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**THE RELATIONSHIP BETWEEN THE DAMAGE ON THE BODIES,
HOUSEHOLD STRUCTURES AND SOCIAL LIVINGS OF
ATOMICBOMB SURVIVALS AND THE PROCESS OF
THEIR REHABILITATION**

By MASAYOSHI CHŪBACHI

**I. THE POINTS AT ISSUE REVEALED IN A FACT-FINDING
RESEARCH OF ATOMIC-BOMB SURVIVALS**

The damage atomic-bombing brought about in August 1945 to the people of Hiroshima and Nagasaki is a unique one in the history of human race, causing a number of singular problems. If, however, another war of large scale should happen, this singularity will no longer make an issue as it did this time; the sufferings like this will be a commonplace affair to be borne by any people who are thrown into a war.

Atomic-bomb injuries are serious not only because of the direct sufferings to their victims, but because of the "sequelae" which often give rise to troubles even to the persons who have not directly hit by bomb, but who become victims owing to the mental shock they sustained—which often involve the atomic deaths of their near relatives—causing such misfortunes as the damping of their desires, aspirations and social motivations as well as a mismanagement in their household affairs.

It is understood generally that those "sequelae" come from the powerful influence of radioactivity affecting destructively the foundation and the depth of living mechanism. This is, however, a biological sense of the word. In this work, however, the word is used also to mean the after-effect of atomic-bombing, which often come to the persons who were not physically hurt, but who fell victims in a psychological or sociological sense.

It is also important to know that "sequelae" often appear with the persons who were only lightly bombed or who have apparently recovered from its physical injury.

Looking over the whole of Hiroshima, we find the epicenter of the City is quite retarded in rehabilitation and is troubled with pestilential slum problems.

Such a dreadful conditon—which is not only physical but psychological or sociological—caused by atomic-bombing, which is beyond the Nature's power of control, is likely to occur with any war of large scale in the future. So, it is important that the destruction worked in Hiroshima and Nagasaki be carefully studied so that such a catastrophic event will be well taken care of, if it should happen again. Or, it may never happen as we hope. Still, we consider it a matter of vital importance to preserve its evidence as a valuable and rare document in the history of human race.

Concerning the atomic-bomb victims, there were two researches: an appendix to the Census of 1950, and a study conducted in 1956 by Hiroshima City of all of its citizens with the object of enforcing a national health insurance. These two works

are general but rather simple. Besides these works, there were made some special researches on the people's health, occupations and living standards.

In 1965, however, with the increasing clamor of the public opinion for the relief of atomic-bomb survivals, the Ministry of Public Welfare decided to take a positive step to look after the welfare of the atomic-bomb survivals of the registered atomic-bomb survivals as well as those who newly announced themselves as such, and an investigation was made of their living conditions. In the areas where the number of atomic-bomb survivals were largest, about 20% of them was sampled for the purpose of executing a detailed study of their health, and the living conditions of their families.

The published results were concerned with the health of the victims. It was found that in proportion to their nearness to the centre of bombing, their physical abnormality or handicap was marked; the fact is true even at the present time. But concerning their blood pressure and other blood conditions, there was noticed no abnormality, either as compared with the general populace or as related to the distance from the centre of bombing. As to the bodily vigor, they showed no noticeable decline either.

Their living conditions also were found not particularly bad, although their average income is somewhat lower than the standard of the whole nation, their (men) unemployment rate is higher, the percentage of day laborers (men and women) is higher and the percentages of leaving-off or the shifting of occupation is higher after the 40 years of age, as compared with the national average.

But examining their lives in detail, we find that the percentage of atomic-bomb survivals who think or report that they are unwell or handicapped is greater than the national average. (In this case, the persons of less than 20 years of age are not included, and also it is important to know that the majority of them were older people. And this local material was compared with the correspondingly adjusted national demographic material.) The number of the persons who received medical attention is greater, and the expenses they have to pay for it is rather heavy even under the benefit of the Atomic-bomb Medical Service Law.

The percentage of the employed males is lower than the national average, but their unemployment rate is higher. This is more marked with the persons who were bombed within the radius of 1.5 k.m. from the epicentre of bombing, or with the holders of the Special Atomic-bomb Survivals's Card.

The percentage of the employed females is greater than the national average, although they are less confident of their health as compared with the males; this high rate of female employment is especially marked with those who are engaged in day labor.

The percentage of the survivals, male and female, who changed their employment in the last one year is greater than the national average.

This high rate—taking the males only—is mainly due to their personal or family reason, whereas, taking the females only, this high rate is mainly due to discharge or low wage. Analyzing the reasons for the change of employment as above,

according to sexes, it is interesting to note that they are reversed to the ordinary cases—women usually change their job for personal or family reason, while men do so because of discharge or because of looking for a better pay. This all shows that women in this case were often main breadwinners, taking the place of men who were atomic-bombed. Also, it was found that this change of employment by women did not necessarily bring a higher wage for them than before.

The percentage of the persons who are under the Livelihood Protection Law is somewhat lower than the national average, if calculated on the basis of per household, but it is 19.1% which is higher than the national average of 16.5% if calculated on individual basis, especially it is 20.2% for the Special Atomic-bomb Survival's Card holders. The persons who have no confidence in their health and who are often ill in bed is as high as 61.8%.

This seems due to the fact that the number of atomic-bomb survivals per household is greater for the heavily damaged households, and also to the fact that the ordinary Medical Care System which is a part of the Livelihood Protection Law, and which is often applied to one person in a household, whereas the household of this sort (one applicant in one household) does not come under the jurisdiction of the Livelihood Protection Law, but is taken care of by the Atomic-bomb Medical Service Law.

Such being the case, it is quite safe to say that there exists a difference between the health and the living of atomic-bomb survivals and those of ordinary people. Especially, this holds true with the latter, that is, with their living. As to where this difference comes from, we should carefully observe the lives which the atomic-bomb survivals had during the 20 years since 1945, and examine them on the basis of their classified sociological patterns.

In other words, in setting a general plan for the investigation of the problem, we should first conduct a case study of atomic survivals' lives, put up the working hypotheses for the establishment of various patterns for them, determine what indices are required for their verification, conduct a preparatory investigation to find out the ways they are distributed among the classified patterns, and in the last place, a certain number of samples be taken from the patterns of atomic-bomb survivals.

This is the formal process to be followed for this investigation. For an administrative reason, however, its initial step, that is, the "case study" was not conducted in 1965. Only in April 1966, when the total number investigation and the sample investigation had been completed, the interviews of the 240 households with atomic-bomb survivals in Hiroshima and Nagasaki were conducted with the object to obtain a supplementary information to help the explanation of the investigation.

Thus the investigations so far effected are not sufficient to verify the hypotheses that had been set. The author took part in those investigations as a member of the committees provided for their execution, and thinks it responsible for him to report the facts so far discovered, so that we may go on to varyify the hypotheses that have been set.

II. THE CHARACTERISTICS OF THE ATOMIC-BOMB DESTRUCTION AND OF THE RECOVERY THEREOF

"The Law Providing for the Special Measures for Atomic-bomb Survivals" was effectuated on September 1, 1968. Prior to the promulgation of this law, the Japan Atomic, Hydrogen Bomb Sufferer Groups Conference (Nihon Gensuibaku Higaisha Dantai Kyokai) proposed a plea for the relief of the atomic-bomb sufferers in October 1966. In the "Source Materials" appended to this proposal, the social aspects of atomic damage are described as follows:

- (1) The lasting physical handicaps due to radioactivity and the hindrances in social life of atomic-bomb sufferers;
- (2) The casualties indiscriminately fallen not only on soldiers but on a large number of civilians, including old folks, fathers and mothers, destroyed families;
- (3) Dilapidating a large urban area in a moment, the atomic-bomb attack deprived the citizens of their houses, properties and workshops (independent enterprisers' stores, factories, employers' offices)⁽¹⁾.

As the destruction by atomic-bombing come suddenly over a large expanse of land, the death rate of its victims is very high,⁽²⁾ those who survive it often suffer from its "sequelae." As it breaks up the family life and household structure and deprives a regional community of its functions, the recovery of the normal household and communal conditions is very slow.

Especially, as Hiroshima's settled population of 250,000 were thick in the centre, the attack seems to have been systematically planned to hit there hard so as to destroy the city's mainstay completely. The rehabilitation, therefore, starting with its environs, took a fairly long time.

Also, at the time of attack, 8:30 in the morning, a large number of the people were headed toward the centre of the city. This means that the attack was quite effective in demolishing the upper stratum of the citizens who were the bearers of vital duties of the town. The fact should also be taken as a significant event, if considered in the light of social structure, as compared with a case of ordinary air raid, for the atomic-bombing took away a large number of main breadwinners from families.

About the time when the atomic-bombing came, a large number of people who had been mobilized to work for the removal of houses were there; also, some soldiers and army civilian employees were stationed. Thus the population at the time of bomb attack far surpassed the City's settled population in an ordinary occasion.

Needless to say, there were a large number of people in the town's environs, who fell victims to atomic-bombing. Really, the atomic-bombing worked quite destructively to the manpower and the family life of Hiroshima and its environs.

The people who had survived the atomic bombing and fled temporarily into the environs or outside the town returned gradually to their former places of residence, especially those who had not been badly damaged. These people were fast reconstructing their households, and recovered economically. Thus the population

of Hiroshima began to increase first in its environs and then in the centre. By the end of 1945, there even appeared some clusters of black-market stalls in front of the National Railway Stations, that is, Hiroshima and the Koi Stations.

In spite of the City's measure enforced in 1946 restricting the inflow of people such an economic rehabilitation movement as the reassumption of productive activity by the Tōyōkōgyō—one of the major secondary type of industries in Hiroshima—was set afoot, and invited a fairly large number of employees. In September, Hiroshima City was designated for the application of the Special City Planning Law, and the City built 200 emergency houses under municipal control for the Company at Motomachi. These all mean that citizens were returning to the central part of the City.

In 1948, the population living within one kilometer of the bombed centre increased to the 53% of the prebombing rice rationing pass-book registered population, or recovered the 100% of the whole prewar population of the City as is shown in Table I.

TABLE I. THE PERCENTAGES OF RETURNED POPULATION BY DISTANCES FROM THE CENTRE OF BOMBING
(Keizo Yoneyama, Takao Kawai: "Atomic Bombing and Social Change, I (Genbaku to Shakai Hendo)," *Hogaku-kenkyu*)

Distances from B.C.	Years, Months	1945	1946	1946	1946	1947	1948
		Nov. 1	Apr. 26	Aug. 20	Dec 10	August	August
Less than 1 K.M.		3.1	6.8	23.4	28.9	33.2	52.8
1-1.5 K.M.		11.5	18.4	27.8	32.8	34.1	51.2
1.5-2 K.M.		22.5	32.5	36.7	39.7	47.8	60.1
2-2.5 K.M.		75.5	101.0	114.3	117.7	119.1	132.4
2.5-3 K.M.		128.5	139.2	146.7	152.5	173.4	176.6
More than 3 K.M.		181.6	216.7	201.3	211.8	209.7	213.5
TOTAL		55.6	67.8	76.7	81.9	86.4	100.2

Note: The prebombed population according to the rice rationing registered population as of June 1945.

Being designated as "The Important Factory for the Production of Tricycle automobile," the Tōyōkōgyō came to be fairly under way, and as a result of the promulgation and the effectuation in 1949 of the "Law for the City Construction in Commemoration of Peaceful Hiroshima," the employment for the construction work was on a gradual increase. Soon, however, influenced by the Dodge Plan, the factories which counted as many as 3,840 at the beginning of 1949 were reduced to 1,317 at the end of the same year.

But with the outbreak of Korean War in 1950, the economy of Chūgoku District (in which Hiroshima is located) turned upward and the population there reached the peak in the ten years since the end of War, especially the demographic change due to social mobility was conspicuous.

Looking over the economic movement up to 1954, we find the secondary industries, especially the production income of manufacturing industries, continued to increase till 1955 when it began to decrease owing to the deflation which set in.

The return of the bombed citizens to Hiroshima seems to have been completed by this time. That the incoming of people that had been on a gradual decrease since 1949 began to increase in and after 1957 seems mainly due to the inflow of the people newly migrating to the City.

Admitting the fact that the peculiarity of atomic damage comes from the physical trouble and its "sequelae" due to radioactivity, the destructive effect on family structure, causing the deviation of life's cycle from its normal course, and the extensiveness and the instantaneousness of atomic attack, we should earnestly endeavor to look into the structural characteristics of atomic survivors' life in the light of the interacting relationships of the three causes above.

Suppose a family lost its children still in school age on account of the atomic-bombing, the parents should often have to suffer from the poverty when they get old, which might be called a "sequela" of a ruined family structure. The situation like this should be studied by searching into the conditions which this family had enjoyed before the bomb attack and how it was destroyed by bombing. The situations like this should be classified into observational patterns.

What we should do in this connection is first the examination of the process which the structures of bombed families went through on account of the destruction, and then the study of the recovering steps such as the reestablishment of their family structures, the return to their previous dwelling places and the restoration of their economic stability. This transformation process will be considered in fivefold periods of time.

The first period is the earliest time of rehabilitation covering from the time right after the bomb attack to the end of 1946, when people began to come back to the environs;

The second period is the time up to the end of 1947, when the centre of the City began to show recovery sign;

The third is the time when the early stage of rehabilitation was concluded at the end of 1949;

The fourth is the so-called second stage of rehabilitation up to the end of 1954. This is the time when Hiroshima gradually emerged from the "town of atomic-bomb sufferers" into a post war new town starting on a fresh development. At the same time there seems to have appeared a gulf between the people who succeeded in making a good start for life, and those who had been lowly stationed in society and those who had been heavily damaged;

The fifth is the period after 1955. This is the time when the various relief measures such as "The Medical Service Law for Atomic Bomb Damage," were realized.

(1) The Japan Atomic and Hydrogen Bomb Sufferer Groups Conference: *The Plea for the Enactment of the Relief Law for Atomic and Hydrogen Bomb Sufferers*, Appended Material: *Peculiarities of Atomic-bomb Damage and the Request for the Law to Relieve the Atomic-bomb Sufferers*,

October, 1966, pp. 11-14

Shigeru Yamate: "Why necessary to Enact 'The Law to Relieve the Atomic-bombed,'" *Sekai*, April, 1963.

(2) "It is estimated that 200,000—about the half of 400,000 population of Hiroshima—died when the atomic-bomb exploded over the City, and 80,000 were killed instantly in Nagasaki," *Atomic-bomb, Testimony by 500 Persons* edited by the Asahishimbun-sha, 1967.

The definition of "atomic-bomb sufferer" may significantly differ according to each researcher. Accepting, however, the provision of the "Law for the Medical Care of the Atomic-bomb Sufferers," defining the damaged area to be the 4 kilometre stretch from the bombed centre, which is about the size of the City of Hiroshima or Nagasaki, we may take the death rate of the atomic sufferers to be about 50%.

(3) The Employee Union of Hiroshima Bank, edit.: *Being Stirred from the Ruins, 10 Year History of Struggle*, 1958, pp. 24-25.

III. THE PROCESS OF THE QUESTIONNAIRE INVESTIGATION AT HIROSHIMA

The questionnaire investigation of Hiroshima aimed at obtaining the first-hand information of the 160 sampled households through their atomic-bombed members, often being confirmed by the household heads and their wives as well as by other members, so that the results will be as accurate as possible.

The number of the sampled households including the reserve ones was 211. The households for which the investigation was actually conducted counted 170, of which 156 answered effectively, as shown in Table II.

The questionnaire items on household conditions, covering the period from the prebombing to the investigation time, are as follows: each household structure, the characteristics of its members especially with reference to their health, education, occupations, incomes, the household consumption level, the household dwelling place and its houses and the present mentality of its members. Also, the 20 year changing process of each household structure, as observed in the light of its atomic damage, was clarified.

After a preparatory work made in the latter half of March 1966, the investigation itself was executed during the time from March 30 to April 10, 1966. The investigation was conducted by two research bodies: the Keio group consisting of 5 students, graduate and undergraduate, of Keio University, and the 6 member Tokyo University group, graduate and undergraduate students. With the addition of the 8 students from the local Hiroshima College of Commerce, the field workers counted 19 altogether. The cooperation between the Keio and the Tokyo University group was very close since the beginning of the preparatory work, the former being directed by Professor Masayoshi Chūbachi, and the latter by Professor Mikio Sumiya assisted by Hiromi Shimodaira.⁽¹⁾

The first step of the approach to the problem was the selection of the places to be studied. The household investigation card generally used for the life investigation of 1/20 + 3/40 sample was adopted. In sampling, the 8 streets in the central part and the environs of the City were selected taking into consideration their local and occupational peculiarities.

TABLE II. NUMBERS OF THE INTERVIEWED HOUSEHOLDS

Streets Households	Moto-machi	Ohte-machi	Hakushima-machi	Nakahiro-machi	Ujina-machi	Koi-machi	Onaga-machi	Hesaka-machi	In Hospital	Total
Sample Households including Reserve Ones	18	28	23	27	30	29	27	29	0	211
Interviewed Households (a later addition of 6 hospitalized patients)	18	22	23	23	22	22	20	14 ¹⁾	6	170
No Information mainly due to the absence of household members)	0	1	2	1	1	1	0	1	3 ²⁾	10
Refused to Answer	0	0	0	0	0	1	0	0	0	1
Household Duplicated	0	1	0	0	0	0	0	1	0	2
Defective Entry	0	0	1	0	0	0	0	0	0	1
Households effectively used	18	20	20	22	21	20	20	12	3	156

Notes: (1) The number of investigated households was 20 for each of the 8 streets, the total being 160. The additional 6 households "in hospital" were subtracted from the Hesaka's households for the reason of the investigation deadline.

(2) In spite of the repeated visits, the household members were always absent. The numerical drop of "In Hospital" was due to dehospitalization, serious illness or death.

Of course, the atomic-bombed households changed their abodes, and the local peculiarities also underwent changes in the 20 years under consideration. But considering the fact that the atomic-bombed households themselves went through decomposition and reorganization to some extent and that Hiroshima people are generally less mobile, it seems that our first stage of approach was proper, practical and effective.

The second stage of our approach was that, in selecting the 20 households properly representative of the 8 places, we took into account the structures of households and the structures of atomic-bomb survivals. In other words, we looked into if there was a nuclear family in each of the selected households and classified them into simple, categorized patterns, according as if those nuclear families were atomic-bombed or not, and took trouble to see if those particular patterns of households were sufficiently represented.

In the third place, after we have selected the places to be studied and have given a proper consideration to their occupational phases, we made efforts to have our data fully representative of the various social groups as classified by dint of the highest income earning person in a family.

In the last place, we paid our utmost and comprehensive attention to the following matters by household questionnaire and individual questionnaire: the household structures at the time of bombing and at the time of investigation, the structures of

atomic-bomb survivals in the family, the degrees of atomic-bomb injury, the health, the ages and the incomes of the persons interviewed.

The 8 investigated places: Moto-machi, Ohte-machi, Nakahiro-machi, Hakushima-machi, Koi-machi, Onaga-machi, Ujina-machi and Hesaka-machi are distributed in the order of the distances from the central part to the environs of the C

An outline of their peculiarities is presented below:

(1) Moto-machi. Being located in the central part, it includes the so-called atomic-bomb slums on the bank of Ohta River and the municipal residential district, formerly a parade ground. On the shore of the River, small barracks are built close together; they are occupied by the workers who are under the government measure for the jobless, day-laborers, home workers, and petty enterprisers. Their mobility is very high. These municipal houses are outworn. The streets are poorly laid and drain ill. Electric home apparatus and private cars, however, catch our eye, bespeaking economic stirring of the people. It seems that there are more regularly employed workers around here than in the atomic-bomb slums.

(2) Ohte-machi. The same as Moto-machi, Ohte-machi is also located in the central part. It includes such an area where houses were completely destroyed, and almost all the people there were killed by the bombing, and its adjacent places were reduced to ashes rather by fire. At present, these places may generally be called a business and service work district embracing all sorts of people ranging from the upper class living in the prosperous shopping streets to the lower ones who are engaged in small domestic production. Our object was to look into the living conditions of the low class of people engaged in service work at 5-chome (block), Ohte-machi, across the crossroad in front of the Hiroshima Municipal Hall.

(3) Nakahiro-machi is situated in the north-west of the City. There exist many smaller enterprises, especially iron and nonferrous metal factories and scrapping workers. These workshops are surrounded by the homes of the workers for them, and by the greengrocer's and variety stores patronized by them. The difference in the scale of life between the factory owners and their employees seems to be getting wide. Even the factory owners look like developing into the two extremes of living.

Since the street is conveniently situated to the centre of the City, the office workers' homes are rapidly increasing. Before the War, this place had some rural villages around; some of them were burnt, and those places are now being urbanized into residential quarters.

(4) Hakushima-machi is a typical residential district in the north of the City for the middle class people as the employees of large enterprises or public office workers. Here and there we find the official residences for the employees of large industry or the residences for municipal officials. Roads are well laid and traffic is not very busy. Buildings are amply provided with space, and environments are excellent.

(5) Koi-machi is a flourishing street in the west of the City, the sub-centre of the City, so-to-speak. Different from the centre, it is full of petty shops built around the Koi Street Car Stop. Many of these shops are the remnants of the

black-market stalls built by the people who sneaked in the City soon after the end of War. As many of the plots they occupy are public owned, their evacuations are causing a troublesome issue now. The general populace around the shopping quarters are mostly low class of workers such as the factory hands or shop employees. Their mobility is very high.

(6) Onaga-machi in the north-east of the City. A group of reformed dwellings, consisting of 7 apartment houses built during the period from 1953 to 1965, has been made the object of our study. At the entrance to the group, there stands a neighborhood association hall in which the people, who were evacuated on account of the area reform, live. Besides regular or day laborers, there live some independent shoemakers there, using a part of the 2DK style living room as their workshops.

(7) Ujina-machi in the south of the City. A fairly large number of big as well as smaller enterprises are crowded here. There live many laboring people, especially those for the smaller enterprises or for some unskilled works. Here is a public employment agency taking care of the unemployed that are as numerous as next to Moto-machi. Around here, there are scattered stagnant business shops and service work parlors catered to the wage-earners living around. This area was fortunately saved from fire, but because of that, the houses are obsolete, giving the impression of slums. In this area, our investigation was conducted for the *2-chome* only, the southernmost tip of the area.

(8) Hesaka-machi in the north of City. This place was incorporated into the City in 1955. Before the War, the area was partly agricultural, and partly, village-residential for upper class citizens. Practically no damage was made by bombing, but being situated on a road to refuge, some people there seem to have been physically infected by the atomic-bombed refugees, the fact we might term the "indirect victims of radioactivity."

After the War, however, the place was developed and residentialized, for farmers disposed their lands to go into other fields of activity. We hear that there is at present only one full-time agriculturist whose gross income amounts to more than 300,000 yen a year.

The above choice of the places for investigation was made for the purpose of having our interview results as comprehensively representative as possible of the modes of change in the living of atomic-bomb survivals during the 20 years under investigation. Suppose we analyze those results and find some statistical tendencies, it does not follow that we can properly apply them to all the atomic-bomb survivals of whole Hiroshima.

It seems necessary to check whether the previously presented tendencies can be taken as generals by examining the weights of the respective patterns, taking into consideration the whole group of atomic-bomb survivals through a properly provided preparatory investigation, and further by verifying them through the samples derived from them.

This work is merely an attempt to set up the hypotheses for the promotion of a future work of this sort, but here we present tentatively the deviations, if there are,

which these representative areas, excepting Heaska, may show in their percentages if compared with the whole Hiroshima City, in relation to their employment structures—industrial and occupational—and to their atomic-bomb survivals structures. (See Tables III, IV)

TABLE III. COMPARISON OF THE EMPLOYMENT STRUCTURES IN THE WHOLE CITY OF HIROSHIMA AND IN THE INVESTIGATED AREAS ACCORDING TO THE CENSUS OF 1965 (CALCULATED BY "THE MATERIALS ON POPULATION AND HOUSEHOLDS BY STREETS")

	Number of the Employed above 15 years of Age	Work Status				Industires		
		Employed Workers	Independent Workers	Home Workers	Un-known	Agriculture Forestry Fishery	Mining	Construction Manufacturing
Moto-machi	100%	79.8	14.2	5.9	0.1	0.7	0.1	38.5
Ohte-machi (4-5 Chome)	100	73.7	15.3	10.9	0.1	0.3	0.1	22.1
Naka-hiro	100	79.6	13.4	8.9	0.2	0.8	0.1	51.2
Haku-shima	100	81.6	12.5	5.7	0.2	0.2	0.2	26.6
Koi	100	75.8	15.2	8.8	0.2	7.6	0.0	26.1
Onaga	100	82.9	11.6	5.3	0.2	0.9	0.0	41.6
Ujina (2-chome)	100	89.1	7.7	3.0	0.2	0.2	0.0	50.0
Total	100	79.8	13.4	6.7	0.1	2.0	0.1	35.0
Total: Hiroshima	100	80.0	12.9	7.1	0.0	1.9	0.0	35.0

	Industries				Occupations				
	Wholesale Retail	Transportation Communication	Service	Others	Agriculture Forestry Fishery	Production Transportation	Sales Service	Office Work	Unclassified
Moto-machi	25.8	6.1	18.4	10.4	0.4	46.1	25.2	28.3	0.0
Ohte-machi (4-5 Chome)	41.6	4.7	23.9	7.3	0.4	25.8	42.0	31.8	0.0
Naka-hiro	23.2	5.5	11.1	8.1	0.7	50.0	23.7	25.6	0.0
Haku-shima	30.4	9.8	18.8	14.0	0.2	30.8	27.4	41.6	0.0
Koi	28.9	8.8	19.0	9.6	7.5	29.2	25.8	37.4	0.1
Onaga	20.1	15.7	14.2	7.5	0.8	50.2	20.2	28.8	0.0
Ujina (2-chome)	16.6	8.6	16.8	8.0	0.3	48.6	17.1	33.9	0.1
Total	26.9	8.4	17.7	9.9	2.1	39.1	25.5	33.3	0.0
Total: Hiroshima	28.1	8.8	17.0	9.2	1.8	39.0	27.2	32.0	0.0

TABLE IV. THE TRENDS OF ATOMIC-BOMB SURVIVALS' PERCENTAGES
IN WHOLE HIROSHIMA AND THE INVESTIGATED AREAS
(calculated by Hiroshima Municipality)

Streets	Investigation Appended to 1950 Census ⁽¹⁾			Atomic-bomb Survival Card Possessors in 1960			Facts of Atomic-bomb Survivals in 1965 ⁽³⁾		
	Popu- lation	Atomic- bomb ⁽²⁾ Survivals	%	Popu- lation	Atomic- bomb Survivals	%	Popu- lation	Atomic- bomb Survivals	%
Moto-machi	9,200	1,918	20.8	15,185	2,383	15.7	15,585	2,990	19.2
Ohte-machi (4-5 Chome)	1,830	527	28.8	2,513	495	19.7	2,498	500	20.0
Naka-hiro	2,460	1,001	40.8	3,513	1,068	30.4	4,713	1,180	25.0
Haku-shima	6,500	1,644	25.3	8,969	1,812	20.2	9,592	1,754	18.3
Koi	9,350	4,427	47.8	10,620	3,740	34.3	12,377	4,074	32.9
Onaga	6,860	3,243	47.4	8,004	2,314	28.9	8,805	2,387	27.1
Ujina ⁽⁴⁾	21,600	6,920	32.0	29,744	6,419	21.5	32,885	5,876	17.9
Total	57,800	19,680	34.0	78,548	18,231	23.2	86,455	18,761	21.7
Total: Hiroshima	285,712	98,102	34.3	431,336	91,221	21.1	504,240	100,246	19.9

- Notes: (1) With no available statistics by streets in the 1950 Census, we estimated rough numbers by the Municipal Census, 1951-54.
- (2) Concerning the specifications of atomic-bomb survivals by streets in the *Appended Investigation of the 1950 Census*, Mr. Hiroshi Maki, Associate Director of the Hiroshima Atomic-bomb Casualty Commission, has kindly given us cooperation.
- (3) The figures in these columns are based on the populations as they were in the area demarcations of 1960, although the investigation was made in 1965.
- (4) The figures of Ujina here are for the whole street of Ujina, as the populations for each *chome* (block) were unknown in 1950 and 1960.

According to these Tables, we find that in spite of a fairly marked difference in the structures of the employments and the atomic-bomb survivals in these areas on account of their geographical and occupational peculiarities, but coming to the totals of those areas, we notice that they agree quite well with the situation of the whole Hiroshima City with the exception of the "sales" which is about 1-2% below, and the "office work" which is about 1% over it.

The situation, with Hesaka included, is found not much altered, only the farming population being increased by 1%, and the population in "sales" being decreased by that many.

It seems quite safe to say that the results we have obtained with reference to the households interviewed can be applied to the whole survivals of Hiroshima.

(1) Here we offer a deep gratitude to the atomic-bomb survivals and their families, as well as to the staff members of the Plan Section, the Bureau of Public Hygiene, the Ministry of Public Welfare; the Countermeasure Conference on the Atomic-bomb Damage in Hiroshima; and the Atomic-

bomb Damage Counter-measure Section, Bureau of Public Hygiene, Hiroshima City, for the cooperation they gave us in the process of actual execution of our investigation including such an important affair as the choice of the areas and other objects for investigation.

IV. LIFE STRUCTURE, ITS DESTRUCTION AND RECOVERY

As was previously stated when we considered the general phases of the destruction and the rehabilitation of the bombed areas, it seems that they went through a two-fold stage of reconstruction, generally speaking: first, the recovery period, and second, the development period.

It is significant in this connection to know when, that is, how soon and how late, each survival could manage to reconstruct his family structure, return to his former dwelling place, and restore his economic stability, having enabled him to secure the conditions of life which he was enjoying at the time when we saw him.

It is important, therefore, to know how various living conditions of individual survivals, such as the physical damage they or their families suffered, the employments they were deprived and the properties they lost, have influenced them to be placed at their contemporary situations, if expressed differently, to have them accept the existing social stratification.

Further, it was essential to know which class in this stratification he belonged to. This could be ascertained fairly well by questionnaire indirectly through such an information of their employments or the shiftings of their abodes, although the increase or the decrease of their actual incomes or properties could not be known directly.

In considering the social stratification, we adopted the tripartite classification: upper, middle and lower. Further, each class was subdivided into three groups according to their standards of life: higher, middle and lower.

The upper class includes such persons as section chiefs and those who are above them in government or public offices, or those who work for the enterprises with more than 1,000 employees, municipal assemblymen, professional people such as doctors or lawyers, shop keepers with more than 5 or 10 employees and the farmers owning more than 1 cho (2.45 acres) and 5 tan (5×0.245 acres) of land.

The middle class includes office employees and the regular workers of large enterprises, the office employees of smaller enterprises, independent shop keepers employing the persons other than of their own families, or the persons owning the property or running the business equivalent to the above, the officials of local community bodies and the farmers owning the land amounting to 5 tan or 1 cho and half.

The lower class includes such people as the temporary factory workers, regular laborers of smaller enterprises, the unemployed living on public relief, petty independent shop keepers, odd-jobbers, farmers with less than 5 tan of land (5×0.245 acres), side-job workers and the persons taken care of by relief measure.

To facilitate the statistical management, these people were rated numerically according to the seriousness of their handicaps: the more serious a persons's damage,

TABLE V. THE ATOMIC BOMBED HOUSEHOLDS GRADED BY MARKS FOR THE DAMAGES THEY SUSTAINED

		Household Head or Main Breadwinner Dead	Other Occupied Persons Dead	Household Head or Main Breadwinner Injured	Other Cases
Membership Wholly Bombed	—Dead, Injured	11	10	9	8
	—Dead Only	9	8	—	6
	—Injured Only	—	—	5	4
	—None	—	—	—	2
Membership Partially Bombed	—Dead, Injured	10	9	8	7
	—Dead Only	8	7	—	5
	—Injured Only	—	—	4	3
	—None	—	—	—	1

the higher he was marked. Thus the higher group of the upper class was numbered 1. Scaled by 1, the entire system was 9-fold graded, marking the lower group of the lower class 9.

Next, we considered the seriousness of radioactivity on individuals according as they lived within or without 1.5 kilometers from the centre of bombing, naming the former as 2 and the latter as 1. Also, the household damage was studied if it was inflicted wholly or partially on its membership. The households were given 1 to 11 points according as death or injury happened with its members, and according as it occurred with its head or main breadwinner.

Next, we took up the question of the length of time for rehabilitation. Since the atomic-bomb survivals are the people who lived in Hiroshima City and its environs, we examined the question by looking into how soon the evacuated people returned to the Hiroshima area on their having recovered their previous household conditions and economic stability to a tolerable extent. In other words, we marked their speeds of recovery according to the previously presented regional fivehold classification of the rehabilitation speed of the bombed communities. The atomic-bomb survivals who were fastest in their recovery, that is, those that came back by the end of 1945 were marked 1. Graduated for the recovery retardation by the scale of 1, the survivals who rehabilitated after 1955 were marked 5.

Concerning the existing conditions of household membership, the defective households where either man or wife was lacking were marked 4, the highest mark; the couple households where both man and wife were bombed were marked 3; those where man only was bombed, 2; and those where wife only was bombed, 1. Other households—only 2—in the total of 156, were treated as the household of 0 mark.

The existing conditions of the households as described above are shown by Table VI according to areas and hospitalized patients. Generally speaking, the couple households where both man and wife were bombed are most numerous. Observ-

TABLE VI. THE EXISTING CONDITIONS OF BOMBED HOUSEHOLD MEMBERSHIP
(The figures in parentheses indicate the numbers of observed objects when sampling was made.)

Household Conditions	Streets									Total
	Moto-machi	Ohte-machi	Nakahiro	Hakushima	Koi	Onaga	Ujina	Hesaka	In Hospital	
Couple Household: Both Man and Wife Bombed	6 (6)	6 (8)	10 (9)	6 (6)	5 (8)	8 (7)	9 (8)	6 (8)	0	56 (60)
Couple Household: Man Only Bombed	1 (1)	5 (6)	4 (5)	4 (3)	3 (3)	6 (7)	3 (5)	0 (6)	0	26 (36)
Couple Household: Wife Only Bombed	5 (5)	6 (8)	4 (5)	3 (5)	6 (7)	3 (5)	2 (4)	3 (8)	0	32 (47)
Defective Household (wife lacking: Man Bombed)	0 (1)	0 (1)	0 (2)	1 (3)	1 (2)	1 (2)	1 (4)	0 (3)	1	5 (18)
Defective Household (man lacking: Wife Bombed)	6 (4)	3 (5)	4 (5)	5 (4)	4 (8)	2 (5)	6 (6)	3 (4)	2	35 (41)
Other Households	0 (1)	0 (0)	0 (1)	1 (2)	1 (1)	0 (1)	0 (3)	0 (0)	0	2 (9)
Total	18 (18)	20 (28)	22 (27)	20 (23)	20 (29)	20 (27)	21 (30)	12 (29)	3	156 (211)

ing, however, the environs where bombing was not very serious, we find the households of this sort rather numerous in such places as Nakahiro Onaga, Ujina and Hesaka.

Next to the couple households where both man and wife were bombed, the defective households, the households where wife only was bombed, are large in number. If these two categories of households are put together, they are more numerous than the households where both man and wife were bombed. These facts seem to show that there are a considerable number of the cases where man was bomb-dead, leaving wife behind, or she was married to a non-bombed man, or a wife came into the City looking for her husband.

The above interpretation seems justified when we examine the percentages of the "Wives Bombed" at Moto-machi and Koi, the streets where a large number of the bombed at the Center of the City came back and settled.

Next, we examine by areas and according to which social classes the atomic-bomb survivals belonged before and after the bombing. Table VII with the vertical side column indicating the 9 social classes: upper, middle and lower, each being subdivided into 3, and the horizontal top column indicating the 4 periods of time: prebombing, postbombing up to the end of 1949, 1950-1954 and 1955-present, shows by areas and by the periods of time, the ways the 156 households were distributed among the social classes.

Taking up the totals in the extreme right column we find that the households, which belonged to the classes from the upper through to the middle of the middle class decreased by the end of 1949 as compared with the prewar time, continued

TABLE VII. THE DISTRIBUTION SHIFTS OF THE INVESTIGATED HOUSEHOLDS, AS OBSERVED BY AREAS, PERIODS OF TIME AND SOCIAL CLASSES

Areas		Moto-machi				Ohte-machi				Nakahiro				Hakushima				Koi			
		Pre bomb	'45	'50	'55	Pre bomb	'45	'50	'55	Pre bomb	'45	'50	'55	Pre bomb	'45	'50	'55	Pre bomb	'45	'50	'55
Social Classes	Periods of time	Pre '49	'54		Pre '49	'54		Pre '49	'54		Pre '49	'54		Pre '54	'54		Pre '49	'54			
	Upper Class	Up.	0	0	0	0	1	0	1	1	1	0	0	1	2	1	2	2	0	0	0
Mid.		0	0	0	0	1	1	1	1	1	2	2	1	3	2	1	1	1	1	0	0
Low.		0	0	0	0	1	1	1	3	1	0	0	0	3	5	4	3	0	0	1	2
Total		0	0	0	0	3	2	3	5	3	2	2	2	8	8	7	6	1	1	1	2
Middle Class	Up.	1	0	0	0	3	2	3	3	0	0	0	0	2	1	2	3	6	2	2	4
	Mid.	3	0	0	0	5	2	4	4	4	1	2	4	1	1	1	1	5	4	6	5
	Low.	5	3	3	4	6	7	5	3	6	4	4	3	6	1	4	3	4	10	7	4
Total		9	3	3	4	14	11	12	10	10	5	6	7	9	3	7	7	15	16	15	13
Lower Class	Up.	7	4	7	6	3	4	2	3	6	5	9	9	3	8	5	6	4	2	4	4
	Mid.	1	10	6	7	0	2	3	2	3	9	4	4	0	1	0	1	0	1	0	1
	Low.	1	1	2	1	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
Total		9	15	15	14	3	7	5	5	9	15	14	13	3	9	6	7	4	3	4	5
G. Total		18	18	18	18	20	20	20	20	22	22	22	22	20	20	20	20	20	20	20	20

Areas		Onaga				Ujina				Hesaka				in Hospital Patients				Total			
		Pre bomb	'45	'50	'55	Pre bomb	'45	'50	'55	Pre bomb	'45	'50	'55	Pre bomb	'50	'50	'55	Pre bomb	'45	'50	'55
Social Classes	Periods of time	Pre '49	'54		Pre '49	'54		Pre '54	'54		Pre '54	'54		Pre '54	'54		Pre '49	'54			
	Upper Class	Up.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	3
Mid.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	4	3
Low.		1	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	8	6	7	9
Total		1	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	18	13	14	16
Middle Class	Up.	1	0	0	0	1	2	0	0	0	1	1	1	0	0	0	0	14	8	8	11
	Mid.	1	1	2	3	3	1	2	2	4	2	2	3	0	0	0	0	26	12	19	22
	Low.	4	3	1	1	1	1	0	1	1	2	3	3	3	0	0	0	36	34	27	22
Total		6	4	3	4	5	4	2	3	5	5	6	7	3	0	0	0	76	54	54	55
Lower Class	Up.	9	5	9	10	13	7	11	10	3	2	1	5	0	2	2	2	48	39	50	55
	Mid.	3	10	6	6	2	10	7	6	3	4	5	0	0	1	1	1	12	48	32	28
	Low.	1	1	2	0	0	0	0	1	0	1	0	0	0	0	0	0	2	5	6	2
Total		13	16	17	16	15	17	18	17	6	7	6	5	0	3	3	3	62	92	88	85
G. Total		20	20	20	20	21	21	21	21	12	12	12	12	3	3	3	3	156	156	156	156

somewhat in the same trend up to 1954, and increased again after 1955, although they have not restored the percentage in the prebombing period.

In contrast to this, the households of the lower group of the middle class were generally on the decrease after the bombing, while those of the upper group of the lower class gradually increased. And the households below the middle of the lower class increased rapidly after the bombing up to 1949, but they began to decrease gradually after that; they seem not to have restored their prebombing percentage so far.

It is impossible to know if the similar tendencies as above can generally be said of the non-bombed households, as the research materials for them are not available. As can be seen, however, by Tables VIII, IX and X which take into consideration the employment structures by industries and occupations of the prewar Hiroshima in general, as well as of the City's postwar rehabilitation process, the pulling down tendency of social class seems to have happened equally with the non-bombed households till the end of 1949. It seems, however, that we are permitted to consider their living conditions after the end of 1949 to have tended upward above their prewar level. It seems, therefore, reasonable to consider that the atomic-bomb survivals as a whole are tardy in the rehabilitation of their prewar social status.

It does not mean, however, that all the atomic-bomb survivals are uniformly slow in their recovery. It seems right to judge that about one-third of the total sufferers were seriously injured in view of the fact that 57 out of the 156 households were located within 1.5 kilometers from the centre of bombing and had their heads or other members injured, 61 of them had some of their members killed at the moment of bombing, and 56 of them had their living conditions restored only after 1946.

TABLE VIII. THE HOUSEHOLD MEMBERS EMPLOYMENT PERCENTAGES AS CLASSIFIED BY THE WORKS OF THEIR HOUSEHOLD HEADS
(the percentages of the employed household members excepting the unoccupied)

	1930	1935	1940		1950	1955	1960	1965
Agriculture, Fisheries	8.4	10.7	4.5	Agriculture Forestry, Fisheries	7.3	4.8	3.3	2.2
Mining	0.2	0.2	0.1	Mining	0.1	0.2	0.2	0.1
Industries	30.1	27.9	49.0	Construction, Manufacturing	35.5	31.4	36.9	37.2
Commerce	31.7	31.4	23.0	Wholesale, Retail	22.7	23.3	22.8	23.6
Transportation	8.7	9.6	5.5	Transportation, Communication	11.4	12.3	10.9	12.0
Public Service, Free	14.6	11.9	9.8	Public Service, Service	20.2	24.6	21.2	19.8
Other Employment	6.3	8.6	8.1	Other Employments	2.8	3.4	4.7	5.1
Total	100	100	100	Total	100	100	100	100

TABLE IX. PERCENTAGES OF THE EMPLOYED PERSONS OF AND ABOVE 15 YEARS OF AGE, AS CLASSIFIED BY THE INDUSTRIES OF THE CENSUS

	1947 ⁽¹⁾	1950	1955 ⁽²⁾	1960	1965
Agriculture, Fisheries	10.1	7.3	5.1	2.9	1.9
Mining	0.1	0.1	0.1	0.1	0.1
Construction, Manufacturing	36.4	33.0	28.8	35.6	34.9
Wholesale, Retails	14.4	23.5	25.9	26.5	28.1
Transportation, Communication	12.1	10.7	10.0	8.3	8.8
Public Service, Service	21.1	22.6	26.5	22.0	21.2
Other Employments	5.8	2.8	3.6	4.7	5.0
Total	100.0	100.0	100.0	100.0	100.0

Notes: (1) Employed Persons of and above 10 years of age for this year.

(2) For this year, Electricity, Gas and Water services are included in Transportation and Communication. For other years, these are included in Other Employments.

TABLE X. PERCENTAGES OF THE EMPLOYED PERSONS OF AND ABOVE 15 YEARS OF AGE, AS CLASSIFIED BY THE GENERAL CATEGORIES OF THEIR EMPLOYMENTS

	Percentages			
	1950	1955	1960	1965
Professional, Technical	7.3	7.8	7.2	7.2
Managerial	4.3	4.7	4.2	5.1
Office	19.2	17.4	18.2	19.8
Sales	17.4	18.5	16.7	16.6
Agriculture, Forestry, Fisheries	7.0	5.0	2.8	1.8
Quarrying	0.1	0.1	0.1	0.0
Transportation, Communication	2.4	3.8	5.2	5.7
Skilled Productive, Simple Labor	33.8	31.6	35.3	33.2
Service	8.5	11.1	10.3	10.6
Unclassified, Unknown	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

The problem of social class shifting awaits our fuller consideration when we are aware that the 40% of the investigated households had belonged to the lower class before the bombing, and the percentage rose to 60 right after the bombing, whereas its present percentage may possibly be surmised to be above 55. (Consult Tables XI, XII.)

TABLE XI. THE HOUSEHOLD MEMBERSHIP DAMAGE

	Household Head or Main Bread-winner Killed	Other Occupied Persons Killed	Household Head or Main Bread-winner Injured	Other Occupied persons Injured	Other Cases	Total
All Members Bombed, Killed or Injured	5	5	4	0	8	22
All Members Bombed, Only Some of Them Killed	3	3	—	—	5	11
All Members Bombed, Only Some of Them Injured	—	—	14	0	21	35
All Members Bombed, Neither Killed nor Injured	—	—	—	—	18	18
Some Members Bombed, Killed or Injured	3	0	5	1	7	16
Some Members Bombed, Only Some of Them Killed	3	1	—	—	8	12
Some Members Bombed, Only Some of Them Injured	—	—	5	3	9	17
Some Members Bombed, Neither Killed nor Injured	—	—	—	—	25	25
Total	14	9	28	4	101	156

TABLE XII. THE PERIODS OF TIME WHEN LIVING CONDITIONS WERE SOMEHOW RESTORED

Streets	Moto-machi	Ohte-machi	Nakahiro	Hakushima	Koi	Onaga	Ujina	Hesaka	In-Hospital	Total
End of 1945	6	8	14	13	16	17	17	7	2	100
End of 1946	9	4	3	2	3	1	1	2	1	26
End of 1949	3	6	4	4	1	2	3	3	0	26
End of 1954	0	2	1	1	0	0	0	0	0	4
After 1955	0	0	0	0	0	0	0	0	0	0
Total	18	20	22	20	20	20	21	12	3	156

Now, we consider another question according to the marking scale prescribed before: the correlation between the atomic damages as described above and the conditions of life such as the social class placement of atomic-bomb survivals, the periods of time when they somehow restored their living conditions, and the present degree of their damage.

The side vertical column of Table XIII indicates the prebombing social classes, each with its own gradation number. We find practically no correlation between these social class grades and whether or not the atomic bomb survivals had lived within 1.5 kilometers from the center of bombing. This very little correlation comes from the essential characteristics of atomic bombing—its extensiveness, instantaneousness and thoroughness—as distinct from ordinary bombing. Especially, as the bombing was pivoted around the centre of the City, the resultant damage worked levelling over the social classes, high and low. This small correlation is seen also of the damage on households. The fact is further confirmed by the prebombing social classes shown in the vertical side column of Table XIV. It is also supported by the high correlation with the damage on “bombed person.”

But coming to the social classes after the bombing, we find them perfectly correlated to the prebombing social classes all the way through the entire period. Further, as is seen by Table XIII, the upper class seems to be pretty fast both in rehabilitating and in the management of postwar sufferings of life.

If seen, however, contrariwise, as is done by Table XIV which presents facts with the household damage as its observational axis, we find the postwar social classes show some correlation with the life rehabilitation period, but its correlation with the postwar social classes is found ever diminishing.

TABLE XIII. THE RELATION BETWEEN THE PREBOMBING SOCIAL CLASSES AND THE POST -BOMBING LIVING CONDITIONS

			Damage on Bombed Person		Atomic Damage on Household		Rehabilitation Period		Social Class, 1945-1949		Social Class, 1950-1954		Social Class, 1955-Present		Damage on Household at Present	
Upper	Grades	Households	1.75	9	5.50	9	1.00	1	1.75	1	1.25	1	1.25	1	3.25	8.5
	U. 1	4	1.33	4.5	3.67	2	1.17	2	2.50	2	2.50	2	2.50	2	1.83	1
	M. 2	6	1.25	2	3.75	3	1.25	3	4.00	3	3.88	3	3.75	3	2.38	2
Middle	U. 4	14	1.29	3	5.00	7	1.57	5	5.00	4	5.29	4	4.93	4	2.57	4
	M. 5	26	1.35	6	5.04	8	1.65	7	6.12	5	5.85	5	5.65	5	2.58	5
	L. 6	36	1.33	4.5	4.94	5	1.64	6	7.05	6	6.61	6	6.47	6	2.56	3
Lower	U. 7	47	1.38	7	4.96	6	1.66	8	7.55	7	7.53	8	7.23	7	3.13	7
	M. 8	12	1.58	8	4.25	4	2.50	9	8.00	8.5	7.50	7	7.25	8	5.25	8.5
	L. 9	2	1.00	1	2.00	1	1.50	4	8.00	8.5	8.00	9	7.50	9	3.00	6
Correlation of Order			-0.16		+0.77		+0.96		+1.00		+1.00		+1.00		+0.89	

TABLE XIV. COMPARISON OF THE DAMAGES ON HOUSEHOLDS, AND THE LIVING CONDITIONS, PREBOMBING AND POSTBOMBING

Weight	Total of Households	Prebombing Social Class		Damage on Bombed Person		Period of Time for Rehabilitation		Social Class, 1945-1949		Social Class, 1950-1954		Social Class, 1955-Present		Damage on Household at Present	
1	25	5.64	6	1.20	3	1.44	3	6.56	5.5	6.24	4	6.12	7	2.60	4
2	18	6.11	10	1.11	1	1.17	1	6.56	5.5	6.39	7	5.61	2	3.11	7
3	11	4.55	1	1.18	2	1.45	4	5.45	1	5.18	1	4.73	1	1.55	1
4	28	6.07	9	1.43	6	1.50	5	6.68	8	6.50	8	6.36	11	2.68	5
5	22	55.5	5	1.32	4	1.36	2	6.45	3	6.18	3	5.77	3	2.86	6
6	5	6.80	11	1.80	10.5	2.40	10	6.80	10	6.60	9	6.00	5	3.20	8
7	9	5.11	2	1.56	8	1.78	7	6.00	2	5.89	2	5.89	4	2.11	2
8	19	5.32	3	1.43	6	1.52	6	6.47	4	6.32	6	6.26	9	2.58	3
9	7	5.43	4	1.43	6	2.00	8	6.58	7	6.71	10	6.29	10	3.29	9
10	7	5.86	7	1.71	9	2.29	9	6.71	9	6.29	5	6.14	8	3.43	10
11	5	6.00	8	1.80	10.5	2.80	11	7.00	11	7.00	11	6.02	6	4.00	11
Correlation of Order		-0.05		0.911		0.827		0.461		0.445		0.391		0.573	

TABLE XV. THE RELATION OF THE DAMAGE ON BOMBED PERSON TO THE PRE- AND POSTBOMBING LIVING CONDITIONS

	Prebombing Social Class	Damage on Bombed Household	Period of Time for Rehabilitation	Social Class, 1945-1949	Social Class, 1950-1954	Social Class, 1955-Present	Damage on Household at Present
Bombed out of 1.5 K.M., 99 Households	5.6	4.1	1.4	6.6	6.2	6.1	2.6
Bombed within 1.5 K.M., 57 Households	5.7	6.0	1.8	6.7	6.4	6.2	2.9

Notes: Weight 1 for the person bombed out of 1.5 k.m.

Weight 2 for the person bombed within 1.5 k.m.

Looking over the last table, Table XV, we find there exists a high correlation between the household damage and a survival's distance from the centre of bombing, and that the survivals situated near to the centre of bombing are lower than others in social class especially during the ten years after the bombing, as well as in their existing damaged household conditions.

In other words, the second feature of atomic-bomb damage is the high death rate of atomic-bomb sufferers, that is, an extremely large number of deaths per unit of a bombed place. In spite of the necessity of taking into consideration the "sequela" of radioactivity as a serious factor disturbing the restoration of health to the bombed, it seems that the prebombing social class stratification remains persistently in the determination of postwar social conditions. In other words, in

spite of our admitting that an atomic bombing made a levelling injury regardless of social classes, we will have to recognize that the recovery from it is harder for the people who are low in social position. It seems right, therefore, to conclude that the people of this sort are worse hit by the atomic bombing.

V. CONCLUSION

Here we summarize the thoughts we have obtained from the gathered materials into 5 points, which we expect to work as the assumptions for the further examination of our subject:

(1) Having finished our primary study of the rehabilitation of the atomic-bomb survivals with reference to such sociological indices as the structural reconstruction of their household, their reestablishment in the regional community of Hiroshima and the recovery of their economic life, we have found that in proportion to the seriousness of damage made to their own health and to the health or life of their family, as well as to the gravity of the general destruction effected in the area in which they happened to live, their recovery was retarded. The result was that they failed to take advantage of the postwar prosperity which came along in the process of reconstructing Hiroshima, and were slow in their economic activity;

(2) Generally speaking, principal breadwinners were more killed or worse hit. The result was that the household duties were often carried by other family members, especially wives and other female members were heavily burdened with the responsibilities for life;

(3) As compared with ordinary bombing, the atomic bombing made a more uniform damage regardless of social classes, high and low. But the rehabilitation seems to be very much quicker with the high class than with the lower;

(4) Surveying the whole structure of social classes of the atomic-bomb survivals, the class stratification of prewar days has not fully recovered its prebombing conditions in spite of the flourishing state of Hiroshima as a whole;

(5) Analyzing the actual conditions research made by the Ministry of Public Welfare, it seems their conclusion to the effect that the health of the atomic-bomb survivals as a whole is not much different from the general health of the Japanese to be right. It does not follow, however, it denies the "sequelae" which exist at present to some extent or which may appear with such a sociological entity as family life or with the general phase of a regional community.

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