STUDIES OF SOCIAL STRATIFICATION AND SOCIAL MOBILITY IN JAPAN: 1955-1967

by Ken'ichi Tominaga

Research Trends

After World War I when the Japanese economy had, for the first time, reached a high level of capitalist development, liberal intellectuals began to debate such questions as the poverty of the working class and the future of the middle class. Discussions of social class revolved mainly around socialist ideas. At the same time, sociology began to emerge as distinct from socialist thought, and we may trace the study of “social stratification” by Japanese sociologists from the 1920’s (see Tominaga 1965 for a bibliography).

After World War II, many new concepts derived from empirical surveys in American sociology and anthropology were introduced to Japan. Survey techniques such as Warner’s method of “Evaluated Participation” and “Index of Status Characteristics” (Warner et al 1949) and ideas such as those contained in Center’s interest group theory” (1949) were discussed in the 1950’s and related to traditional concepts of “social class” (Yamamoto 1956; Hamajima 1956).

The two earliest empirical studies of social stratification in Japan were conducted in 1952 (Yasuda 1953; Kido and Sugi 1953; Hibi 1953; Odaka and Nishihira 1953; Nihon Shakaigakukai Chosainkai 1954). Kido and Sugi investigated “authoritarian-democratic” and “conservative-progressive” attitudes of Tokyo residents in relation to their socioeconomic status. Using the data from a survey of six large cities, Odaka and Nishihira attempted to measure social status in terms of occupational prestige, education, and income, and also to measure inter- and intragenerational social mobility. This study provided the Japanese data for a comparison of occupational prestige in six nations (Inkeles and Rossi 1956).

Social mobility in the broad sense has been defined to include population movement from rural villages to the cities (Hayashi 1940; Nojiri 1943; Tachi 1962; and Kuroda 1966). Until about 1955 Japanese villages provided “surplus” population to satisfy the needs of the cities; after that time, however, increased opportunities for employment and rises in wages attracted the young people, even the heirs of rural families, to the cities.

Social mobility in the broad sense also refers to the movement of labor
from one locality, industry, and firm to another. Social movements of these kinds have been extensively studied by sociologists and labor economists (Ujihara 1966; Nishikawa 1966; Yamamoto 1967; Fuse 1967; Arisawa and Naito, eds. 1968; and Rodosho 1968). After 1952, studies of social mobility in terms of "vertical mobility" dealt with occupational statuses; the earliest studies on this topic were by Hibi (1953) and Odaka and Nishihira (1953).

A survey in 1955 by the Research Committee of the Japanese Sociological Society was the first to cover the entire population. It included such topics as occupational ranking, occupational mobility, social attitudes, subjective status judgments, mutual evaluation of social statuses in rural communities, and estimates of social status according to occupation, education, and income. The principal findings (Nihon Shakaigakukai Chosaiinkai, ed. 1958, Odaka, ed. 1958) may be summarized as follows:

1. Quantitative measures of social status do not correlate with each other. For example, correlation coefficients between scores for prestige based upon occupation and subjective judgments or prestige are only .223 (in the national survey) and .304 (in the Tokyo survey).

2. Education was generally considered the most important criterion of social status.

3. Except for farmers and those in professional occupations, movement between generations is high.

4. Values and attitudes differ according to the education, occupation, and income of the respondents, but the greatest differences relate to age.

The 1952 survey (of six large cities) and the 1955 survey (of the nation) were important in providing extensive statistical data, and they also stimulated Japanese sociologists to adopt survey techniques. However, the data were not fully analyzed and led to no definite conclusions. The 1955 national survey was followed by the 1960 Tokyo survey and the 1965 national survey. These materials are now being coded, and I have made use of them in this report.

In his analysis of the 1960 Tokyo survey, Yasuda (1962, 1964) demonstrated that the "index of association" (Glass et al. 1954; and Natalie Rogoff 1953) used in the 1955 national survey is defective as an index of mobility. Yasuda presented the "y-coefficient" or coefficient of openness. Kurasawa (1968: Ch. 6) found that the y-coefficient of those who came to Tokyo to enter college and after graduation got jobs in Tokyo was .79, whereas that of those who moved to Tokyo to take employment after graduation from schools of any kind elsewhere was .96. There are thus two types of migrants: one has a family background of fairly high status and graduates from college in Tokyo to become a white-collar worker; the other enters small firms as a blue-collar worker or small retail stores as a salesclerk and falls in the lower social stratum of the Tokyo population. Tominaga (1968) also analyzed the same data from a different perspective. In contrast with
Abegglen's statement that Japanese employees enter into "life-long employment," he found that only 12.1% of all employees stay in one firm throughout their careers, and that the tendency toward life-long employment is prominent only among white-collar workers in large business firms.

A related area of research concerns the social mobility of the elite. Various scholars (Noda 1960; Mannari 1965; Aonuma 1965; and Aso 1967) have studied the careers of successful persons in politics, the business world, and other occupations, classifying them by family background, birthplace, education, and so on. The studies of Mannari and Aso are especially excellent in providing a broad historical perspective from early Meiji times to the present. Mannari showed that 50% of the first generation of the business elite in early Meiji came from the merchant class, and the remaining 50% came from the warrior and peasant classes. Aso distinguished three types of elites: the mobile, the indigenous, and the local city elite. According to his analysis, the number of mobile elites has increased constantly since the Meiji era.

Social Stratification in Japan: 1955-1965

After recovery from the damage of World War II, the period from 1955 to 1965 was one of rapid industrialization and social change in Japan. Tables I-V contrast data on occupations, education, and income (the major criteria of social stratification) from the 1955 and 1965 national surveys.

Occupations: Table I shows a striking decline of almost 10% in the percentage of agricultural workers, and increases in the number of workers in all occupations other than mining and agriculture, especially clerical workers and production process workers; the number of sales workers and workers in transport also increases considerably.

Education: According to the national survey data, the percentage of college graduates increased from 12.6% in 1955 to 14.0% in 1965. Persons with secondary education (the middle schools in the old system or the high schools in the new system) increased from 19.2% to 25.5%.

Education today importantly mediates the influence of ascribed status upon achieved status. That is, without modern education a person's occupational opportunity was determined principally by his family background—his parents' education, occupation, socioeconomic status, and the like. Familial background nevertheless continues to be an important influencing factor. Table II reveals the extent to which a person's education varies according to his father's occupational status. Men whose fathers are professionals or managers have the most education, the sons of farmers or unskilled laborers have the least. Data in Table II indicate that the father tends to "pass on" his status to his son through education. However, since differences in levels of education as influenced by occupation of the father are not very large, the effect of ascribed status on opportunities for occupational advancement is not strong.
Social Mobility in Japan: 1955-1965

Conventional descriptions of occupational mobility between generations consist of those proportions of men whose occupations differ from those of their fathers. Inflow and outflow rate according to the formulae shown in the footnote of Table III are used to represent occupational mobility.

Table III compares inflow and outflow rates of each occupational category for 1955 and 1965. The following tendencies appear:

1. The intergenerational mobility rate of Japanese society as a whole increased from 51.6 to 64.3.
2. The most striking change occurred in the agricultural sector. In 1955 farming was the only occupation in which the outflow rate was less than 50%, but in 1965 it reached 64.0%. Many farmers’ sons are leaving the agricultural sector and few are taking their place: the inflow rate of farmers decreased from 13.4% in 1955 to 11.0% in 1965.
3. Semiskilled workers already had a high inflow rate in 1955; the increase to 93.7% in 1965 reflects rapid industrialization.
4. The professions are usually considered relatively closed to outsiders. This was true in 1955, but both inflow and outflow rates for the professions increased in this decade. Saleswork is one of the few occupational categories in which both inflow and outflow rates decreased.

The inflow rate and the outflow rate stand for “actual mobility,” which is composed of two parts (Yasuda 1962): “forced mobility” (produced by an imbalance in demand and supply for labor) and “pure mobility” (occurring as spontaneous movement from one category to another). If “forced mobility” were eliminated, the remaining “pure mobility” would define the extent of “openness” or “closedness” of a particular occupation.

The index of association and the index of dissociation presented by Glass et al. (1954), the coefficient of association or c-value presented by Carlsson (1957), and the measure of social distance mobility presented by Rogoff (1953) are common devices for measuring “pure mobility.” Yasuda (1962, 1964) has presented the “y-coefficient,” or “coefficient of openness,” using the formula presented in the footnote of Table IV. The y-coefficients for each occupational category as well as for the society as a whole in 1955 and 1965 are shown in Table IV. We can summarize our observations as follows:

1. The coefficient of openness of the society as a whole increased from .583 in 1955 to .648 in 1965. This means that increases occurred not only in actual mobility, as indicated by inflow-outflow analysis, but also in pure mobility, as indicated by the y-coefficient.
2. The occupations closest to perfect mobility in both 1955 and 1965 are clerical and semiskilled work; in both, the extent of openness increased during the decade.
3. For occupations involving skilled work, the degree of openness increased from .622 in 1955 to .782 in 1965, thus reducing the difference in
degree of openness between skilled and semiskilled workers in 1965.

(4) The coefficients for the occupations of manager and farmer decreased during the decade. The closed character of farming is especially striking.

We may conclude that from 1955 to 1965 intergenerational mobility (both actual and pure) increased in society as a whole as well as in many occupational categories. In this section I have dealt only with intergenerational mobility. Intragenerational mobility will be analyzed from a somewhat different perspective in the next section.

Process Analysis of Social Mobility

As mentioned in the previous section, one conventional method of analyzing social mobility is to treat intergenerational and intragenerational mobility as separate but parallel. However, analysis of intragenerational mobility measures the change in status of a single person and not of two people, as in our previous discussion of father and son. The concept of "perfect mobility" cannot be applied in analysis of intragenerational mobility, which concerns changes in an individual’s status throughout his lifetime. When a child is small, his status is completely determined by the status of his father. When he is a student, his social position is determined by the level of education which he has achieved. After he enters the labor market, his social position is determined by his occupation and income. At any one point, a person’s past statuses become points of ascription in determining his present status. For example, a student's level of education can be treated as his achieved status, whereas his father’s status becomes his ascribed status. When he first takes a job in the labor market, his past educational achievement becomes a point of ascription. When he moves to a second job, his first job becomes a point of ascription. Thus, from the perspective of a person’s progress through life, the two concepts of achievement and ascription must be seen as relative.

"Path analysis" as developed by Duncan (1966; Blau and Duncan 1967) is an excellent analytical tool for quantifying these changes in status over time. A schematic outline of the process of change over one’s lifetime is presented in Figure 1. This figure includes the five variables used in Duncan’s model and an additional one, present income. To simplify presentation, the following abbreviations will be used: father's education (V), father's occupational status (X), respondent’s education (U), respondent’s first occupational status (W), respondent’s present occupational status (Y), and respondent’s present income (Z). “X” has been defined as the father’s occupational status at the birth of the son (Mukherjee and Hall, in Glass, ed. 1954), at the time when the son was age 16 (Blau and Duncan 1967), at the time the son entered the labor market (Yasuda 1962), or according to the major occupational position of the father during his career (Nihon Shakai-
Thus we can place "X" in different time points from T₁ to T₃ (Fig. 1). In the following presentation, we have used as father's occupational status his major occupation during his career, and this status therefore covers a broad span of time. When used for analysis of the son's status, it can be taken as a generalized representation of the status of the son at time T₁. The distance between T₃ and T₄ represents a person's career from the time of his first to his present employment. Because our respondents vary in age from young to very old, the time between T₃ and T₄ in our sample varies from zero to as much as forty or fifty years. In order to analyze the changes between former and present occupation, it is necessary to control for age.

Because the "path model" is a quantitative model, all six variables must be represented in quantitative terms. Income, of course, is already quantified. In this paper we have quantified educational achievement (Table II). Occupational scores are derived from the research by Nishihira (1965) in which 98 different occupations were ranked. We have reduced these 98 occupations to 94, excluding the peculiar positions held only by a single person such as Prime Minister, Chairman of the Diet, Chief Justice, and President of the University of Tokyo. We have combined the scores from Nishihira's occupational items to fit into our own broader categories.

The basic idea behind "path analysis" is that a person may be located in the social hierarchy by computing both his ascribed and achieved status. We use the term ascribed status to indicate the direct influence of a person's status at birth and his status in the past as it has a direct effect upon his present status. The problem here is to define "direct influence." For example, it is usually thought that the correlation between father's occupational status (X) and the respondent's present occupational status (Y) is an indication of ascribed status. However, the product-moment correlation does not necessarily indicate a direct cause and effect relationship; instead, multiple regression analysis may be used as an indication of direct influence. The "path model" thus makes use of a system of multiple regression equations. The "path coefficient" is a standardized partial regression coefficient of this system of equations. Among the six variables included in Figure 1, the variables V and X belong under time point T₁; variables Y and Z belong under T₄. Therefore, the relationship between V and X and between Y and Z is not one of cause and effect. Because variables V and X do not have any preceding variables, they are dealt with as exogenous variables. Thus our model can be expressed in the following system of regression equations:

\[
\begin{align*}
U &= a_u + puvV + puxX \\
W &= a_w + pwvV + pwxX + pwuU \\
Y &= a_y + pyvV + pyxX + pyuU + pywW \\
Z &= a_z + pzvV + pzxX + pzuU + pzwW.
\end{align*}
\]
The correlation coefficients for the six variables derived from the 1965 national survey are presented in Table V. The path coefficients computed from the above equations are shown in Table VI. Figure 2 is the schematic representation of Table VI. The results from comparing Table V-A with V-B and Table VI-A and VI-B are as follows:

(1) The pattern of relationship between variables is essentially the same in the 1965 and 1967 examples. Therefore, it is permissible to put these two sets of data together and analyze them in terms of the “path model.”

(2) The gross effect of variable W (first occupational status) on Y (present occupational status) as presented in Table V is very high; Table VI indicates that this effect is direct. In other words, how high or low the original occupation was has a direct causal effect on how high or low the present occupational position is.

(3) U (respondent’s education) has a fairly high gross effect on Y (respondent’s present occupational status), but most of this is not a result of direct causal relationships. In other words, it is true that respondent’s education is fairly highly correlated with present occupational status, but this is an extremely complicated relationship with many other intermediate factors involved; the factor of education alone does not account for much of the variance to be explained in present occupational status.

(4) X (father’s occupational status) has an effect on Y (respondent’s present occupational status) that cannot be neglected, but the effect is not very great.

(5) In Tables V and VI, variables V (father’s education) and X (father’s occupational status) have a relatively large influence on U (respondent’s education). Although the father’s social status does not directly determine the social status of the son, it exerts an influence through the medium of the son’s education.

(6) Let us consider Z (respondent’s present income). As can be seen from a quick glance at Figure 2, the “path coefficients” related to present income are generally very small. The respondent’s present income has a very low relationship to his father’s social position. Even the respondent’s education has a very low relationship to his present income. However, the major reason why the respondent’s education is not related to the present income is that for the youngest cohort, ages 20-29, there is very little difference in incomes that can be related to education. Only for the older age groups does the relation between education and present income rise.
As indicated in Figure 2, the residual variables (indicated by outside arrows) generally have a very large effect. This is particularly striking in the case of Z (respondent's present income), which indicates that the role of ascription in determining one's social position, especially income, is extremely small.

FIGURE 1: The process of status allocation in one's life.
<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>1955</th>
<th>1965</th>
<th>%</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and Technical Workers</td>
<td>2,172</td>
<td>2,490</td>
<td>5.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Managers and Officials</td>
<td>967</td>
<td>1,295</td>
<td>2.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Clerical Workers</td>
<td>4,472</td>
<td>6,058</td>
<td>12.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>4,704</td>
<td>5,706</td>
<td>12.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Farmers, Lumbermen, Fishermen</td>
<td>14,169</td>
<td>11,654</td>
<td>24.5</td>
<td>-7.9</td>
</tr>
<tr>
<td>Workers in Mining</td>
<td>362</td>
<td>206</td>
<td>0.4</td>
<td>-0.4</td>
</tr>
<tr>
<td>Workers in Transport and Communication</td>
<td>1,499</td>
<td>2,051</td>
<td>4.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Craftsmen, Production Process Workers, etc.</td>
<td>12,512</td>
<td>14,743</td>
<td>31.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Service Workers</td>
<td>2,828</td>
<td>3,390</td>
<td>7.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Not Classifiable</td>
<td>6</td>
<td>17</td>
<td>0.0</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>43,691</td>
<td>47,610</td>
<td>100.0</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: Census

NOTE: 1. This table lists all employed persons (both sexes) 15 years old and over. All subsequent tables list males 20 years and over.

2. The occupational classification of this table differs from that of all subsequent tables.
### TABLE II

**AVERAGE EDUCATION LEVEL BY FATHER'S OCCUPATION**

<table>
<thead>
<tr>
<th>FATHERS' OCCUPATIONAL CATEGORIES</th>
<th>MEAN EDUCATIONAL LEVEL OF SONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>22.1</td>
</tr>
<tr>
<td>Managerial</td>
<td>22.0</td>
</tr>
<tr>
<td>Clerical</td>
<td>19.4</td>
</tr>
<tr>
<td>Sales</td>
<td>18.9</td>
</tr>
<tr>
<td>Skilled</td>
<td>16.9</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>16.2</td>
</tr>
<tr>
<td>Unskilled</td>
<td>14.4</td>
</tr>
<tr>
<td>Farmer</td>
<td>15.9</td>
</tr>
</tbody>
</table>

Source: 1965 National Survey

**NOTE:** Quantification of Education Level is as follows. For each six years of Length of Schooling, the score in 10. Thus, Primary School Graduate (6 years) is 10, Lower Secondary School Graduate under New System (9 years) is 15, College Graduate under New System (16 years) is 27, etc.

### TABLE III

**INFLOW RATE AND OUTFLOW RATE (INTERGENERATIONAL OCCUPATIONAL MOBILITY) 1955-1965**

<table>
<thead>
<tr>
<th>OCCUPATIONAL CATEGORIES</th>
<th>INFLOW RATE</th>
<th>OUTFLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1955</td>
<td>1965</td>
</tr>
<tr>
<td>Professional</td>
<td>72.9</td>
<td>77.5</td>
</tr>
<tr>
<td>Managerial</td>
<td>76.7</td>
<td>78.2</td>
</tr>
<tr>
<td>Clerical</td>
<td>89.4</td>
<td>88.1</td>
</tr>
<tr>
<td>Sales</td>
<td>66.3</td>
<td>61.0</td>
</tr>
<tr>
<td>Skilled</td>
<td>68.0</td>
<td>69.0</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>86.4</td>
<td>93.7</td>
</tr>
<tr>
<td>Unskilled</td>
<td>67.5</td>
<td>78.0</td>
</tr>
<tr>
<td>Farmer</td>
<td>13.4</td>
<td>11.0</td>
</tr>
<tr>
<td>Total</td>
<td>51.6</td>
<td>64.3</td>
</tr>
</tbody>
</table>

Source: 1955 & 1965 National Survey

**NOTE:** In the intergenerational occupational mobility matrix \([A_{ij}]\) where the first suffix represents the father's occupation, and the second, the son's occupation, inflow rate and outflow rate are defined respectively as follows:

\[
\text{Inflow rate} = \frac{a_i - a_{ij}}{a_i} \times 100
\]

\[
\text{Outflow rate} = \frac{a_i - a_{ij}}{a_i} \times 100
\]
### TABLE IV

**COEFFICIENTS OF OPENNESS (Y-COEFFICIENTS) OF INTERGENERATIONAL OCCUPATIONAL MOBILITY:**

1955-1965

<table>
<thead>
<tr>
<th>OCCUPATIONAL CATEGORIES</th>
<th>1955</th>
<th>1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>.604</td>
<td>.666</td>
</tr>
<tr>
<td>Managerial</td>
<td>.823</td>
<td>.771</td>
</tr>
<tr>
<td>Clerical</td>
<td>.818</td>
<td>.830</td>
</tr>
<tr>
<td>Sales</td>
<td>.701</td>
<td>.658</td>
</tr>
<tr>
<td>Skilled</td>
<td>.622</td>
<td>.782</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>.807</td>
<td>.830</td>
</tr>
<tr>
<td>Unskilled</td>
<td>.725</td>
<td>.765</td>
</tr>
<tr>
<td>Farmer</td>
<td>.290</td>
<td>.207</td>
</tr>
<tr>
<td>Total</td>
<td>.583</td>
<td>.648</td>
</tr>
</tbody>
</table>

**Source:** 1955 and 1965 National Survey

**NOTE:**

\[ y_{ii} = \frac{\min(n_{i,i}, n_{.,i}) - f_{ii}}{\min(n_{i,i}, n_{.,i}) - n_{i,.}, n_{.,i}/N} \]

\[ Y = \frac{\sum_{i} \min(n_{i,i}, n_{.,i}) - \sum_{i} f_{ii}}{\sum_{i} \min(n_{i,i}, n_{.,i}) - \sum_{i} n_{i,.}, n_{.,i}/N} \]

where \( y_{ii} \) stands for index of openness for occupational category \( i \), and \( Y \), for the society as a whole. The symbol \( \min(n_{i,i}, n_{.,i}) \) refers to the larger one of the two marginals \( n_{i,.} \) and \( n_{.,i} \) in the intergenerational occupational mobility matrix.
### TABLE V

**CORRELATION COEFFICIENTS (STANDARDIZED REGRESSION COEFFICIENTS) FOR COMBINATIONS OF SIX VARIABLES**

#### A. 1965 National Survey

<table>
<thead>
<tr>
<th></th>
<th>V</th>
<th>X</th>
<th>U</th>
<th>W</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>.349</td>
<td>.362</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>.204</td>
<td>.299</td>
<td>.412</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>.195</td>
<td>.311</td>
<td>.395</td>
<td>.571</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>.081</td>
<td>.157</td>
<td>.212</td>
<td>.178</td>
<td>.359</td>
<td>1.000</td>
</tr>
</tbody>
</table>

#### B. 1967 Tokyo Survey

<table>
<thead>
<tr>
<th></th>
<th>V</th>
<th>X</th>
<th>U</th>
<th>W</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>.425</td>
<td>.370</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>.400</td>
<td>.317</td>
<td>.463</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>.146</td>
<td>.268</td>
<td>.300</td>
<td>.545</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>.077</td>
<td>.145</td>
<td>.147</td>
<td>.203</td>
<td>.430</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**NOTE:** Notation and Quantification of Six Variables:

- **V:** Father’s Education
- **X:** Father’s Occupational Status
- **U:** Respondent’s Education
- **W:** Respondent’s First Occupational Status
- **Y:** Respondent’s Present Occupational Status
- **Z:** Respondent’s Present Income

V and U (Education): Length of Years of Schooling by Score 10 for each 6 years.

X, W, and Y (Occupational Status): Occupational Prestige Score (see text).

Z (Income): Annual Gross Income (by ten thousands of yen).
## TABLE VI

PATH COEFFICIENTS (STANDARDIZED PARTIAL REGRESSION COEFFICIENTS) FOR SPECIFIED COMBINATIONS OF SIX VARIABLES

### A. 1965 National Survey

<table>
<thead>
<tr>
<th>Dependent (Effect) Variables</th>
<th>Independent (Causal) Variables</th>
<th>Coefficients of Determination R</th>
<th>Residual Effects $\sqrt{1-R^2}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>.372</td>
<td>.253</td>
<td>.864</td>
</tr>
<tr>
<td>W</td>
<td>.022</td>
<td>.196</td>
<td>.897</td>
</tr>
<tr>
<td>Y</td>
<td>-.017</td>
<td>.368</td>
<td>.795</td>
</tr>
<tr>
<td>Z</td>
<td>-.040</td>
<td>.061</td>
<td>.969</td>
</tr>
</tbody>
</table>

### B. 1967 Tokyo Survey

<table>
<thead>
<tr>
<th>Dependent (Effect) Variables</th>
<th>Independent (Causal) Variables</th>
<th>Coefficients of Determination R</th>
<th>Residual Effects $\sqrt{1-R^2}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>.296</td>
<td>.209</td>
<td>.889</td>
</tr>
<tr>
<td>W</td>
<td>.163</td>
<td>.241</td>
<td>.871</td>
</tr>
<tr>
<td>Y</td>
<td>-.064</td>
<td>.311</td>
<td>.830</td>
</tr>
<tr>
<td>Z</td>
<td>-.024</td>
<td>.050</td>
<td>.975</td>
</tr>
</tbody>
</table>

**NOTE:**
1. Regarding Quantification of Six Variables, see note to Table V.
2. Path Coefficients stand for causal relationship. Therefore, in each specified combination of six variables, the preceding variable in the time sequence is the "casual" variable, and the other the "effect" variable.
A. 1965 National Survey

\[
\begin{align*}
T_1 & \quad T_2 & \quad T_3 & \quad T_4 \\
V & \quad U & \quad Y & \\
X & \quad W & \quad Z & \\
\end{align*}
\]

\[
\begin{align*}
P_{uv} &= .372 \\
P_{uw} &= .213 \\
P_{wy} &= .022 \\
P_{ux} &= .116 \\
P_{zx} &= .085 \\
P_{xw} &= .021 \\
P_{wr} &= .897 \\
P_{yr} &= .795
\end{align*}
\]

\[
\begin{align*}
P_{uv} &= .864 \\
P_{uw} &= .166 \\
P_{wy} &= .160 \\
P_{ux} &= .471 \\
P_{zx} &= .359 \\
P_{xw} &= .095 \\
P_{wr} &= .969
\end{align*}
\]

NOTE: Arrow Lines stand for causal relationships. Curved lines stand for correlations. \(V \rightarrow Y\) and \(V \rightarrow Z\) are omitted in this Figure because these path coefficients are very small minus values in both A and B.

FIGURE 2. Schematic representation of path coefficients.

B. 1967 Tokyo Survey

\[
\begin{align*}
T_1 & \quad T_2 & \quad T_3 & \quad T_4 \\
V & \quad U & \quad Y & \\
X & \quad W & \quad Z & \\
\end{align*}
\]

\[
\begin{align*}
P_{uv} &= .296 \\
P_{uw} &= .244 \\
P_{wy} &= .063 \\
P_{ux} &= .118 \\
P_{zx} &= .086 \\
P_{xw} &= .148 \\
P_{wr} &= .871
\end{align*}
\]

\[
\begin{align*}
P_{uv} &= .889 \\
P_{uw} &= .049 \\
P_{wy} &= .052 \\
P_{ux} &= .473 \\
P_{zy} &= .430
\end{align*}
\]

\[
\begin{align*}
P_{wr} &= .830 \\
P_{yr} &= .975
\end{align*}
\]

NOTE: Arrow Lines stand for causal relationships. Curved lines stand for correlations. \(V \rightarrow Y\) and \(V \rightarrow Z\) are omitted in this Figure because these path coefficients are very small minus values in both A and B.

FIGURE 2. Schematic representation of path coefficients.
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