23	19	3	45(18.1)	204 (81. 9)	249(100.0)
Not Participated	23	4	10	37(38.1)	60(61.9)	97(100.0)

b. Mutual Financing Association (key)

		Out-migr	ant Households			Non-m	igrant	_	
	Urban Areas	Other Rural	Unknown Destination	Tot N.	al %		eholds %	To N.	tal %
Participated	12	6	1	19(1	5. 1)	107(8	34. 9)	126(1	100.0)
Not Participated	34	17	12	63(2	8. 6)	157(71.4)	220(1	00.0)

Source: See Table 3

tact less with their neighbor through group activities may be alienated from villageties and more likely to out-migrate than those who participated more. The concept of "marginal situation" with respect to migration developed by Park may be applied to the findings of our study. We may say that those who are alienated from their community lives in marginal situation. And these marginal men may be more likely to accept a motivation such as 'better life condition'.

Out-migration of rural people may also be related to personal network outside the village. That is, out-migration of rural dwellers may be facilitated by the existence of traditional primary inter-personal relations, especially those based on kinship-ties, with persons in the area of destination. There are many families in Korean rural villages which have a separated member or members who live in urban area. When the separated members in urban area successfully settle down, the rest of the members of families usually follow and migrate in that area. This type of family move may be called as a "delayed family migration". According to our revisiting survey,

^{3.} Robert E. Park, "Human Migration and the Marginal Man", American Journal of Sociology, Vol. XXXIII, May 1928, pp. 881-893.

^{4.} Man-Gap Lee, "Change in Korean Rural Community," paper presented at the 4th Conference on Problems of Modernization in Korean Rural Society, sponsored by Asian Research Institute, held in Kyoungju, Korea, 1970, p.5.

^{5.} John S. MacDonald and Leatrice D. MacDonald, "Chain Migration, Ethnic Neighborhood Formation and Social Netcworks", *The Milbank Memorial Fund Quarterly*, Vol. XIII, No. 1, January 1964, pp. 89—90.

the percentage of the delayed family migration was about 30% of all migrant failies who went to urban areas.

It is also conceivable that, similar to the above process, broader kinship-ties call forth migration from rural to urban area. In several cases in this survey, a family who had migrated in urban area achieved some wealth and community power, this family influences their relatives to migrate in that area. This type of migration may be called a "chain migration", 6 as MacDonald puts it. Case study of three Eastern Kentucky neighborhoods conducted by James S. Brown and his colleagues⁷ reveals similar findings to this.

2) Socio-economic Characteristics of Out-migrants: an Aspect of Social Mobility Experience

In this section, process of out-migration will be analyzed in relation to migrants' mobility experience such as repeated migration, socio-economic status mobility, and occupational mobility.

Goldstein in his Norristown Study⁸ tested a hypothesis that out-migrants, tended in large measure to be the persons who were previous in-migrants. In that study, data confirmed the hypothesis that out-movement from Norristown consisted in large measure of persons who had moved into Norristown in the earlier decades. He pointed out, "Since the continuous in-and out-movement is composed largely of the same persons, the great majority of migrant must at any given point in time be somewhat marginal persons in the community with little interest in or time available for integration into its core social organization". Migrants are likely to be alienated from their community. Thus, it is probable that the migration itself becomes a self generating force for repeated migration.

In our data it is shown that those who had moved into the village recently tended to move out more than those who had lived in the village longer. As Table 6 shows,

^{6.} Ibid., p. 82.

^{7.} James S. Brown, Harry K. Schwarzweller, and Joseph J. Mangalam, "Kentucky Mountain Migration and the Stem-Family: An American Variation on a Theme by Le Play," in Selected Essays and Research, Kenneth C. W. Kammeyer (ed.), (Rand McNally & Company, Chicago, 1969), p. 232.

^{8.} Sidney Goldstein, Pattern of Mobility 1910-1950, The Norristown Study. 'University of Pennsylvania Press, 1958, Chapter 10.

^{9.} Goldstein, "Repeated Migration as a Factors in High Mobility Rates", American Journal of Sociology, Vol. 19, No.5, October 1954, p. 540.

while 35 percent of those who moved into the villages after the World War II outmigrated, only 17 percent of those who were living in the area before the War did so.

Table 6. Households by Migration Status and Duration of Residence

	Out-migrant Households		Non-migrant Households		Total		
	N.	%	N.	%	N.	%	
Before 1945	40	(17. 1)	194	(82. 9)	234	(100.0)	
After 1945	34	(38. 6)	54	(61.4)	88	(100.0)	

Source: See Table 3

 $X^2 = 16.77 (P < .001)$

Twenty four No Responses excluded from X^2 analysis.

Second, in a sense that migration implies not only geographical mobility but also change in socio-economic status, it is important to examine the experience of vertical mobility of out-migrants. A hypothesis can be proposed that the rate of out-migration from rural area will be among those who have experienced downward mobility greater than among those who have been upwardly mobile, because the former would be more deprived and dissatisfied in the present residence. This hypothesis is confirmed by our data. As Table 7 shows, those whose current economic level are relatively lower than previous level are more likely to out-migrate than those who have been upwardly mobile.

Table 7. Households by Migration Status and Degree of Improvement of Household Economic Level after the Land-Reform

		Out-migrant Households		Non-migrant Households		Total	
	N.	%	N.	%	N.	%	
Worse after Land Reform	30	(31. 9)	64	(68. 1)	94	(100.0)	
No Change	25	(25.0)	75	(75.0)	100	(100.0)	
Better after Land Reform	21	(15.4)	115	(84. 6)	136	(100.0)	

Source: See Table 3

 $X^2 = 11.08 \ (P < .005)$

Sixteen No Responses excluded from X^2 analysis.

However, this does not necessarily imply that the migrants are generally from the lower economic stratum. As shown in Table 8, out-migrants are composed of persons from almost every level of economic ladder.

Finally, we turn to the problem of relationships of migration with occupational mobility. A comparison of the urban-ward out-migrant households with non-migrant households shows that the migrant households are more likely to be from those who

Table 8. Households by Migration Status and Economic Stratum a. Land Ownership

	Out-migrant Households		Non-migrant Households		Total		
	N.	%	N.	%	N.	%	
Landed Farmer	30	(17.2)	144	(82.8)	174	(100.0)	
Partly Landed and Partly Tenant Farmer	13	(20.0)	50	(80.0)	63	(100.0)	
Tenant Farmer	16	(28.6)	40	(71.4)	56	(100.0)	

b. Yearly Income

	Out-migrant Households		Non-migrant Households		Total		
	N.	%	N.	%	N.	%	
300,000 Won or more	13	(20.0)	51	(80.0)	64	(100.0)	
100,000—300,000 Won	31	(19.9)	125	(81.1)	156	(100.0)	
Less than 100,000 Won	29	(26.9)	79	(73. 1)	108	(100.0)	
Unknown	9		19		28		

Source: See Table 3

were engaged in non-farm occupation or farming with additional non-farm occupation, whereas the non-migrant households were mostly engaged in farming occupation. As shown in Table 9, only about a quarter of total out-migrant households to urban areas were farm households before migration. And it is also found that out-migrant households who had non-farm occupation in their previous residence tend to get the similar kind of occupation. This fact means that those who are capable of occupational adjustment in their destinations are more likely to out-migrate.

Table 9. Previous Occupation of Out-migrant Households by Destination

	into urban		into o	ther rural
	N.	%	N.	%
Farming only	12	(26.1)	18	(78. 3)
Farming with Non-farm Occupation	15	(32.6)	_	
Non-farm Occupation	16	(34.8)	5	(21.7)
No Occupation	3	(6.5)		
Total	46	(100.0)	23	(100.0)

Source: See Table 3

4. Summary

Internal migration is traditionally viewed as a process of population adjustment

within a whole society. This view holds that internal migration as a process of population adjusment is caused by social and economic imbalance existing among various regions. "Whatever the reasons, the important point is that when a region or a community in a society does experience economic decline, the migration of native population out of that area and into a more prosperous or promising one serves to improve the economic and social balance of the society." This perspective on migration is mainly concerned with a functional interpretation of migration as a social change.

However, though this perspective well suggests that rural to urban migration occurs from social and economic imbalance between two areas, it is not appropriate enough for analyzing the process of migration itself. In this paper, migration is viewed as a process occurring in the context of personal network within and outside the village and as being closely related with the previous experience of social mobility.

In this perspective, variables concerning with the process of migration are categorized into following four sets;

- 1) Inner-solidarity within the village of origin
- 2) Personal ties with people in the place of destination
- 3) Previous mobility experience
- 4) Potential capacity for migration in terms of occupational adjustment.

The relationships of these variables with the process of migration are examined separately by comparing characteristics of out-migrants with non-migrants in the rural village. The major findings are;

- 1) Out-migrants from the rural village tend to be marginal in the inter-personal network of the village
- 2) While out-migration of villagers takes place in the process of weakening group solidarity within the village, it also appears to be facilitated by primary relations with those who have settled in the place of destination
- 3) Those who lived in the village for a shorter period are more likely to out-migrate than those who lived in the village longer
- 4) Those who have experienced downward mobility are more likely to out-migrate than others

¹⁰⁾ Kammeyer (ed.), op. cit., p. 192.

5) Those who have engaged in non-farm occupation in one way or another are more likely to out-migrate than those who have engaged in farm occupation only. Most of previous researches on the out-migration selectivity of rural areas have been conducted by surveying urban residents who had moved into the urban area and have settled down in the area for some time. In that case, as noted earlier, it is difficult for researchers to find the objective conditions of migrants in the place of origin at the time of their move.

A more desirable method of research for analyzing the process of migration is a comparative study of out-migrants with continuous residents in the social and economic context of the place of origin. In this paper, it has been shown that the research on migration can be successfully conducted by comparing both groups in the village as an out-migration area. In this way, some important sociological factors, especially in terms of personal inter-relationship, are found to be closely related to the process of migration.