Article

DEMOGRAPHIC TRANSITION IN KOREA*

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This paper summarizes the demographic transition of Korea during a period from 1910 to 1970. The author contends that mortality decline in Korea during the colonial period (1910–1945) is due mostly to the modern medicine, so called "miracle drug," and only very recently in Korea has the process of modernization, the economic development together with urbanization and industrialization, set in motion to exert the trend of mortality.

As for the fertility, he concludes that the major factors in fertility decline, which started only after the Korean War, are the family planning programmes initiated by the Government, steady rise in age at marriage, and the increase in induced abortion practice.

The author discusses a few hypotheses related to population transition by Freedman, Coale, and Bogue. His main interest lies in testing the validity of the above mentioned hypotheses based on case studies of Korea and Japan for he implicitly assumes that such a comparative study will certainly give us more information on the content of demographic factors and hence new hypotheses on demographic transition in this part of the world.

I. MORTALITY TRANSITION

Mortality rate of Korean population up to the end of the 19th Century must have been very high, for available historical data amply document poor health conditions, a low standard of living and lack of public health system. No significant change took place in those conditions conducive to a high mortality level, which continued to prevail until after the annexation of Korea by Japan. The crude death rate during the 19th Century is assumed to be in the neighborhood of 35 deaths per thousand population.[1]

Mortality transition occurred during the first decade of the colonial regime, however. In the 1910–15 period, crude death rate was estimated to be 34 deaths per thousand as shown in Table 1. It was reduced to 26 by the first intercensal period, 1925–30, and further to 23 by the 1935–40 period. Life expectancy increased from 37.9 years for men and 37.2 years for women in 1925–30 to 42.0 years and 44.8 years respectively in 1940–45.

Such reduction of mortality was mainly brought about through prevention of infectious and contagious diseases and improvement of environmental conditions and public health facilities. For whatever reasons, the Japanese Government-General of Korea made considerable improvement of conditions of public health and sanitation through enforced prevention of infectious diseases, establishment of quarantine system, and construction of sewage and water ways. Additional factors which should be mentioned in connection with the mortality reduction are establishment of medical schools and facilities including hospital.

It should be noted, however, that this steady decline of death rate, unlike in the Western

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Table 1: **Crude Death Rates and Expectation of Life at Birth by Sex, 1910–70**

	CDR (per 1000)	Expectation of life at birth male	female
1910–	32–37	—	—
1910–15	34	—	—
1915–20	33	—	—
1920–25	30	—	—
1925–30	26	37.9	37.2
1930–35	24	40.4	40.1
1935–40	23	40.4	41.7
1940–45	23	42.0	44.8
1945–50	23	—	—
1950–55	33	—	—
1955–60	16	46.9	52.5
1960–65	15	48.1	53.5
1965–70	13	50.8	56.5

Source: Kwon, Tai-Hwan, Hae-Young Lee, Yunshik Chang, and Eui-Young Yu, *The Population of Korea*, The Population and Development Studies Center, Seoul National University, 1975, Table II. 4, p.23.

European countries, did not result from an improvement of standard of living. Farmers, constituting the great majority of Korean population at the time, became increasingly pauperized during the colonial period. A good many of them, in the end, left their village to seek new opportunities in Manchuria and Japan. More than two million people were estimated to have migrated to Manchuria and Japan.[2] World War II which broke out in the late 1930s did not directly affect the level of mortality as Korea never became a battleground.

Mortality trends after Liberation went through rather eventful processes. Korea was liberated in 1945 as the War came to an end with the victory of the allied forces, and subsequently came to split into north and south. Political and social disturbances and economic instability following the partition did have considerable effects on population trends. Although paucity of adequate data does not allow us to produce any direct demographic measures, vital rates appeared to have taken reverse direction temporarily.

The Korean hostilities which lasted three years (1950–1953) had even greater impact on population. War casualties were estimated to be 1.6 million, and the crude death rate rose sharply during the 1950–53 period, ranging from 36 to 47 deaths per thousand. After the truce in 1953, mortality rate went back to the pre-War level, and subsequently continued to decline again. The crude rate in 1954 and 1955 was estimated to be between 17 and 20 deaths per thousand population.

While the West experienced a remarkable decline of mortality owing to the invention of "the miracle drugs" during World War II Korea proved to be no exception in this respect. Introduction of such new medicines into Korea began to have a major impact on mortality level around 1955. Improvement of sanitary conditions made in the process of reconstruction from war devastation also contributed remarkably to mortality reduction. The crude death rate was 16 deaths per thousand total population in the 1955–60 period. In the 1965–70 period it was further reduced to 13 deaths per thousand. One may, therefore, note that 1955 marks a decisive turning point in mortality trend and will be remembered as the year when the second mortality transition started.

It is worth reiterating at this point that mortality transition in Korea reveals a characteristic that is observed in other developing nations. As the early mortality reduction which began during the first decade of this century had little to do with improvement of living conditions,

the recent, more rapid, decline during the 1960s may not be considered as a result of rising standard of living attendant on economic development. The Korean economy recovered to the pre-War level toward the end of 1950s; although the first five-year economic plan was launched in the early 1960s, rapid economic growth began to be witnessed toward the end of the 1960s.

II. FERTILITY TRANSITION

Existing evidence leads us to believe that the crude birth rate at the beginning of the 19th century would have been in the range of 35 and 40 births per thousand total population. We also assume that such a high rate of fertility remained more or less unchanged throughout the pre-modern period. In the traditional society, the great majority suffered from the extremely low level of living, malnutrition, and poor health conditions. As a result, mortality, especially the infant mortality rate, was high, which, in turn, helped to develop a pro-natalistic value system among Koreans. Furthermore, the Confucian ideology which governed the ways of livig as well as thinking idealized the patrilineal extended family system based on succession through sons. The custom of early marriage prevailed and marriage was universal. On the other hand, unlike in traditional Japanese society, there was no deliberate attempt to limit the number of children, nor was there any effective means to control fertility. In traditional Korean society, conditions favor high fertility, nearing the biological maximum within the limit of physical and health conditions. And this traditional high fertility appears to have continued until the time of Annexation.

The census data collected during the colonial period enabled us to estimate fairly useful fertility rates for the period from 1910 to 1944.[3] As shown in Table 2, the crude birth rate increased steadily from 38 births per thousand total population in 1910–15 to 45 births per thousand in 1925–30, marking the highest point. It then began to decline, reaching 42 births per thousand in 1940–45. The fertility trends during this period indicate following two points. First, during the entire period of Japanese control the crude birth rate consistently remained a traditional high level of more than 40 births per thousand. Second, although the crude birth rates were at a high level there was an upward trend in the first half whereas a downward trend in the second half of the period.

In contrast to the mortality trend, fertility of Korean population was little affected during

Table 2: **Estimated Crude Birth Rates, Total Fertility Rates, and Net Reproduction Rates**

Year	CBR (per 1000)	TFR	NRR
1910–	35–40	—	—
1910–15	38	—	1.17
1915–20	40	—	1.25
1920–25	42	—	1.40
1925–30	45	6.2	1.68
1930–35	44	6.1	1.77
1935–40	44	6.2	1.86
1940–45	42	6.1	1.93
1945–50	42	6.0	1.97
1950–55	40	5.6	—
1955–60	45	6.3	2.27
1960–65	42	6.0	2.19
1965–70	32	4.6	1.77

Source: See Table I for citation. Table II. 1, p. 12, Net Reproduction Rates are recent estimates by Kwon Tai-Hwan.

the Japanese period. The colonial regime deliberately avoided radical change of traditional customs, family systems, and the status hierarchy of Koreans. Social innovations introduced in the process of colonial rule are primarily intended for the interest of the colonizer, not for that of the colonized. The traditional Korean society was based on kinship or family solidarity to the point of being regarded as a familistic society. Radical transformation of the family system of Koreans who had been cherishing the Confucian ideal of family life was tantamount to a destruction of the Korean social structure at the root. This would not have been of any help to the Japanese authorities in their colonial control.

Owing to such circumstantial factors the traditional family system and family living which constituted the core of the structure of Korean society was relatively less affected by the colonial policy, or, in some sense, was deliberately protected by the Government-General of Korea. As an example, according to *Chosen Minjirej* (The Government-General decree on civil affairs) which was enacted in 1912, "regulations regarding capacity, kinship and inheritance in the Japanese civil code shall not apply to Koreans. As for any specific case related to these matters will be resorted to Korean customs.,' (Item 68)[4] This decision is of particular significance in view of the fact that all other legal regulations were brought in from Japan without much alterations.

We are not implying here that the family system can exist independently of other social institutions. All social institutions are closely interrelated with each other, and change in any one is necessarily accompanied by changes in others. Viewed in this functional perspective, the Korean family system under the conlonial administration was not completely exempted from change, and did not continue to retain its traditional patterns. Since 1910, the Korean family value and norm gradually began to change, and disorganization of the traditional family living became inevitable. It should be noted, however, that the pace of change was slower for the family than for other institutions. It is contended here that the Korean family system did not experience *a major* transformation in its essential aspect during the Japanese period.

Consequently, marriage patterns did not go through any substantive change throughout the entire colonial period especially in terms of age at marriage and its universality. As shown in Table 3, during the period between 1925 and 1940 the age at marriage for men increased from 21.1 years in 1925 to 21.8 years in 1940, while, for women, it increased from 16.6 years in 1925 to 17.8 years in 1940. In other words, over the fifteen year-period, marriage was delayed slightly less than a year for men, and about a year for women. The proportion married of both men and women aged 40 to 44 was almot 99 per cent. In fact, significant rise in age at marriage had to await until 1955. Even then the universal marriage pattern remained virtually intact. It is not therefore surprising that the high birth rate on the order of 40 births per thousand continued to prevail during the period under consideration. Explanation of the slight increase of fertility in early years may be found primarily in the mortality reduction of women in the reproductive ages. Establishment of modern medical facilities and improved sanitary conditions brought about not only an increase of the proportion of women surviving in the reproductive ages but also a reduction of danger attendant on pregnancy and delivery.

On the other hand, a slight decline of birth rate in the latter half of the colonial period may be ascribed to two factors. First, as indicated above, the age at marriage for women rose steadily throughout the colonial period, though not of a significant magnitude. Increase

Table 3: **Age at First Marriage by Sex, 1925–70**

	1925	1930	1935	1940	1955	1960	1966	1970
Male	21.1	21.2	21.4	21.8	24.7	25.4	26.7	27.2
Female	16.6	16.8	17.1	17.8	20.5	21.5	22.9	23.3

Source: See Table I for citation. Table III. 3, p. 46.

of one year of the age at marriage would have had an immediate effect of reducing fertility somewhat where knowledge about deliberate fertility control was lacking and contraceptive devices were not available. Second, in the course of Japanese invasion to China in the 1930s, massive armed forces were sent to the mainland China. As the war protracted, the labor shortage problem became gradually intensified in Japan. Toward the end of the 1930s mobilization of Korean labor for mines and mutinous factories in Japan slowly began. Japan entered the Pacific War in 1941. With the worsening manpower shortage conscription, an increasing number of Korean youths and adults was executed for labor service, and later, for military-service as shown in Table 4. Consequently, the enforced mobilization of Korean men in the prime ages had a cumulative effect on their marriage through temporary separation or death and thereby reducing the level of fertility.

Table 4: **Number of Total Korean Migrants and Labour Draftees to Japan, and Percentage of Labour Draftees, 1939–44**

	Total migrants	Labour draftees	Percentage of draftees
1939	179,956	49,819	28.2
1940	218,027	55,979	25.7
1941	242,469	63,866	26.3
1942	219,373	111,823	51.0
1943	272,776	124,286	45.6
1944	249,888	286,432	114.6

Source: See Table I for citation. Table II. 8, p. 32.

One cannot deny that there was substantial socio-economic transformation in Korea in the latter part of the colonial period, 1930–1945. During this period, urbanization proceeded slowly. The proportion of population residing in the city area with 20,000 and more residents increased from 4.8 per cent in 1925 to 6.9 per cent in 1930 and to 16.0 per cent in 1940 as shown in Table 5. But Korea continued to serve mainly as a supplier of rice and other raw materials to Japan proper, remaining predominantly agricultural, until the end of the colonial period. Since the late thirties, Korea became rather important as a strategic bridgehead for Japanese penetration into the Asian continent. Heavy industry began to grow in Korea, but was largely concentrated in a limited region in the north. Korean workers employed in the new industries were mainly unskilled laborers and were limited in number.

Table 5: **Population in Korea, Total and Urban, 1925–40**

Year	Total Population		Urban Population		Percent in urban areas
	Number	Intercensal	Number	Intercensal	
	(in 1000)	inc. (%)	(in 1000)	inc. (%)	
1925	19,523	13.1	931	65.4	4.8
1930	21,058	7.9	1,452	56.0	6.9
1935	22,899	8.7	2,115	45.6	9.2
1940	24,326	6.2	3,895	84.2	16.0

Source: See Table I for citation. Table IV.1, p. 62.

It is therefore rather doubtful to believe that urbanization and industrialization under Japanese rule had significant effect on the level of fertility of Korean women. Furthermore, the Japanese population policy during this period was that of pronatalist, the effect of which was strongly felt even in Korea. This policy emphasis was well summarized in one of the

most frequently heard slogan, "umeyo fuyaseyo (let's procreate, let's expand)." This was perhaps inevitable in view of the fact that Japan was in urgent need of manpower to meet the serious shortage of human resources arising from their efforts to win the war and to establish a "Coprosperity sphere of East Asia." Korean population, especially adults in working ages came to be viewed as a source of supplementary human resources.

In this connection, it should be underlined that in the latter part of the colonial period the crude birth rate showed a slight decline, whereas marital fertility, in terms of total fertility rates, did not, as shown in Table 2.

After the end of World War II in 1945, Korea faced unprecedented political disturbances and hardships while transforming itself from a closed to an open society. The bi-partition of the peninsula resulted into a polarization of ideology and a disorganization of economic life through breakdown of a single political and economic unit. The interim military administration by the U.S. Armed Forces, which was not familiar with Korean situations and was without any preparation could never be successful to manage the complicated problems following Liberation. In 1948, the Republic of Korea was established. Passage of the land-reform law at the Parliament in the following year provided a basis for agricultural development in the following year provided a basis for agricultural development through abolition of absentee landownership, and consequently an opportunity for an industrial development by inducing the landowners to invest money compensated for the land into industry. But the Korean War which broke out in 1950 had the devastating effects on every aspect of Korean society. During the period from 1945 to 1953, Koreans experienced disturbances and hardships which were of a scope and intensity unprecedented in Korean history and played a decisive role in redirecting the way of life of Koreans. Fertility behavior, together with fertility values and norms, proved to be no exception in this process. The impact of the Korean War on fertility behavior of Korean women was clearly reflected in the crude birth estimated to be 30 births per thousand population in 1951, the second year of the War.

Baby boom followed immediately after the War as it did in the Western Europe and the United States after World War II. Fertility level reached a peak in Korean history during 1955–60. As shown in Table 2 the crude birth rate was 45 births per thousand total populat]on (only the 1925–30 period had a comparable rate), the total fertility rate was 6.3, and the net reproduction rate was 2.27. In 1960, the natural growth rate became a record high of 29 per thousand which clearly pointed to a reality of population explosion in Korea and led concerned persons to turn their attention to the serious population problem.

Fertility reached its peak in 1957, and began to decline afterward. A military regime came into power after a coup detat in 1961. The Korean economy which was almost completely destroyed by the War was reconstructed to the pre-War level by the end of the 1950s. The military regime launched the first five-year economic plan and adopted family planning as an integral part of the national policy in 1962. A fertility transition in true sense of the term took place in Korea in the mid-1960s. The crude birth rate was reduced from 45 birth per thousand in 1955–60, to 41 births per thousand in 1960–65, and further to 32 births per thousand in 1965–70. In 1970, the crude birth rate estimated on the basis of census data was 31 births per thousand. It should be noted that, unlike in the latter part of the colonial period, both the total fertility and the net reproduction rate, together with the crude birth rate as indicated in Table 2 were reduced during this period. The total fertility rate declined from 6.0 in 1960–65 to 4.6 in 1965–70. During the same period, the net reproduction rate declined from 2.19 to 1.77.

This fertility reduction in the mid-1960s may be attributable to a variety of factors. First of all, it should be mentioned that family planning was recognized as a national policy in 1962. In 1963, the Ministry of Public Health and Social Welfare drew up a ten-year plan of family planning program and set up a target of reducing the natural growth rate per annum

from 2.5 percent in 1966 to 2.0 in 1971. The Government immediately established a nation wide organization network and raised a fund from the government budget and foreign aid for an implementation of the program. Various activities constituting the program proceeded rapidly. They are, family visits by the family planning program field workers, enlightenment and persuasion efforts for adoption of family planning devices through group meeting, advertisement of family planning through mass media, dissemination of contraceptive devices including IUD free of charge and the like.[5] In 1964 the percentage of currently married women aged 15–44 ever used contraceptives was only 12%. It increased to 28 percent in 1967, and to 55 percent in 1973. In terms of attitudes toward use of contraceptives, 89 percent of the same women approved in 1964 whereas in 1973, 98 per cent approved, with only 2 per cent opposing.[6] Indeed, these numerical figures indicate a dramatic change in fertility behavior and attitudes of Koreans. Although we do not accept very optimistic view on family planning we cannot help appraising highly of the Korean family planning program as a "planned change" for its contribution to the fertility transition.

The family planning program is not the sole factor accounting for the fertility reduction, however. It should be added that both rising age at marriage and increasing practice of induced abortion were also responsible. We have already mentioned that the age at marriage for women increased from 16.6. years in 1925 to 17.8 years in 1940, a gain of one year. The age at marriage continued to rise after Liberation, to 20.5 years in 1955, 21.5 years in 1960, 22.9 years in 1966, and 23.3 years in 1970. As for men, the same age was 21.8 years in 1940 whereas it increased to 24.7 years in 1955, and to 27.2 in 1970. The traditional custom of early marriage became transformed to that of late marriage with the major impetus coming from the Korean War. This trend did have a significant effect of reducing fertility level. Finally, there is a remarkable spread of induced abortion practice. As indicated in Table 6 the practice rate of induced abortion tripled during a ten-year period from 1963 to 1973. More specifically, abortion rate per thousand population increased from 5 to 12, while abortion rate per one hundred married women aged 15–44 increased from 6 to 30. It should also be noted in conjunction with the increasing trend of induced abortion practice that the Maternal and Child Health Law which had been disputed over years was passed in August 1973, and liberalization of induced abortion became finally assured.

In the above, we have reviewed those factors which contributed directly to the fertility transition in Korea in the mid-1960s and the recent trends of wide-spread practice of family

Table 6: **Estimated Number of Induced Abortions, Abortion Rates per 1000 Population and per 100 Married Women**

Year	Number of Abortions	Abortion Rates per 1000 Population	Abortion Rates per 100 Married Women
1963	139,000	5	6
1964	168,000	6	7
1965	210,000	6	11
1966	246,000	8	13
1967	258,000	9	14
1968	268,000	9	15
1969	307,000	9	19
1970	333,000	10	22
1971	327,000	11	26
1972	375,000	11	27
1973	390,000	12	30

Source: Song Kun-Yong and Han Seung-Hyun: 1973 National Family Planning and Fertility Survey, 1974, KIFP, Table 4–1, p. 162.

planning, rising age at marriage, and increasing induced abortion practice. One might ask how much reduction of fertility can be accounted for each factor. One source indicates that assuming there was a 38 percent reduction of fertility rate between 1960 and 1970, family planning was responsible for 11.5 percent, rising age at marriage 13.3 percent and induced abortion 11.5 per cent.[7]

III. EDUCATION AND PRIVATION

Fertility transition in Korea which began in the mid-1960s is still proceeding today. In the above, we pointed out three factors which contributed directly to the rapid fertility reduction. We then need to explore further on what caused changes in those demographic or intervening variables. Among others we would like to point to the following two factors.

On the basis of a comprehensive study on demographic transition in the 19th Century Europe, Coale questions the validity of the assumption which the demographic transition recognized to be self-evident regarding a close correlation between fertility reduction and socio-economic factors, especially industrialization and urbanization. The European Fertility Study directed by Coale indicates that differential fertility levels are more closely related with cultural and linguistic distinctions than the level of socioeconomic development.[8] Similar observation can be made with Korea's fertility transition in the 1960s. In Korea, the economy had not reached a take-off stage, and the urbanization was fairly slow until the late 1960s.

One of the most prominent change in Korean society after Liberation was development of educational system and a rapid increase of school attendance rate. With establishment of the new government in the South Korea in 1948, the six-year elementary school education became compulsory for the first time in the history of Korea. As shown in Table 7, nearly 90 percent of children of elementary school ages are attending school, and attendance rate above the middle school level has increased steadily over the years, with ever-narrowing gap between boys and girls in attendance rate. This quantitative expansion of education might not have been attended by qualitative improvement under economic conditions prevailed in Korea during the same period, but certainly reflects a response to a high educational aspiration of Koreans.

Importance of the role of education in family planning program is frequently mentioned in its relation with propagation of knowledge about family planning and dissemination of con-

Table 7: **Percentages of the Population Attending School at Ages 6–24 by Age Groups and Sex, 1930–70**

		1930	1940	1955	1966	1970
	Age			Both Sexes		
Total	6–24	6.06	15.60	37.7	58.1	62.7
	6–12	13.53	32.74	65.9	87.5	89.8
	13–18	1.06	2.39	26.1	47.2	58.6
	19–24	0.09	0.17	4.4	9.3	9.7
				Men		
Total	6–24	—	—	46.0	62.2	66.5
	6–12	21.72	46.96	73.3	88.9	90.4
	13–18	1.71	3.92	36.8	56.8	67.2
	19–24	—	—	7.9	13.2	12.7
				Women		
Total	6–24	—	—	28.9	55.5	58.7
	6–12	4.84	17.97	57.8	86.1	89.2
	13–18	0.36	0.81	14.2	42.0	49.5
	19-24	—	—	1.3	5.1	6.5

Source: See Table I for citation, Table III. 12, p. 59.

traceptive devices. Implications of education for fertility behavior go much beyond that. As Freedman aptly pointed out, "it is more basic."[9] In his own words,

> with increased education and literacy the population becomes involved with the ideas and institutions of a larger modern culture. If the individual is, or believes he is, part of a larger non-familiar system, he begins to find rewards in social relationships for which large members of children may be irrelevant.

There is a sense in which education becomes a window through which we see the world outside and a medium through which we contact with the people outside. Education therefore promotes change of values and attitudes and an adaptability to a new environment.

Secondly, Koreans went through the most trying period during the decade between 1945 and 1955. Before Liberation, agriculture and light industries in the south relied heavily on electricity and fertilizer produced in the north. The south-north partition was followed by discontinuation of the supply of electricity and fertilizer, and the south Korean economy came to face a chaos. Even in family living Koreans had to go back to a "dark age" of candle and petroleum lamp for years. The Korean War subsequently uprooted the economic basis which was meager and insecure. During the War period, living conditions of Korean fell to an almost inhumane level due to a soaring inflation, extreme paucity of living commodities, destruction of households and the like. Furthermore, few families remained unaffected by the war tragedy of separation or death of family members. The War might not have had the effect of total transformation of the traditional extended family system, but did cast a doubt on the pattern of family living which had been deemed as ideal for centuries. In this regard, what Bogue calls a "new discovery" that "privation is a powerful motivating force for fertility control" appears to have considerable validity for an explanation of the fertility transition in Korea, but we do hesitate to render full support to Bogue's contention that his notion applies, without any qualification, to "every population" experiencing privation due to a rapid population increase.[10] The same argument could be made for the Japanese experience in fertility transition after World War II.

In short, it is our belief that there developed necessary and sufficient conditions for fertility control in Korea in the early sixties as a result of a variety of events and shocks which Koreans experienced during the relatively short period after 1945, together with the slow but continuing socio-economic transformation under the Japanese control. Accordingly, it seems proper to argue that the family planning program which proceeded concurrently became a catalyst to fertility transition in the mid-1960s.

IV. PROSPECT

This past decade witnessed a remarkable change in fertility behavior and attitudes. According to 1973 National Family Planning and Fertility Survey, 55 percent of currently married women aged 15 to 44 have ever practiced family planning mainly for better child care and improvement of their level of living. Only four percent of those women not practicing family planning had no knowledge of contraceptive devices. Nowadays, contraceptive devices can be bought easily at drug stores, or obtained free of charge from a government agency in charge of family planning. In 1973, induced abortion became finally legalized. In the same year, 30 percent of the currently married women sampled in the above mentioned survey has ever had at least one induced abortion, with the mean number of induced abortion being 2.1. The number of children considered to be ideal by married women also decreased sharply within the past ten years. In 1973, the same survey shows the number to be about three children, a reduction of about two children from that in the early sixties.[11]

In short, it appears that Korea is getting ready to meet those three general prerequisites for a major fall in marital fertility listed by Ansley J. Coale:[12]

1) Fertility must be within the calculus of conscious choice. Potential parents must consider it an acceptable mode of thought and form of behavior to balance advantages and disadvantages before deciding to have another child. . . .
2) Reduced fertility must be advantageous. Perceived social and economic circumstances must make reduced fertility seem an advantage to individual couples.
3) Effective techniques of fertility reduction must be available. Procedures that will in fact prevent birth must be known, and there must be sufficient communication between spouses and sufficient sustained will, in both, to employ them successfully.

Those children born during the baby boom years after the Korean War are entering, or have entered, the reproductive ages, hence the absolute size of Korean population is expected to grow further. Nevertheless, it is not likely that fertility rate will resume the traditional high level unless an unpredictable, radical change breaks out. There, however, remains one question. Just how fast will Korean population reach the zero population growth?

In light of the fertility reduction in the late 1960s some demographers expect that the fertility transition in Korea will repeat the Japanese experience in terms of pattern and speed for the reasons indicated below. First, both Korea and Japan have been under the influence of Confucian culture. Second, in addition to the geographical propinquity between the two countries, Korea has been influenced by Japanese culture during the colonial period. Third, currently both industralization and urbanization are proceeding rapdily in Korea, and the pace of development in Korea excels that in Japan in the early years.[13]

Reasonable as these grounds may appear, we nevertheless find some basic differences between the two countries upon close examination. First, the crude birth rate of Korean population had maintained a high birth rate of above forty births per thousand from the turn of the century to recent years, with the natural growth rate reaching the peak of 3 percent per annum. On the other hand, in Japan both the fertility and natural growth rate have never been so high. During the seventy-year period from the early Meiji Restoration period (1870s) to the end of World War II the crude birth rate remained between the highest, 35 births per thousand, the lowest, 29.4 births per thousand, averaging slightly above 30 births per thousand. Accordingly, the natural growth rate during the same period remained relatively low: less than 1 percent between 1870 and 1895, and 1.1 to 1.4 percent between 1900 and 1940.[14]

Second, there is a big difference between Koreans and Japanese in terms of attitude toward children, especially son. The son-preference orientation among Koreans has been widely known, and its impact on fertility level has been well documented. According to the **1973** *National Family Planning and Fertility Survey*, the proportion of women wanted to have more children in the hope of having at least one boy 'if there were no sons after having wanted number of children' were 69 percent; 52 percent in Seoul, 59 percent in other cities and 80 percent in rural areas. Again, the proportion of women who already had one boy and wanted to have more sons was 37 percent; 13 percent in Seoul, 27 percent in other cities and 51 per cent in rural areas.[15] The proportion of women by age group in both cases is shown in Table 8.

These findings do indicate a strong tendency among Korean couples to continue to have children until at least one son is born.

Mainichi Newspaper in Japan has conducted similar surveys, "The National Opinion Survey on Family Planning" since 1950 at an interval of two years. The *Demographic Revolution in Japan*, a summary report of the survey from 1950 to 1969, however, makes one realize that no question on boy-preference orientation has ever been asked. This lack of interest in the

Table 8: **Percent of Women Wanting to Have More Children after Having Had Wanted Number of Children but No Boys or One Boy by Wife's Age**

Age	Numberof Sons after having wanted number of children	Total	Yes (%)	No (%)	Unknown (%)
15–24	0	100 (227)	59	36	5
	1	100 (227)	26	68	6
25–29	0	100 (431)	65	31	4
	1	100 (431)	29	66	5
30–34	0	100 (480)	70	26	4
	1	100 (480)	42	54	4
35–39	0	100 (468)	72	24	4
	1	100 (468)	39	58	3
40–44	0	100 (313)	75	22	3
	1	100 (313)	45	52	3

Source: See Table VI for citation. Table 2–13, p. 47.

problem of boy preferences seems to reflect their own attitudes which are very different from Koreans.[16]

In order to understand this different orientation in spite of the same Confucian cultural background, we should ask the following two questions. First, to what extent the Confucian philosophy was emphasized at the state level, and was accepted by people in two countries? Second, how do they differ from each other in family and kinship systems? As for the first question, it should suffice to say that Confucian culture was much more deeply entrenched in Korea than in Japan. An answer to the second question may be found through a comparison of the degree of kinship consciousness and adoption system between Korea and Japan.

In his comparative study of the social structure of Japan and of China, Levy, Jr. regards traditional China as a family oriented society in that loyalty to the family or kinship group precedes that to any other groups. On the other hand, traditional Japan was characterized by a rigid feudalistic hierarchy, with loyalty to a feudal lord always preceding that to the family. Another contrasting factor in the developmental process of the two countries is the system of adoption. One unique aspect of this system in Japan, in contrast to China, may be found in administration by adoption among the Samurai (warrior) class.[17] Although it never became an ideal pattern for family succession and was not to be hoped for by people, a qualified person was adopted, regardless of kin relations, to succeed the family genealogy in place of the son who was considered to be incompetent. This custom continued to exist until today without much change. Based on post-World War II surveys, Pelzel states as follow:[81]

> In the absence of a qualified direct-line descendant, a close or a distant kinsman, or with great frequency even a male with no genetic link whatsoever to the house, may be adopted as the successor to the head. If there are daughters but no son, it is usual for the adopted successor to be brought in simultaneously as the husband of the eldest daughter. Whatever the successor's origin, once adopted he takes the family name, and in all formal and legal aspects he becomes the authorized head of the household and house he had entered and is incorporated into its genealogy.

If we compare the Korean family system to that of either Japan or China, it tends to be closer to the latter. Historically, Korea was never feudalistic, and through strong influence of Confucian culture became what Levy calls a family oriented society. With regard to the system of adoption a set of related regulations were stipulated for Yangban (nobility) families in the early period of the Yi dynasty—during the reign of the fourth king, Sejong.[19] The gist of the regulations is that if there is no son, another person must be brought in from the family of

brothers or of the same lineage or clan to succeed the family and to observe ancestor worship. In other words, it was strictly prohibited to adopt someone who was not genetically related. This rigid system of adoption did not exist in Koryo dynasty which immediately preceded Yi dynasty. Until the end of Koryo dynasty period, adoption of non-kin member was not rare, and the custom of family succession through daughter's son was also practiced. In Yi dynasty Korea, however, as the Confucian philosophy became the guiding principle not only for politics but also for every aspect of social life, even the system of adoption was forced to change. Under new regulations, family succession has to be made through son. The son-preference orientation in Korea thus dates back at least five centuries.

Attitudes toward son are not, of course, without change since the society at large is changing. We do not, however, expect that the son-preference attitude will change over night.

It should also be added that more than 2 million people are living in rural areas without resident doctors. They live in the environment where lack of medical facilities always present the possibility of sudden death of their children. But there is no likelihood that the government will place emphasis exclusively on economic development and social welfare in the near future as a large portion of the national budget must be allocated for defense purposes.

In view of the facts considered above it is rather doubtful that the fertility transition in Korea will proceed at the same pace experienced in Japan. It will be some time for the Korean fertility transition to reach the final stage, unless some radical changes take place in other conditions.

Note

1) For the historical study of Korean population written in English, see:
   Chang Yunshik: Population in Early Modernization: Korea, 1966, unpublished Doctoral Dissertation, Princeton University.
   Kim Yun: The Population of Korea 1910–1945, 1966 Unpublished Doctroal Dissertation, Australian National University.
   Kwon Tai-Hwan: Population Change and Its Components in Korea 1925–1966, 1972, unpublished Doctoral Dissertation, Australian National University.
   For the present paper, the author relied on the vital rates estimated by Tai Hwan Kwon in Chap. II, "Component of Population Growth," *The Population of Korea*, 1975, The Population and Development Studies Center, Seoul National University, Seoul.
2) For pauperization of Korean farmers in this period, among other works, see:
   Kenich Hisama: *Chosennogyo no Kindaiteki Yoso* (*Modern Korean Agriculture*), 1935, Nishigahara Kanko Kai, Tokyo. Particularly, Part I, Chap. 6 and 7.
3) The first Korean census was conducted by Japanese Government-General in 1925, which was followed by successive quinquennial censuses in 1930, 1935, 1940 and 1944.
4) Chung Kwang-Huen: *Hankuk Kachok Bop Yunku* (*A Study on Korean Family Law*), 1967, Seoul National University Press, Seoul, p. 22.
5) There are voluminous research and survey reports on the Korean family planning program which appeared during the past ten years. Among others, see:
   The Ministry of Health and Social Affairs (ed.): *Population and Family Planning in the Republic of Korea*, Vol. I, 1970, Ministry of Health and Social Affairs, Seoul, and
   Korean Institute for Family Planning (ed.): *Population and Family Planning in the Republic of Korea*, Vol. II, 1974, Korean Institute for Family Planning, Seoul.
6) Song Kun-Yong and Seung Hyun Han: 1973 *Chunkuk Kachok Kyehwek mit Chulsan Ryok Chosa* (1973 *National Family Planning and Fertility Survey—A Comprehensive Report*), 1974, Korean Institute for Family Planning, Seoul.
7) Lee Byung-Moo: "The Impact on Fertility of Age at First Marriage, Induced Abortion and the Family Planning Program," 1970 *Annual Report of Family Planning*, Vol. I, 1971, The National Family Planning Center, Seoul, p. 180.

8) A.J. Coale: "The Demographic Transition Reconsidered" *Proceedings of IUSSP International Population Conference*, 1973, IUSSP, Liege, Belgium, p. 63.
9) Ronald Freedman: "Norms for Family Size in Underdeveloped Areas," in Michael Micklin (ed.): *Population, Environment, and Social Organization: Current Issues in Human Ecology*, 1973, The Dryden Press, Hinsdale, Ill., p. 185.
10) Donald J. Bogue: "Recent Developments in Family Planning that Promise Hope in Coping with the Population Crisis in Asia and throughout the World, in Minoru Tachi and Minoru Muramatsu (eds.): *Population Problems in the Pacific: New Dimensions in Pacific Demography*, 1971, Conveners of the Congress Symposium No. 1, Eleventh Pacific Science Congress, Tokyo, 1966, p. 240.
11) Song Kun-Yong and Seung Hyun Han: *op. cit.*
12) A.J. Coale: *op. cit.*, p. 65.
13) P.W. Kuzents: "Accelerated Economic Growth and Structural Change in Korea," paper presented at the Conference on Population and Development in Korea, Jan. 1975, Seoul, jointly sponsored by The Population and Development Studies Center, Seoul National University, Social Science Research Council, N.Y., and American Council of Learned Society, p. 10. In comparing the recent rapid growth and structural change of Korean economy with those of Japan (1878–1882 to 1923–1924) and Sweden (1861–1865 to 1901–1905), he states that "whereas the process lasted 40 to 45 years in these countries, it took only 20 years in Korea."
14) Kuroda Toshio: *Nippon Jinkō no Bunseki* (*Analysis of Japanese Population*), 1968, Ich Ryu Sha, Tokyo, pp. 4–6 and Table 1.
15) Song Kun-Yong and Seung Hyun Han: *op. cit.*, p. 239.
16) Mainichi Shinbunsha Jinkomondai Chosakai (eds.): *Nippon no Jinkō Kakumei* (*Demographic Revolution in Japan—Twenty Years of Public Opinion Surveys on Family Planning*), 1971, Mainichi Shinbunsha, Tokyo.
17) Marion J. Levy, Jr.: "Contrasting Factors in the Modernization of China and Japan," in S. Kuznets, W.E. Moore and J.J. Spender (eds.): *Economic Growth: Brazil, India, Japan*, 1955, Duke University Press, Durham, N.C. p. 499.
18) John C. Pelzel: "Japanese Kinship: A Comparison," in Maurice Freedman (ed.): *Family and Kinship in Chinese Society*, 1970, Stanford University Press, Stanford, p. 232.
19) Kim Doo-Hun: *Hankuk Kachok Chaedo Yonku* (*A Study on Korean Family Institution*), 1949, Eulyu Munhwa Sa, Seoul, p. 325.

〈國文要約〉

한국의 인구변천

李　海　英

이 논문은 1910년에서 1970년에 이르기까지의 기간동안 한국에서의 인구변천을 개괄하고 있다. 필자는 식민지 통치기간(1910—1945) 동안 한국에서의 사망율 감소는 주로 소위 특효약이라고 불리우는 현대의학의 보급에 기인한 것이며 산업화와 도시화를 수반하는 근대화 과정과 경제발전이 사망율 추세에 영향을 미치게 된 것은 극히 최근에 이르러서 일 뿐이다라고 주장하고 있다.

출생율에 대하여 그는, 한국전쟁 직후에 시작되었던 출생율 감소는 주로 정부가 주도했던 가족계획 프로그램, 지속적으로 높아진 결혼연령, 인공임신중절실시의 증대 때문이라고 결론을 내리고 있다.

필자는 프리드만(Freedman), 코울(Coale), 보그(Bogue)가 내세운 인구변천과 관련된 가설들을 논하고 있다. 특히 한국과 일본의 사례연구에 근거를 두고 있는 가설의 타당성을 검증하는데 주로 관심을 두고 있는데, 이는 필자 자신이 이러한 비교연구를 통하여 우리가 보다 많은 인구학적 요인에 관한 정보와 그리고 이 지역의 인구변천에 관한 새로운 가설을 얻을 수 있으리라 믿고 있기 때문이다.