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The Recent Movement of Population in Japan

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statistics are internationally recognised. Their value, moreover, is so great, that all the Northern European States have adopted the same methods, as I have already described to you. Their value is testified to by the representatives of the Northern European States, in reference to which I must call your attention to the resolutions⁷ of the central council at Copenhagen of 1908, which run as follows :—

The central council recommends “that the participating nations should make increased monetary provision for utilising the material brought in by commercial fishing vessels from known fishing grounds at the termination of each trip, as it is only by these means that investigations can be conducted on a sufficiently large basis to afford trustworthy results as to the increase and decrease of fish, the distribution of different species and the distribution of the same species according to number, size, age, and other conditions.”

Thus it is here expressly recommended that greater monetary provision should be made for such statistical objects. In this recommendation, moreover, it is acknowledged that the system of statistics already described is appropriate, and in this way is to be regarded as the correct one. The value of the system is thereby acknowledged.

II.—*The Recent Movement of Population in Japan.* By IWASABURO TAKANO, Professor of Statistics in the Imperial University, Tokio.

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Introductory.

THE statistics relating to the movement of population in our country have been complete since the year 1899, when the system of centralisation in the collection and elaboration of the materials was introduced. Since that year the local registration officials have been required to fill up the so-called “statistical card” for each marriage, divorce, birth, or death, according to the statements made by the persons concerned and certain documentary

⁷ Procès Verbaux of the Réunions of the Council. Special Committees and Sections. (Vol. xi, *Rapports et Procès Verbaux des Réunions.*) Copenhagen, 1908, p. 53.

evidence, these cards being provided beforehand by the Statistical Bureau of the Cabinet. The cards when filled in are sent every three months to the Statistical Bureau, where they are arranged and properly treated for the preparation of the several statistics, which are then summarised in the volume entitled "The Statistics of the Movement of Population in the Japanese Empire." This work was published for the first time in 1902, opening a new era in Japanese statistics, and since then has been issued every year without a break. Before that time we had only very scanty materials for the study of vital statistics in Japan. Now we have good statistical data as to the movement of population, but the publications in question have not yet been issued for many years; and though they contain many detailed statistics, yet they entitle us to wish for more, and at present we must satisfy ourselves with rather commonplace inquiries. I have undertaken such inquiries on the basis mainly, though not entirely, of these new materials, and the outlines of the results are described in the following sections:—

I. *Marriages.*

1. *Number of marriages.*—The number of marriages in each year since 1886 is as follows:—

TABLE 1.—*Marriages of the legal population.*

	Numbers.	Ratio of marriages per thousand inhabitants.		Numbers.	Ratio of marriages per thousand inhabitants.
1886.....	315,311	8.19	1896 ...	501,777	11.75
'87.....	333,149	8.55	'97 ...	365,207	8.45
'88.....	330,246	8.34	'98 ...	471,298	10.77
'89.....	340,445	8.50	'99 ...	297,428	6.72
'90.....	325,141	8.04	1900 ...	346,590	7.70
'91.....	325,651	8.00	'01 ...	378,637	8.33
'92.....	349,489	8.51	'02 ...	394,378	8.57
'93.....	358,389	8.66	'03 ...	371,187	7.94
'94.....	361,319	8.64	'04 ...	399,218	8.46
'95.....	365,633	8.65	'05 ...	351,260	7.37

We see from the table that the number of marriages has almost always been between three hundred thousand and four hundred thousand per annum, but there has been a natural tendency for the numbers to increase in consequence of the increase of population. The regular course of the figures has, however, been broken since 1896, both that year and 1898 exhibiting extraordinary increases and 1899 a sudden decrease; a more steady movement has been resumed since 1901, but the year 1905 again shows a marked decrease. Our marriage-rate, which stands usually above 8 marriages per thousand inhabitants per annum, is higher than that in most European countries. It rose to more than 10 per thousand in 1896 and 1898, and then descended to 6.72 per thousand in 1899, the ordinary rate being recovered in 1901; in 1905 we find again a decrease to 7.37 per thousand. These fluctuations may be easily explained by

the well-known fact that, while the annual number of marriages is fairly steady in ordinary times, when any sudden changes occur in political, judicial, economical or other social conditions, it is liable to be largely affected by them. The regularity of the figures in most years since 1886 is certainly due to the general tranquillity of society maintained during the time. It seems curious that the Chino-Japanese War during 1894-1895 had apparently no influence upon the figures of the said years, but such a phenomenon is not peculiar to Japan, the same thing having been observed in other countries; indeed, the marriage rate is often not only little influenced during war but generally increases very much after war is over. The sudden increase of marriage in 1896 is almost certainly the after-effect of the war. For the increase in 1898 I cannot, however, assign any adequate reasons. The figures of 1899 show a noticeable decrease, and this is very probably attributable to the enforcement of the Civil Code and the Personal Registration Law, which contained many complicated regulations relating to marriage and was put in force in July, 1898. The somewhat considerable decrease in 1905 may probably be ascribed to the great Russo-Japanese War: war seems to have had on this occasion some influence upon marriage. Japan, after the Chino-Japanese War, had, so to speak, its second renaissance, which caused several important changes and alterations in political, judicial, economical and social affairs; naturally, the number of marriages was much affected by them and showed the sudden movements to which we have referred.

We may add here the quinquennial averages of the number of marriages and the marriage rate to show the general movement:—

	Annual average number of marriages.	Ratio of marriages per thousand of the populaton.		Annual average number of marriages.	Ratio of marriages per thousand of the population.
1886-90....	328,858	8·32	1896-1900....	396,460	9·10
'91-95....	352,096	8·51	1901-'05....	378,936	8·19

The following figures may also be given as relating to the marriages during 1899-1905—not of the legal population, as above stated, but of the actual population to which our new statistics on the movement of the population refer. There exists, therefore, a slight difference between the numbers of the table and those of Table 1:—

TABLE 2.—*Number of marriages of the actual population.*

1899.....	297,372	1902.....	394,165	1904.....	398,930
1900.....	346,528	'03.....	370,961	'05.....	350,898
'01.....	378,457				

2. *Marriages in different months.*—The following table shows that considerable differences exist between the numbers of marriages in different months of the year:—

TABLE 3.—*Number of marriages in each month of the year.*

Month.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
January ...	21,367	25,527	32,486	34,736	29,401	31,608	31,206
February	23,823	30,640	31,520	36,423	38,372	44,079	33,858
March	35,650	38,671	41,601	46,434	44,571	55,072	44,456
April	30,330	34,838	39,983	40,384	38,390	43,546	34,369
May	27,664	31,957	36,109	36,833	32,871	33,133	42,648
June	18,051	20,476	22,491	22,945	23,270	21,681	20,910
July	20,693	25,338	27,055	26,890	26,053	22,900	20,045
August	20,751	24,081	24,447	24,549	23,465	23,914	22,321
September	23,064	29,016	29,720	31,225	25,058	29,268	25,180
October	23,828	27,353	31,529	30,581	30,305	30,071	23,701
November	21,105	24,593	25,257	26,492	24,833	26,530	20,633
December	31,046	33,768	36,259	36,673	34,372	37,128	31,621
Total ...	297,372	346,528	378,457	394,165	370,961	398,930	350,898

These fluctuations exhibit certain common characters in every year. To make these clear, if we take, for example, the two years 1901 and 1904, and reckon the average number of marriages per day in every month respectively, we learn, as may be seen in the table given below, that March comes first in number, followed by February, April, May and December. The numbers in the other months are almost all under the average in a year, especially the summer season of June, July, and August, the deficiency in June being the most remarkable. If we compare further the average number per day of a year, taken as 100, with the average per day in each month, we see, *e.g.*, that the month of March in 1901 shows an excess of 29·4 per cent., which is the highest above the average of the year, while June shows a deficiency of 27·7 per cent. In 1904 March shows an excess of 62·9 per cent., and June a deficiency of 33·7 per cent.

TABLE 4.

Month.	1901.		1904.	
	Average of marriages per day.	Ratio of the average of marriages per day in each month to the average of marriages per day in a year taken as 100.	Average of marriages per day.	Ratio of the average of marriages per day in each month to the average of marriages per day in a year taken as 100.
January	1,048	101·0	1,020	93·5
February ...	1,126	108·5	1,520	139·4
March	1,342	129·4	1,776	162·9
April	1,333	128·5	1,452	133·1
May	1,165	112·3	1,069	98·0
June	750	72·3	723	66·3
July	873	84·2	739	67·7
August	789	76·0	771	70·7
September	991	96·5	976	89·5
October	1,017	98·0	970	89·0
November	842	81·2	884	81·1
December	1,170	112·7	1,198	109·8
Average of } a year.... }	1,037	100·0	1,090	100·0

The figures of other years show similar results; we always find that the greatest number of marriages occur in March and the fewest in the summer months. It is very interesting to compare the former fact with the figures shown by the Roman Catholic countries of Europe, where the fewest marriages occur in March for religious reasons, while the contrary is the case in our country, the month of March being regarded as a happy one for marriage. These two facts, however, well illustrate the influence of custom upon marriage. The fact of fewest marriages occurring in the summer season is a common phenomenon in many countries, and is not peculiar to Japan.

3. *Murriage and age*.—The statistical data enable us to study the frequency of marriage, (a) in relation to the age of husband or wife alone; (b) in relation to the ages of husband and wife jointly.

(a) (i) *Age of husbands*.—Classifying the number of marriages according to the ages of the husbands, the figures for the years 1899-1905 are as follows, eight age-classes being adopted for convenience:—

TABLE 5.—*Number of marriages classified according to the ages of husbands.*

Age-class.	1899.	1900.	1901.	1902.
Not exceeding 20	24,251	27,041	28,286	26,953
Over 20 and not exceeding 25 ...	110,851	127,845	137,421	141,716
" 25 " 30	84,489	101,343	115,047	124,020
" 30 " 35	38,058	43,055	45,607	46,546
" 35 " 40	16,508	20,135	22,780	23,893
" 40 " 45	10,671	12,193	12,652	12,595
" 45 " 50	6,133	7,334	8,155	8,534
" 50	6,381	7,582	8,509	8,999
Total	297,372	346,528	378,457	394,165

Age-class.	1903.	1904.	1905.
Not exceeding 20	23,952	22,436	22,079
Over 20 and not exceeding 25 ...	129,322	138,181	105,002
" 25 " 30	121,176	134,309	117,918
" 30 " 35	45,504	51,052	49,832
" 35 " 40	22,977	24,972	24,634
" 40 " 45	11,450	11,512	13,165
" 45 " 50	7,930	7,696	8,525
" 50	8,650	8,772	9,743
Total	370,961	398,930	350,898

We see from the table that the age-class "over 20 and not exceeding 25" takes usually (except in 1905) the lead of all in number, and accounts for over 30 per cent. of the annual total of marriages. Next come the classes of "over 25 and not exceeding 30" and "over 30 and not exceeding 35," which, taken together, include generally over 40 per cent. of the annual total. (See Table 6.)

TABLE 6.—*Showing the number of marriages out of 100 marriages in each year in the three principal age-classes.*

Husband's age.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Over 20 and not exceeding 25	37·3	36·9	36·3	35·9	34·9	34·6	29·9
„ 25 „ 30	28·4	29·2	30·4	31·5	32·7	33·7	33·6
„ 30 „	12·8	12·4	12·1	11·8	12·3	12·8	14·2

If we further examine the number of marriages in each single year of age we observe that the ages 23—26 are generally the period in which the most marriages take place (see Table 7). It is interesting to note from these figures that the highest number of marriages, which occurred between the ages 23 and 24 in 1899 and 1900, occurred between 24 and 25 in 1901, 1902, 1903 and 1905, and between 25 and 26 in 1904. From Table 6 we see that the percentage of marriages in the age-class 20—25 decreased from 37·3 per cent. in 1899 to 29·9 per cent. in 1905, while the proportion in the age-class 25—30 rose from 28·4 per cent. to 33·6 per cent. Further, as is pointed out below, there has been a marked decrease in marriages of males under 20. Taking these points into consideration, we may perhaps conclude that the age of husbands at marriage is steadily increasing.

TABLE 7.—*Number of marriages classified according to the age of the husband, by single years.*

Husband's age.	1899.	1900.	1901.	1902.
Over 20 and not exceeding 21....	16,624	17,406	18,650	18,886
„ 21 „ 22....	20,090	23,018	23,616	24,636
„ 22 „ 23....	23,238	26,149	28,694	28,337
„ 23 „ 24....	26,104	30,831	32,377	34,666
„ 24 „ 25....	24,795	30,441	34,084	35,190
„ 25 „ 26....	23,455	27,501	31,326	33,787
„ 26 „ 27....	20,029	24,349	26,779	29,442

Husband's age.	1903.	1904.	1905.
Over 20 and not exceeding 21....	16,977	18,594	15,670
„ 21 „ 22....	21,966	24,048	15,220
„ 22 „ 23....	26,405	27,851	20,412
„ 23 „ 24....	30,327	33,532	25,561
„ 24 „ 25....	33,647	34,156	28,139
„ 25 „ 26....	31,968	35,326	27,130
„ 26 „ 27....	29,174	31,476	26,500

(a) (ii) *Age of wife.*—The following table shows the number of marriages in the same years, classified according to the ages of the wives:—

TABLE 8.—*Number of marriages classified according to the ages of wives.*

Age-class.	1899.	1900.	1901.	1902.
Not exceeding 20	100,854	115,425	122,222	126,149
Over 20 and not exceeding 25...	123,989	144,712	158,588	164,801
" 25 " 30...	42,061	51,093	59,054	62,790
" 30 " 35...	16,198	18,421	19,809	20,704
" 35 " 40...	6,750	8,201	9,212	9,758
" 40 " 45 ..	3,727	4,234	4,597	4,657
" 45 " 50...	2,060	2,390	2,648	2,834
" 50	1,733	2,052	2,337	2,472
Total	297,372	346,528	378,457	394,165

Age-class.	1903.	1904.	1905.
Not exceeding 20	114,436	118,139	95,278
Over 20 and not exceeding 25...	155,942	166,765	143,245
" 25 " 30...	61,297	69,480	65,732
" 30 " 35...	20,450	23,942	24,687
" 35 " 40...	9,550	10,661	10,750
" 40 " 45 ..	4,114	4,570	5,324
" 45 " 50 ..	2,727	2,743	3,028
" 50	2,445	2,630	2,854
Total	370,961	398,930	350,898

As is shown by the table, more marriages occur in the age-class "over 20 and not exceeding 25" than in any other, a little over 40 per cent. of the total number of marriages in each year falling between these ages (Table 9). Next to this comes the age-class of "not exceeding 20," some 30 per cent. of the women married in each year being under this age. The age-class "25—30," the third in order of importance, includes only 14·1 per cent. to 18·7 per cent. of the wives. (See Table 9.)

TABLE 9.—*Out of 100 marriages in each year.*

Age-class.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Not exceeding 20	33·9	33·3	32·3	32·0	30·8	29·6	27·2
Over 20 and not exceeding 25	41·7	41·8	41·9	41·8	42·0	41·8	40·8
" 25 " 30	14·1	14·7	15·6	15·9	16·5	17·4	18·7

Considering the marriages at each year of age separately, most marriages occur between the ages 19 and 21. The age 20—21 is almost always predominant, with the exception only of the year 1900, when marriages of women aged 19—20 predominated. (See Table 10.) Seeing that the proportion of marriages of females under 20 years of age decreased from 33·9 per cent. in 1899 to 27·2 per cent. in 1905, we would seem at first sight to be justified in concluding that their age at marriage is rising, as in the case of men. But considering, on the other hand, that the proportion of marriages between the ages 20—25 is almost stationary (a little above 40 per cent. generally), and that most marriages continue to

occur at the age of 20—21, it would rather appear that while the premature marriage of women is indeed decreasing steadily, at the same time there is no marked tendency of the average age at marriage of women over 20 to increase.

TABLE 10.—*Number of marriages classified according to the ages of wives, by single years.*

Age.	1899.	1900.	1901.	1902.
Not exceeding 15	784	875	929	677
Over 15 and not exceeding 16....	7,833	9,245	9,428	9,928
" 16 " 17....	13,783	15,388	15,898	16,014
" 17 " 18....	21,533	23,395	25,354	25,749
" 18 " 19....	26,898	30,623	32,366	34,253
" 19 " 20....	30,023	35,899	38,247	39,528
" 20 " 21....	32,542	35,681	40,087	42,094
" 21 " 22....	29,019	34,459	36,138	38,664
" 22 " 23 ..	25,343	29,472	32,962	32,701
" 23 " 24....	20,906	24,911	27,193	28,646
" 24 " 25....	16,179	20,189	22,209	22,696

Age.	1903.	1904.	1905.
Not exceeding 15	413	334	288
Over 15 and not exceeding 16....	7,983	8,697	6,864
" 16 " 17....	15,361	14,347	11,884
" 17 " 18 ...	23,179	25,342	18,788
" 18 " 19....	30,702	31,649	27,099
" 19 " 20 ...	36,798	37,770	30,355
" 20 " 21....	39,398	41,225	34,020
" 21 " 22....	36,038	38,476	32,547
" 22 " 23....	32,300	34,360	29,371
" 23 " 24....	25,878	29,243	25,670
" 24 " 25 ...	22,328	23,461	21,637

(a) (iii) *Premature Marriages.*—Under present conditions in Japan marriage before 20 years of age in the case of the man and 17 years of age in the case of the woman may be properly said to be premature. Taking these ages as the standards, when we look first at the figures for males given below, we observe a by no means insignificant proportion of premature marriages. At the same time, the figures show that the proportion is gradually decreasing.

Marriages of males under 20 years of age.

	Numbers.	Ratio to 100 marriages.		Numbers.	Ratio to 100 marriages.
1899 ...	24,251	8.0	1903 ...	23,952	6.5
1900 ...	27,041	7.8	'04 ...	22,436	5.6
'01 ...	28,286	7.5	'05 ...	22,079	6.3
'02 ...	26,953	6.8			

Marriages of women under the age of 17 are also not few in number, though in this case also there is a declining tendency, as seen from the following figures:—

Marriages of females under 17 years of age.

	Numbers.	Ratio to 100 marriages.		Numbers.	Ratio to 100 marriages.
1899	22,400	7·5	1903	23,757	6·4
1900	25,508	7·4	'04	23,378	5·9
'01 ...	26,255	6·9	'05	19,036	5·4
'02	26,619	6·8			

(a) (iv) *Late Marriages*.—If we regard the marriages after the age of 35 in the case of the man and 30 in the case of the woman as “late,” the ratios of “late marriages” per hundred of all marriages are as follows. We see that the ratio remained almost constant for both sexes in these years, except in 1905, which shows an exceptional increase:—

	Proportion of marriages of males above age 35 per 100 marriages.	Proportion of marriages of females above age 30 per 100 marriages.		Proportion of marriages of males above age 35 per 100 marriages.	Proportion of marriages of females above age 30 per 100 marriages.
1899....	13·5	10·3	1903....	13·6	10·7
1900....	13·7	10·2	'04....	13·3	11·2
'01....	13·7	10·2	'05....	16·0	13·3
'02....	14·0	10·3			

As regards these late marriages, we ought to examine whether the parties are married for the first time or not, and take only those married for the first time into consideration, but the necessary data are not available.

(b) *Ages of husband and wife in combination*.—As the figures during each of the seven years since 1899 are on the whole similar in this respect, I have confined myself simply to the analysis and explanation of the figures for 1904.

The number of marriages in 1904 classified by the ages of husband and wife in combination is as follows:—

TABLE 11.—*Number of marriages in 1904 classified according to the combination of the ages of husband and wife.*

Age of wife.	Age of husband.								Total.
	Under 20.	20—25.	25—30.	30—35.	35—40.	40—50.	50—60.	60—	
Under 15	72	199	53	8	2	—	—	—	334
15—20....	15,829	63,368	32,204	5,182	954	240	24	4	117,805
20—25....	5,990	63,541	69,438	19,990	5,771	1,835	179	21	166,765
25—30....	481	9,750	27,236	17,597	8,989	4,772	604	51	69,480
30—35....	55	1,063	4,396	6,359	5,825	5,064	1,070	110	23,942
35—40....	9	222	806	1,515	2,545	3,900	1,491	173	10,661
40—50 ..	—	33	170	376	816	2,963	2,356	599	7,313
50—60....	—	5	5	25	65	410	1,004	712	2,226
60—	—	—	1	—	5	24	99	275	404
Total	22,436	136,181	134,309	51,052	24,972	19,208	6,827	1,945	398,930

It will be seen that marriages occur most frequently between a man aged 25—30 and a woman of 20—25, and next most frequently between a man of 20—25 and a woman of 20—25 or 15—20. Altogether these three age combinations include nearly half the marriages.

From the above figures I have made the two tables given below (Tables 12 and 13), which show the percentage of husbands of each age-class who married wives of a given age, and similar data for the women.

Considering first the distribution of ages of wives for a given age of husband, the following table gives the figures:—

TABLE 12.—*Percentage distribution of the marriage of males in each age-class according to the age of the wife, 1904.*

Age of wife.	Age of husband.							
	Under 20.	20—25.	25—30.	30—35.	35—40.	40—50.	50—60.	60—
Under 20	70·9	46·0	24·0	10·2	3·8	1·2	0·4	} 3·9
20—25	26·7	46·0	51·7	39·2	23·1	9·5	2·6	
25—30	2·1	7·0	20·3	34·5	36·0	24·8	8·8	
30—35	} 0·3	0·9	3·3	12·5	23·3	26·4	15·8	5·7
35—40		} 0·2	} 0·7	3·0	10·2	20·3	21·8	8·9
40—50	—			} 0·8	} 3·5	15·4	34·5	30·7
50—60	—	} —	} —			} 2·3	14·7	36·6
60—	—		—	—	—		—	1·4
	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

On the whole we see that, as in European countries, the man is likely to select a woman of an age slightly below, but not very different from his.

Next, considering the ages of husbands for wives of a given age, we have the table:—

TABLE 13.—*Percentage distribution of the marriage of females in each age-class according to the age of the husband, to each total taken as 100 (1904).*

Age of husband.	Age of wife.							
	Under 20.	20—25.	25—30.	30—35.	35—40.	40—50.	50—60.	60—
Under 20	13·5	3·6	} 14·7	4·7	} 9·7	—	—	—
20—25	53·8	38·1		—		—	—	—
25—30	27·3	41·6	39·2	18·4	} 7·9	} 4·5	} 1·5	
30—35	} 5·7	12·0	25·3	26·6				
35—40		} 4·7	12·9	24·3	23·9	11·2	} 18·4	} 24·5
40—50	} —		} 7·9	21·2	36·6	40·5		
50—60	} —			} 4·8	} 15·6	32·2	45·1	} 68·1
60—	} —		8·2			32·0		
	100°0	100°0	100°0	100°0	100°0	100°0	100°0	100°0

Generally speaking, as in European countries, a woman is inclined to be married to a man of an age slightly above hers.

It may be noted, in conclusion, that marriages between old men and old women seem to be increasing in some degree, as is indicated by the figures below :—

Number of marriages.	1899.	1900.	1901.	1902.	1903.	1904.
Man above the age of 50 with woman above the age of 50 }	1,343	1,595	1,822	1,913	1,912	2,090

4. *Marriage and civil condition.*—We will now proceed to the study of the influence of the civil condition of the parties concerned upon the number of marriages.

(a) *Civil condition of husbands and wives considered separately.*—First, let us classify the number of marriages according to the civil condition of the husband at the time of his marriage. The following tables show the absolute numbers and also the percentages of bachelors, widowers, and the divorced :—

TABLE 14.—(i) *Number of marriages classified according to the civil condition of the husband.*

Civil condition.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Bachelors	234,075	278,384	302,613	318,375	300,993	326,905	280,439
Widowers	23,096	26,655	28,825	29,534	28,985	28,327	28,465
Divorced	37,549	39,743	42,216	40,552	36,413	36,485	33,715
Unknown	2,652	1,746	4,803	5,604	4,570	7,213	8,279
Total	297,372	346,528	378,457	394,165	370,961	398,930	350,898

(ii) *Percentage of marriages classified according to the civil condition of the husband.*

Civil condition.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Bachelors	78·7	80·3	79·9	80·8	81·1	81·9	79·9
Widowers	7·8	7·7	7·6	7·5	7·8	7·1	8·1
Divorced	12·6	11·5	11·2	10·3	9·8	9·1	9·6
Unknown	0·9	0·5	1·3	1·4	1·3	1·9	2·4
	100·0	100·0	100·0	100·0	100·0	100·0	100·0

We see that the bachelors are in the majority, and form about 80 per cent. of the men married each year. Next come the divorced, and lastly the widowers.

Secondly, classifying the number of marriages by the civil condition of the wife at the time of her marriage, the following

tables show the absolute numbers and also the percentages of spinsters, widows, and the divorced :—

TABLE 15.—(i) *Number of marriages classified according to the civil condition of the wife.*

Civil condition.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Spinsters....	247,093	294,606	313,951	328,430	317,916	320,019	272,379
Widows	8,593	9,271	10,570	10,913	10,031	9,495	8,710
Divorced....	33,486	36,549	38,737	36,932	35,453	32,091	28,534
Unknown	8,200	6,102	15,199	17,890	7,561	37,325	41,275
Total	297,372	346,528	378,457	394,165	370,961	398,930	350,898

(ii) *Percentage of marriages classified according to the civil condition of the wife.*

Civil condition.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Spinsters....	83.1	85.0	83.0	83.3	85.7	80.2	77.6
Widows ...	2.9	2.7	2.8	2.8	2.7	2.4	2.5
Divorced....	11.3	10.5	10.2	9.4	9.6	8.0	8.1
Unknown	2.7	2.8	4.0	4.5	2.0	9.4	11.8
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In this case spinsters are in the majority, the divorced are second, and the widows third.

That marriages between bachelors and spinsters form the great majority of all marriages is a general fact, not peculiar to our country. But, in Europe, marriages between widowers and widows come next in number, while with us the divorced come second. This is clearly due to the larger number of divorces in Japan and the consequently greater number of the divorced in proportion to the population. These marriages, however, are tending to decrease, that is, on the husband's side the ratio per 100 marriages declined from 12.6 per cent. in 1899 to 9.6 per cent. in 1905, and on the wife's side from 11.3 per cent. to 8.1 per cent., a fact which indicates also the recent improvement in the proportion of divorces.

Moreover, our attention is attracted in the figures of Tables 14 and 15 by the fact that the number of marriages of divorcées and of widows is less than that of divorced men and of widowers. This may in part be due to the fact that re-marriage is more difficult for the woman than for the man.

(b) *Marriages classified according to the civil conditions of husbands and wives in combination.*—I have taken here as an example the figures of 1903 :—

TABLE 16.—*Number of marriages in 1903 classified according to the combination of the civil conditions of husbands and wives.*

Wife.	Husband.				
	Bachelor.	Widower.	Divorced.	Unknown.	Total.
Spinster.....	276,344	16,211	22,427	2,934	317,916
Widow	5,101	3,017	1,599	314	10,031
Divorced	14,830	8,592	11,306	725	35,453
Unknown	4,718	1,165	1,081	597	7,561
Total	300,993	28,985	36,413	4,570	370,961

If we regard the figures first from the side of the husband, we learn that bachelors have nearly all married spinsters (91·8 per cent.), and the majority of the re-married, that is, of divorced men and widowers, also married spinsters (see the figures below).

Wife.	Husband.			
	Bachelor.	Widower.	Divorced.	Unknown.
Spinster.....	91·8	55·9	61·6	64·2
Widow	1·7	10·4	4·4	6·9
Divorced	4·8	29·6	31·0	15·9
Unknown	1·7	4·1	3·0	13·1
	100·0	100·0	100·0	100·0

Next, regarding the figures from the side of the wife, we see that spinsters have mostly married bachelors, but the proportion of spinsters marrying bachelors is less than that of bachelors marrying spinsters. Most of the females who re-married also married bachelors, but the proportions are again smaller than the corresponding rates for males (see the table below). Thus we can say the chance of a man, no matter whether a bachelor or previously married, marrying a spinster is always greater than the corresponding chance of a spinster marrying a bachelor.

Husband.	Wife.			
	Spinster.	Widow.	Divorced.	Unknown.
Bachelor	86·9	50·9	41·8	62·4
Widower	5·1	30·1	24·2	15·4
Divorced	7·1	15·9	31·9	14·3
Unknown	0·9	3·1	2·1	7·9
	100·0	100·0	100·0	100·0

II. *Divorce.*

1. *Number of divorces.*—The numbers of divorces and the proportions to population from 1886 to 1905 are as follows :—

TABLE 17.—*Number of divorces of the legal population.*

	Number of divorces.	Ratio per 1,000 inhabitants.		Number of divorces.	Ratio per 1,000 inhabitants.
1886 ...	117,964	3·06	1896 ...	115,654	2·71
'87	110,859	2·84	'97	124,075	2·87
'88	109,175	2·76	'98	99,465	2·27
'89	107,478	2·68	'99	66,626	1·51
'90	109,088	2·70	1900 ...	63,926	1·42
'91	112,411	2·76	'01	63,593	1·41
'92	113,498	2·76	'02	64,311	1·40
'93	116,775	2·82	'03	65,571	1·40
'94	114,436	2·74	'04	64,016	1·36
'95	110,838	2·62	'05	60,179	1·26

We see that the number of divorces always exceeded 100,000, and the proportion to the population 2·7 per thousand, until the year 1898, while in 1899 it sank suddenly to 60,000 odd with the rate of 1·5 per thousand. In a word, the year 1898 marks a boundary line between the two periods. This great change can be undoubtedly attributed to the enforcement of the new Civil Code and the Personal Registration Law on July, 1898, which also caused a sudden temporary decrease in the number of marriages as mentioned above—a very good example of the influence of law upon social phenomena.

After this change the annual figures show no great fluctuations, though they decreased markedly in 1905, probably in consequence of the Russo-Japanese war. Thus we can recognise that the number of divorces presents no great variations year by year in a time of tranquillity, but it may exhibit great changes under exceptional circumstances as in time of war or when alterations in the law are made.

The significant improvement in regard to divorce is very clearly indicated by the following summary figures :—

	Average number of divorces per annum.	Ratio per 1,000 inhabitants.	Ratio per 1,000 marriages in the same year.
1886-98	112,440	2·73	308·2
'99-1905	64,032	1·39	176·6

That is, in the period before 1898 the number of divorces was 112,440 per annum with the ratio to the population 2·73 per thousand, and the ratio to marriages 308·2 per thousand (a little less than one-third of the total marriages), while after 1899 the absolute number sank to a little below the half, *i.e.*, 64,032 per

annum, and the ratio to the population to 1.39 per thousand and that to the marriages to 176.6 per thousand (about one-sixth of the total marriages). In spite of this our divorce rate stands very high above that of other civilised countries. Among the latter, the United States of America with the divorce rate of 82 per thousand marriages in 1897-1906, and Switzerland with 42 per thousand marriages in the same period occupy the foremost rank, while France has 31 per thousand in the period 1897-1905, Germany 20 per thousand in 1897-1906, and Great Britain even so low a rate as 2 per thousand in 1897-1906. Even with the improved rate of 176.6 per thousand, ours is exceptionally high.

We may also give a divorce rate based on the number of existing couples in the years 1888, 1893, 1898 and 1903:—

TABLE 18.

	Number of married couples.	Number of divorces.	Ratio of divorces per 10,000 couples.
1888.....	7,419,953	109,175	147.1
'93.....	7,612,764	116,775	153.4
'98.....	7,979,858	99,465	124.6
1903.....	8,229,152	65,571	79.7

We see that the divorce rate per 10,000 couples decreased from 147.1 in 1888 to 124.4 in 1898, and then to the very much lower rate of 79.9 in 1903.

2. *Divorce and season.*—The number of divorces in each month of the year is as follows:—

TABLE 19.—*Number of divorces in each month of a year.*

Month.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
January	6,038	5,520	5,619	5,670	5,409	5,582	5,254
February ..	5,662	5,310	5,249	5,105	5,668	6,290	5,127
March	7,360	6,913	5,994	6,541	6,880	6,759	6,494
April	5,878	5,906	6,018	5,764	6,012	6,660	5,410
May	5,559	5,363	5,542	5,462	5,469	5,439	5,492
June	3,678	3,413	3,680	3,699	4,008	3,743	3,211
July	4,696	4,499	4,668	4,470	4,824	4,068	3,723
August ...	5,243	5,065	4,633	4,685	5,001	4,342	4,577
September	5,821	5,984	5,843	6,052	5,208	5,452	5,450
October ...	5,702	5,575	5,773	5,804	6,177	5,443	5,164
November	4,619	4,581	4,617	4,737	4,723	4,463	4,182
December	6,289	5,699	5,806	6,150	5,995	5,672	5,977

To find out the common points in these fluctuations, let us take the figures of the two years 1899 and 1905. As will be seen from the table given below, the average number of divorces per day in both these years is highest in March and lowest in June, July and November being next lowest. The figure for March is nearly 30 per cent. above the average of the year, and that for June over 30 per cent. below.

TABLE 20.

Month.	1899.		1905.	
	Average number of divorce per day.	Ratio of the average of divorce per day in each month to the average per day in a year taken as 100.	Average number of divorce per day.	Ratio of the average of divorce per day in each month to the average per day in a year taken as 100.
January	194	106.6	169	103.0
February.....	202	110.9	183	111.3
March	237	130.2	209	127.3
April	196	107.5	180	109.6
May.....	179	98.4	177	107.7
June	123	67.2	107	65.1
July.....	151	83.1	120	73.0
August	169	92.8	148	89.7
September	194	106.4	182	110.4
October	184	100.9	167	101.2
November	154	84.4	139	84.7
December	203	111.3	193	117.2
Average of } a year	182	100.0	165	100.0

In the other five years a similar mode of fluctuation can be traced. But as to the reasons for this fluctuation I am unable to offer any explanation.

3. *Divorce and age.*—We will now proceed to examine the phenomenon of divorce in relation to the ages of the parties concerned, that is, first in relation to the age of husband or wife alone, and secondly in relation to the ages of husband and wife in combination.

(a) *Age of husband or wife alone.*—(i) If we first classify the number of divorces by the age of husband, the figures in the years 1899-1905 are:—

TABLE 21.—*Number of divorces classified according to the age of husband.*

Age.	1899.	1900.	1901.	1902.
Not exceeding 20	4,405	3,098	2,380	2,205
Over 20 and not exceeding 25....	18,878	17,015	15,189	14,863
" 25 " 30...	17,607	17,896	17,967	18,198
" 30 " 35...	10,832	10,416	10,578	10,715
" 35 " 40...	5,424	5,895	6,610	7,026
" 40 " 50...	6,485	6,360	7,059	7,151
" 50 " 60...	2,206	2,352	2,809	3,000
" 60	706	796	850	981
Unknown	2	—	—	—
Total	66,545	63,828	63,442	64,139

TABLE 21—*Contd.* Number of divorces classified according to age of husband.

Age.	1903.	1904.	1905.
Not exceeding 20	1,882	1,559	1,486
Over 20 and not exceeding 25....	14,342	12,835	11,069
" 25 " 30....	18,763	17,933	17,455
" 30 " 35 ..	11,062	11,235	11,097
" 35 " 40....	7,437	7,541	6,978
" 40 " 50....	7,565	8,008	7,425
" 50 " 60....	3,255	3,574	3,387
" 60	1,086	1,228	1,164
Unknown	—	—	—
Total	65,392	63,913	60,061

The table tells us that after 1899 the divorce occurred most frequently in the age class 25—30 every year, and next most frequently in the two neighbouring classes, *i.e.*, 20—25 and 30—35, so that these three age classes taken together contribute about 70 per cent. of the total. This is probably due to the fact that the marriage of the man is contracted most frequently between the ages 20—25 and in the following age groups, while the divorce occurs generally within a few years after marriage, as will be shown below.

One thing more we can learn from the table is that while the number of divorces at ages under 25 has tended to decrease gradually since 1899, at the ages above 25 it has tended to increase. Probably this arises chiefly from the changes in the numbers of marriages, which have tended to decrease at the ages under 20 and to increase at the ages above 20.

(ii) If we next classify the number of divorces by the age of wife, the figures are :—

TABLE 22.—*Number of divorces classified according to the age of wives.*

Age.	1899.	1900.	1901.	1902.
Not exceeding 15	437	151	46	14
Over 15 and not exceeding 20....	14,954	12,192	10,208	9,719
" 20 " 25....	23,919	23,008	21,965	21,617
" 25 " 30....	12,605	13,325	14,299	14,972
" 30 " 35....	6,666	6,723	7,029	7,407
" 35 " 40....	3,432	3,558	4,327	4,477
" 40 " 50....	3,452	3,579	4,144	4,292
" 50 " 60....	918	1,094	1,211	1,374
" 60	161	203	213	267
Unknown	1	—	—	—
Total	66,545	63,828	63,442	64,139

TABLE 22.—*Contd. Number of divorces classified according to age of wives.*

Age.	1903.	1904.	1905.
Not exceeding 15	17	4	13
Over 15 and not exceeding 20....	9,123	8,089	7,077
„ 20 „ 25....	21,380	20,002	18,441
„ 25 „ 30....	15,612	15,421	14,990
„ 30 „ 35....	7,788	8,106	8,131
„ 35 „ 40....	5,217	5,280	4,786
„ 40 „ 50....	4,457	4,870	4,673
„ 50 „ 60....	1,522	1,798	1,610
„ 60	276	343	340
Unknown	—	—	—
Total	65,392	63,913	60,061

On looking at the table, we observe that the majority of divorces always take place in the age-class 20—25, which includes 30 per cent. and more of the total every year; and next comes the class 25—30 (except in the year 1899), which includes 20 per cent. and more of the total. We see, moreover, that divorces under age 25 tend to decrease, while those over the age of 25 tended to increase, at least up to 1904. These changes are probably also due in general to the changes in the number of marriages at the different ages.

(b) *Ages of husband and wife in combination.*—We have now to consider the number of divorces from the point of view of the ages of husband and wife in combination; but, as it takes too much space to give all the figures for the seven years 1899-1905, it will be sufficient to give the figures for 1905 as an illustration:—

TABLE 23.—*Number of divorces classified according to the ages of husbands and wives in combination in 1905.*

Age of wife.	Age of husband.				
	Not exceeding 20.	Over 20 and not exceeding 25.	Over 25 and not exceeding 30.	Over 30 and not exceeding 35.	Over 35 and not exceeding 40.
Not exceeding 15	4	8	—	1	—
Over 15 and not exceeding 20	983	3,692	2,089	328	51
„ 20 „ 25	453	6,008	8,536	2,681	532
„ 25 „ 30	42	1,395	5,704	4,948	1,985
„ 30 „ 35	2	123	992	2,597	2,461
„ 35 „ 40	1	20	108	437	1,452
„ 40 „ 50	—	3	26	99	463
„ 50 „ 60	—	—	—	6	32
„ 60	—	—	—	—	2
Total	1,486	11,069	17,455	11,097	6,978

TABLE 23—*Contd.* Number of divorces, husbands and wives, 1905.

Age of wife.	Age of husband.			
	Over 40 and not exceeding 50.	Over 50 and not exceeding 60.	60—	Total.
Not exceeding 15	—	—	—	13
Over 15 and not exceeding 20	13	9	1	7,077
" 20	203	26	2	18,441
" 25	879	110	17	14,990
" 30	1,660	271	25	8,131
" 35	2,183	516	69	4,786
" 40	2,234	1,532	316	4,673
" 50	238	854	480	1,610
" 60	15	69	254	340
Total	7,425	3,387	1,164	60,061

The ratios of the numbers at each age-combination to the total taken as 1,000 are :—

TABLE 24.—*Ratio of the number of divorces of each age-class combination to the total divorces taken as 1,000 (1905).*

Age of wife.	Age of husband.							
	Not ex- ceeding 20.	20—25.	25—30.	30—35.	35—40.	40—50.	50—60.	60—
Not exceed- ing 15 ... }	0·1	0·1	—	0·0	—	—	—	—
15—20	16·4	60·0	34·8	5·5	0·9	0·2	0·1	0·0
20—25	7·5	100·0	142·2	44·6	8·9	3·4	0·4	0·0
25—30	0·7	21·7	95·0	82·4	33·1	14·6	1·8	0·3
30—35	0·0	2·1	16·5	43·2	41·0	27·6	4·5	0·4
35—40	0·0	0·3	1·8	7·3	24·2	36·4	8·6	1·2
40—50	—	0·1	0·4	1·6	7·7	37·2	25·5	5·3
50—60	—	—	—	0·1	0·5	4·0	14·2	8·0
60—	—	—	—	—	0·0	0·3	1·2	4·2

As we have seen, divorce occurs most frequently between the ages 25—30 of the husband and ages 20—25 of the wife, so that as we would expect the most prevalent age-combination of divorce is that between ages 25—30 of the husband and 20—25 of the wife, this group including 142·2 per thousand of all divorces in 1905. Next comes the combination between ages 20—25 of the husband and 20—25 of the wife, this group contributing 100·0 per thousand of all divorces.

4. *Divorce and the duration of marriage.*—The following table shows the relation which exists between divorce and the duration of marriage :—

TABLE 25.—*Number of divorces classified according to the duration of marriage.*

Duration of marriage.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Not exceeding 1 year	14,937	10,181	10,640	11,682	11,730	10,332	9,267
Over 1 and not exceeding 2 years	15,880	12,583	9,784	10,547	11,183	10,874	9,865
Over 2 and not exceeding 3 years	7,577	11,088	8,899	6,759	7,482	7,935	7,455
Over 3 and not exceeding 4 years	7,818	5,459	7,943	6,281	4,936	5,350	5,598
Over 4 and not exceeding 5 years	3,790	6,369	4,301	5,987	4,825	3,768	3,964
Not exceeding 5 years	50,002	45,680	41,567	41,256	40,156	38,259	36,149
Over 5 and not exceeding 10 years	9,074	10,165	12,756	13,089	14,490	14,141	12,865
Over 10 and not exceeding 15 years	3,762	4,116	4,620	4,793	5,161	5,259	5,332
Over 15 and not exceeding 20 years	1,819	1,839	2,037	2,231	2,595	2,791	2,680
Over 20 years	1,700	1,837	2,219	2,513	2,724	3,211	2,790
Unknown	188	191	243	257	266	252	245
Total	66,545	63,828	63,442	64,139	65,392	63,913	60,061

To make the form of the distribution clearer we give also the proportional numbers for the two years 1900 and 1905:—

TABLE 26.—*Ratio of the number of divorces for each duration of marriage to the total number taken as 1,000.*

	1900.	1905.
Not exceeding 1 year	159·5	154·3
Over 1 and not exceeding 2 years	197·1	164·2
“ 2 “ 3 “	173·7	124·1
“ 3 “ 4 “	85·5	93·2
“ 4 “ 5 “	99·8	66·0
Not exceeding 5 years	715·6	601·8
Over 5 and not exceeding 10 years	159·3	214·2
“ 10 “ 15 “	64·5	88·8
“ 15 “ 20 “	28·8	44·6
Over 20 years	28·8	46·5
Unknown	3·0	4·1
	1000·0	1000·0

We observe that the great majority of divorces occur within five years after marriage, forming in 1900 715·6 per thousand, and in 1905 601·8 per thousand of the total; even the first three years after marriage included in 1900 more than half (530·3 per thousand), and in 1905 little less than half the total (442·6 per thousand). But on examining the figures further we learn also that the divorces within five years after marriage tend to decrease, while those after five years of marriage tend to increase.

5. *Divorce by mutual agreement and divorce by judicial procedure.*—The figures relating to divorces by mutual agreement and divorces by judicial procedure are :—

TABLE 27.—*Number of divorces by mutual agreement and divorces by judicial procedure.*

	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Divorce by mutual agreement	66,378	63,632	63,248	63,964	65,198	63,646	59,824
Divorce by judicial procedure—							
(a) Petitions filed by husband	27	29	28	23	26	26	19
(b) Petitions filed by wife	140	164	166	152	168	241	218
Total	167	193	194	175	194	267	237
Total	66,545	63,828	63,442	64,139	65,392	63,913	60,061

Divorces by mutual agreement form the great majority of all divorces, divorces by judicial procedure forming only some two to four per thousand of the total; of the latter, actions provoked by the wife far exceed in number those provoked by the husband.

Ratio per 1,000 divorces.

	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Divorce by mutual agreement	997·5	996·9	996·9	997·3	997·0	995·8	996·1
Divorce by judicial procedure	2·5	3·1	3·1	2·7	3·0	4·2	3·9

III. Births.

1. *Number of births.*—The number of births during the twenty years from 1886 to 1905 is :—

TABLE 28.—*Number of births (a sum total of the living-births of the legal population and the still-births of the actual population).*

	Number of births.	Ratio per 1,000 inhabitants.		Number of births.	Ratio per 1,000 inhabitants.
1886	1,108,967	28·8	1896	1,409,391	33·0
'87	1,119,001	28·6	'97	1,464,362	33·9
'88	1,250,224	31·6	'98	1,495,479	34·2
'89	1,295,161	32·3	'99	1,523,804	34·4
'90	1,237,126	30·6	1900	1,559,906	34·8
'91	1,178,164	28·5	'01	1,658,850	36·5
'92	1,312,586	32·5	'02	1,670,798	36·3
'93	1,287,299	31·1	'03	1,647,467	35·3
'94	1,322,151	31·7	'04	1,591,365	33·7
'95	1,363,642	32·3	'05	1,599,131	33·3

The number of births, we see, during this period has increased progressively from 1,108,967 in 1886 to 1,599,131 in 1905, partly as the natural result of the increase of our population. The ratio per 1,000 inhabitants has increased from 28·8 in 1886 to 33·3 in 1905.

The following quinquennial averages show the increase very clearly :—

	Average number of births per annum.	Ratio of births per 1,000 inhabitants.
1886-90	1,202,096	30·4
'91-95	1,292,768	31·3
'96-1900	1,490,588	34·2
1901-05	1,633,522	35·3

The births rose from the annual average of 1,202,096 during the first five years to 1,633,522 during the last five years, and the corresponding birth-rates from 30·4 per thousand to 35·3 per thousand. It is worthy of attention, as a characteristic phenomenon in Japan, that, in spite of our very high marriage-rate, the birth-rate was until recently relatively low, and while in European countries the birth-rate is falling, especially in recent years, ours has, on the contrary, increased in no small degree, with the exception of the years 1902 to 1905.

Such is the general tendency of the last twenty years, but the annual figures, of course, fluctuate considerably. The years showing a special increase in the birth-rate as compared with that of the previous year are 1888 (31·6 per thousand as compared with 28·6 in 1887) and 1901 (36·5 per thousand as compared with 34·8 per thousand in 1900); but I cannot assign any sufficient reasons for these increases. On the other hand, the years that show remarkable decreases in the birth-rate are: (1) 1890 and 1891 (the rate of 32·3 per cent. in 1889 suddenly fell in 1890 to 30·6 per cent., and again to 28·5 per cent. in 1891); (2) 1904 and 1905 (the rate of 35·3 per cent. in 1903 suddenly decreased in 1904 to 33·7 per cent., and again to 33·3 per cent. in 1905). The average price of rice had been about five yen per one "koku" till 1890, when it rose to the extraordinary height of over eight yen, owing to the bad harvest, and with this rise other commodities showed an upward tendency in price, thereby affecting the number of marriages in no small degree (the marriage-rate decreased from 8·50 per thousand in 1889 to 8·04 per thousand in 1890, and again to 8·00 per thousand in 1891). These changes in food prices may be taken as the reasons for the first fall. The fall in 1904-05 can perhaps be assigned to the influence of the Russo-Japanese war, but the China-Japanese war of 1894-95 did not show any such effect.

In short, the absolute number of our births appears to be tending to increase year by year, with only such disturbances of this usual course as may be accounted for by exceptional circumstances. The birth-rate, which was comparatively low, has increased gradually till of recent years it has reached values from 33 to 36 per thousand of the population.

2. *Living births and still-births.*—When the living-births and still-births are separated, the figures are as follows:—

TABLE 29.—*Number of living-births of the legal population, and number of still-births of the actual population.*

	Number of living-births.	Ratio of living-births per 1,000 of the population.	Number of still-births.
1886	1,050,617	27·3	58,350
'87	1,058,137	27·1	60,865
'88	1,172,729	29·6	77,495
'89	1,209,910	30·2	85,251
'90	1,145,374	28·3	91,752
'91	1,086,775	26·7	91,389
'92	1,207,034	29·4	105,552
'93	1,178,428	28·5	108,871
'94	1,208,983	28·9	113,168
'95	1,246,427	29·5	117,215
'96	1,282,178	30·0	127,213
'97	1,334,125	30·9	130,237
'98	1,369,638	31·3	125,841
'99	1,388,077	31·4	135,727
1900	1,421,919	31·7	137,987
'01	1,503,361	33·1	155,489
'02	1,513,090	32·9	157,708
'03	1,493,547	32·6	153,920
'04	1,444,337	30·6	147,058
'05	1,457,039	30·3	142,092

During this period the living-births always formed over 90 per cent. of the total births, as may be seen from the figures below, and both the numbers of living-births and the ratio per thousand of the population increased to a maximum of 33·1 in 1901.

	Average number of living-births per annum.	Ratio per 1,000 inhabitants.	Ratio per 100 births.
1886-90.....	1,127,353	28·5	93·8
'91-95.....	1,189,529	28·8	91·7
'96-1900....	1,359,167	31·2	91·2
1901- '05....	1,482,269	32·1	90·7

The still-births, however, also increased in the same period both in absolute number, in proportion to the population, and in proportion to the total births. They formed 6·2 per cent. of the total births in the first quinquennium and no less than 9·3 per cent. in the last, as shown below. In Europe the still-

	Average number of still-births per annum.	Ratio per 1,000 inhabitants.	Ratio per 100 births.
1886-90.....	74,743	1·8	6·2
'91-95.....	107,239	2·6	8·3
'96-1900....	131,401	3·0	8·8
1901- '05....	151,253	3·3	9·3

births are usually between 2 per cent. and 5 per cent. of the total births, and so our proportion of the still-born is certainly extraordinary. The increase is perhaps due in some degree to the closer investigation of still-births by the authorities, but at the same time some other causes must certainly have been operating to produce so many still-born, and against these we must take all possible measures.

3. *Births and season.*—The figures of 1901 and 1905 have been taken as examples for the following table instead of all the figures from 1899 to 1905 :—

TABLE 30.—*Number of births in each month of a year.*

Month.	1901.			1905.		
	Living-births.	Still-births.	Total births.	Living-births.	Still-births.	Total births.
January	164,682	15,261	179,943	160,077	14,580	174,657
February	135,168	14,604	149,772	140,697	13,944	154,641
March	159,173	15,435	174,608	161,996	14,071	176,067
April	137,803	12,548	150,351	110,724	11,761	122,485
May.....	114,374	11,498	125,872	103,630	10,630	114,260
June	91,887	10,046	101,933	83,940	9,068	93,008
July.....	103,366	11,321	114,687	99,821	10,698	110,519
August	107,225	11,833	119,058	104,860	10,808	115,668
September ..	119,888	12,277	132,165	114,174	11,066	125,240
October	120,821	12,717	133,538	115,269	11,584	126,853
November ..	120,021	12,984	133,005	116,906	11,421	128,327
December ..	127,183	14,958	142,141	140,676	12,456	153,132
Unknown	—	7	7	—	5	5
Total	1,501,591	155,489	1,657,080	1,452,770	142,092	1,594,862

If we now compare the average number of births per day in each month with the average per day in a year on the scale of 100 we see that the births in January to March both in 1901 and 1905 are much above the average of the year. The same result is obtained when the living-births and still-births are distinguished.

Referring to the figures of years other than 1901 and 1905 similar phenomena are observed. Thus we see that in Japan, as in European countries, births are most in number in the months from January to March—a phenomenon generally acknowledged to be due to natural causes, as the children born in the said months are those conceived in the period from April to June of the previous year, that is, the time between the spring and early summer seasons.

TABLE 31.—*Ratio of the average of births per day in each month to the average of births per day in a year taken as 100.*

Month.	1901.			1905.		
	Ratio of the average of living-births per day in each month to the average of living-births per day in a year taken as 100. (a)	Ratio of the average of still-births per day in each month to the average of still-births per day in a year taken as 100. (b)	Ratio of the average of total births per day in each month to the average of total births per day in a year taken as 100. (c)	Ratio of the average of living-births per day in each month to the average of living-births per day in a year taken as 100. (a)	Ratio of the average of still-births per day in each month to the average of still-births per day in a year taken as 100. (b)	Ratio of the average of total births per day in each month to the average of total births per day in a year taken as 100. (c)
January	129	116	128	130	121	129
February....	117	122	118	126	128	126
March	125	117	124	131	117	130
April	112	98	110	93	101	93
May	90	87	89	84	88	84
June	74	79	74	70	78	71
July	81	86	81	81	89	82
August	84	90	85	85	90	85
September ..	97	96	97	96	95	96
October	94	96	95	93	96	94
November ..	97	101	98	98	98	98
December ..	100	113	101	114	103	113

4. *Births classified by sex.*—When the births are classified by sex it is always observed, as is well known, that the males are in excess. The figures for recent years in Japan show the ratio of 105·4 males to 100 females.

TABLE 32.—*Births classified according to sex.*

Year.	Male.	Female.	Males to 100 females.
1899.....	784,201	738,032	106·3
1900.....	802,173	757,906	105·8
'01.....	850,994	805,670	105·6
'02.....	855,966	812,096	105·4
'03.....	844,243	799,051	105·7
'04.....	815,123	771,928	105·6
'05.....	810,043	784,482	103·3

That the number of male births is more than the number of female is not only the case for the total births, but also for the living-born and the still-born, the legitimate and illegitimate births. But as regards the degree of the excess there are some characteristic differences. Firstly, the excess of male births is especially remarkable with the still-born—a fact common to European countries. Of the total number of births from 1899 to 1905, the excess of male births as compared with 100 female births was 5·4, but for living-births the excess was a little less, viz., 4·9, while for the still-born the excess was as much as 10·3.

TABLE 33.—*Living- and still-births classified by sex.*

Year.	Living-births.			Still-births.		
	Male.	Female.	Males to 100 females.	Male.	Female.	Males to 100 females.
1899....	713,442	673,539	105·9	70,759	64,493	109·7
1900....	729,916	692,618	105·1	72,257	65,288	110·7
'01....	769,494	732,097	105·1	81,500	73,573	110·7
'02....	773,296	737,539	104·9	82,670	74,557	110·9
'03....	763,806	726,010	105·2	80,437	73,041	110·1
'04....	738,230	702,141	105·1	76,893	69,787	110·2
'05....	735,948	716,822	102·7	74,095	67,660	109·5

Secondly, though the number of males exceeds the number of females in the case of the illegitimate births also, the rate of male excess is comparatively small. For instance, as may be seen in the following figures, of the total number of living-births in 1899 the male exceeded the female by 5·9 per cent., but for the illegitimate births the rate of excess is only 5·7 per cent., a little less than the excess for the legitimate births, which is 6 per cent. Again, of the total number of the still-born, the males exceeded the females by 9·7 per cent., but for the illegitimate still-births the excess is only 5·6 per cent., against 10·7 per cent. for the legitimate. The results for other years are similar.

TABLE 34.

Year.	Males to 100 females					
	In living-births.			In still-births.		
	Total.	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.
1899....	105·9	106·0	105·7	109·7	110·7	105·6
1900....	105·1	105·1	104·7	110·7	111·4	107·9
'01....	105·1	105·2	104·1	110·7	112·3	105·8
'02....	104·9	105·0	103·6	110·9	111·9	107·7
'03....	105·2	105·5	102·6	110·1	111·1	107·0
'04....	105·1	105·3	103·9	110·2	110·5	109·0
'05....	102·7	102·9	100·7	109·5	110·1	107·5

5. *Legitimate and illegitimate births.*—The following are the figures for recent years respecting legitimate and illegitimate births :—

TABLE 35.—*Legitimate and illegitimate births.*

Year.	Legitimate.			Illegitimate.		
	Living-births.	Still-births.	Total.	Living-births.	Still-births.	Total.
1899....	1,282,888	109,707	1,392,595	104,093	25,520	129,613
1900....	1,305,726	109,063	1,414,789	114,805	28,457	143,262
'01....	1,374,196	119,678	1,493,874	127,395	35,372	162,767
'02....	1,381,130	121,076	1,502,206	129,705	36,122	165,827
'03....	1,361,997	118,366	1,480,363	127,819	35,094	162,913
'04....	1,318,709	114,287	1,432,996	121,662	32,373	154,035
'05....	1,331,625	110,889	1,442,514	121,147	30,849	151,996

Of course the legitimate births form the great majority of births, viz., over 90 per cent. of the total, the illegitimate forming 8·5 to 10 per cent. of the total. This percentage of the illegitimate is similar to that of some countries such as Denmark, Germany and Austria, which have no inconsiderable illegitimate birth-rate. Of the total still-born about 80 per cent. are legitimate and about 20 per cent. illegitimate. During the period considered the proportion of the illegitimate to the total births does not seem to show any tendency to decrease, as the figures below indicate :—

TABLE 36.

Year.	Illegitimate in 100 living-births.	Illegitimate in 100 still-births.	Illegitimate in 100 births.
1899.....	8·3	19·0	8·5
1900.....	8·8	20·8	9·2
'01.....	9·3	23·0	9·8
'02.....	9·4	23·2	9·9
'03.....	9·4	23·1	9·9
'04.....	9·3	22·3	9·7
'05.....	9·2	22·0	9·5

I have already stated that the number of the still-born is very remarkable in Japan, and now we see that this is especially the case with the illegitimate in contrast to the legitimate births. As will be seen from the following figures, the percentage of the still-born in the legitimate births is about 8 per cent., while it is about 20 per cent. in the illegitimate, that is, about one-fifth of illegitimate children are returned as still-born, a fact worthy of our serious attention :—

TABLE 37.

	Still-born in 100 legitimate births.	Still-born in 100 illegitimate births.		Still-born in 100 legitimate births.	Still-born in 100 illegitimate births.
1899	7·9	19·7	1903	8·0	21·5
1900	7·7	19·8	'04	8·0	21·0
'01	8·0	21·7	'05	7·7	20·3
'02	8·1	21·8			

IV. Deaths.

1. *Number of deaths.*—The total number of deaths inclusive of the still-born during the twenty years from 1886 to 1905 is as follows :—

TABLE 38.—*Number of deaths (deaths of the legal population and still-births of the actual population).*

	Number of deaths.	Ratio per 1,000 inhabitants.		Number of deaths.	Ratio per 1,000 inhabitants.
1886	996,693	25·9	1896	1,040,035	24·4
'87	814,321	20·8	'97	907,074	21·0
'88	830,329	19·0	'98	1,020,365	23·3
'89	893,931	22·3	'99	1,070,293	24·2
'90	915,470	22·6	1900	1,052,544	23·5
'91	944,528	23·2	'01	1,084,067	23·9
'92	992,540	24·2	'02	1,119,805	24·3
'93	1,046,515	25·3	'03	1,087,754	23·3
'94	953,936	22·8	'04	1,146,679	24·2
'95	969,637	22·9	'05	1,186,947	24·9

On looking at these figures, excluding the first year (1886), which shows a great number of deaths owing to the prevalence of cholera in that year, we see that the number of deaths rose gradually from over 800,000 to over 1,000,000. The rate per 1,000 inhabitants has always, except in 1888, exceeded 20 per thousand, and generally has fluctuated between 23 and 25 per thousand.

If we average the figures of every quinquennium, we see that the annual average number of deaths increased from 890,149 during the first five years to 1,125,050 during the last five years, and the rate rose from 22·5 per thousand to 24·3 per thousand. It is a fact worthy of attention that our figures show a different tendency to those of other civilised countries, in which the death-rate is usually decreasing, but it must be borne in mind that the increase in still-births accounts for part of the rise.

	Average number of deaths per annum.	Ratio per 1,000 inhabitants.
1886-90	890,149	22·5
'91-95	981,431	23·7
'96-1900	1,018,062	23·4
1901-05	1,125,050	24·3

Such is the general tendency of the number of deaths in recent years, but the annual figures, of course, present many fluctuations. Thus the figures of 1886 show a great rise owing to the prevalence of cholera, as already stated, to which over 1,070,000 people succumbed. The figure for 1893 shows a fairly marked rise to 25·3 per thousand, for which, however, I am unable to assign any sufficient reason. The rate in 1905 rose to 24·9 per thousand, probably owing to the Russo-Japanese war.

We also give below the figures relating to deaths exclusive of the still-born in this period, which are more fit for international comparison than those inclusive of the still-born. These figures show almost the same general tendency :—

TABLE 39.—(i) *Number of deaths of the legal population, exclusive still-births.*

	Number of deaths, exclusive still-births.	Ratio per 1,000 inhabitants.		Number of deaths, exclusive still-births	Ratio per 1,000 inhabitants.
1886	938,343	24.4	1896	912,822	21.4
'87	753,456	19.3	'97 ...	876,837	20.3
'88	752,834	19.0	'98	894,524	20.4
'89	808,680	20.0	'99	934,566	21.1
'90	823,718	20.4	1900	914,557	20.3
'91	853,139	21.0	'01	928,578	20.3
'92	886,908	21.6	'02	962,097	20.9
'93	937,644	22.7	'03	933,834	20.0
'94	840,768	20.1	'04	999,621	21.2
'95	852,422	20.2	'05	1,044,855	21.9

(ii). *Quinquennial averages.*

	Average number of deaths (exclusive still- births) per annum.	Ratio per 1,000 inhabitants.		Average number of deaths (exclusive still- births) per annum.	Ratio per 1,000 inhabitants.
1886-90....	815,406	20.6	1896-1900	906,661	20.8
'91-95....	874,192	21.1	1901-05	973,797	21.1

2. *Deaths and season.*—The number of deaths in different months has fluctuated greatly, as will be seen from the following table :—

TABLE 40.—*Number of deaths (exclusive still-births) in each month of a year.*

Month.	1899.	1900.	1901.	1902.	1903.	1904.	1905
January	78,547	85,869	74,627	85,155	79,888	89,804	82,264
February	69,157	84,246	77,374	76,412	74,385	81,473	85,472
March	71,786	90,722	85,297	76,476	75,771	84,480	89,230
April	63,997	68,389	67,881	70,420	66,696	71,670	75,858
May	63,534	64,247	66,312	69,365	68,845	71,047	73,462
June	64,105	60,848	62,102	67,762	64,079	68,813	71,526
July	82,000	67,686	74,563	80,221	75,135	80,273	91,337
August	99,184	81,861	88,690	99,097	92,045	91,476	103,336
September ..	97,153	83,262	92,563	100,251	87,261	85,099	95,988
October	88,987	79,806	82,258	86,864	84,729	77,655	84,072
November ..	77,003	68,727	74,007	72,798	77,483	76,523	75,645
December ..	76,546	74,915	80,075	74,231	84,143	77,019	76,158
Unknown ..	88	56	61	74	47	68	43
Total	932,087	910,744	925,810	959,126	931,008	955,400	1,004,661

If we take as examples the figures of the two years 1899 and 1905, and treat their averages per day in each month as has been done in former sections of this paper, we find that the figures of both years agree in so far that most deaths occur in August and September and fewest in May and June, see the following table :—

TABLE 41.

Month.	1899.		1905.	
	Average of deaths per day.	Ratio of the average of deaths per day in each month to the average of deaths of a year taken as 100.	Average of deaths per day.	Ratio of the average of deaths per day in each month to the average of a year taken as 100.
January.....	253	99.2	265	96.4
February	247	96.7	306	111.2
March	232	90.6	288	104.5
April	213	83.5	253	91.8
May	205	80.2	237	86.0
June	214	83.6	233	86.6
July	265	103.6	295	107.0
August	320	125.2	333	121.1
September.....	324	126.8	320	116.2
October	287	112.3	271	98.5
November	257	100.5	252	91.6
December	247	96.6	246	89.2
Average of a year....	255	100.0	275	100.0

Similar results are obtained with the figures of other years. That is to say, most deaths occur in the season of intense heat or in the late summer, and fewest in the late spring or in the early summer.

3. *Deaths classified by sex and age.*—To compare the death-rates of males and females I have only been able to utilise the returns of deaths from 1899 to 1903, because it is only for this period that the necessary data are available. The result is, as will be seen in the following figures, that the death-rate for males is 20.73 per thousand, and for females 20.44 per thousand, *i.e.*, the former is a little greater than the latter.

1899-1903.

	Male.	Female.
Average number of deaths per annum	473,501	458,247
Death-rate per 1,000 male or female } population	20.73	20.44

Now, let us further investigate the death-rates for the two sexes at successive ages. As shown in Table 42, based on my own calculations for the figures from 1899 to 1903, for children under 5 the male death-rate is 61.15 per thousand as compared with the female death-rate 56.24 per thousand, while between the ages 5 to 35 the female death-rate always exceeds the male, and again at ages above 45 the male death-rate exceeds the female.

TABLE 42.—1899-1903.

Age-class.	Average number of deaths per annum.		Deaths of males per 1,000 male population of each age-class.	Deaths of females per 1,000 female population of each age-class.
	Male.	Female.		
Not exceeding 5	176,304	157,628	61·15	56·24
Over 5 and not exceeding 10	13,407	15,466	5·45	6·43
" 10 " 15	7,637	9,873	3·38	4·47
" 15 " 20	13,770	17,222	6·04	8·07
" 20 " 25	17,352	19,952	8·34	9·80
" 25 " 30	13,597	17,175	7·64	9·94
" 30 " 35	12,016	14,856	7·69	9·90
" 35 " 40	12,443	14,321	9·00	10·88
" 40 " 45	14,343	13,713	11·26	11·44
" 45 " 50	18,591	14,150	14·78	11·96
" 50 " 55	22,286	16,399	20·23	15·63
" 55 " 60	25,359	18,763	28·40	21·47
" 60 " 65	25,610	20,231	39·81	30·46
" 65 " 70	28,841	25,461	61·18	48·59
" 70	71,894	85,017	116·10	106·75
Total average.....	473,501	458,247	20·73	20·44

Concluding remarks.—We have now finished our brief survey of the movement of the population in Japan, which exhibits many points in common with other civilised countries, as well as certain peculiarities. Of course there are many other problems of interest, scientific and practical, to be considered. More detailed investigations might be made as to the conditions in the different local governmental districts, or in urban and rural districts, or as to the relation between the phenomena considered and occupations. But we have not attempted such studies on the present occasion, partly as we wished to give a more general view, and partly on account of the insufficiency of the materials.