

THE UNITED STATES
STRATEGIC BOMBING SURVEY

THE EFFECTS
OF
STRATEGIC BOMBING
ON
JAPANESE MORALE

Morale Division
June 1947





"We kept thinking that Hiroshima would not be bombed at all."

* * *

"The bright day now reveals the frightful picture which last night's darkness had partly concealed. Where the city stood, everything—as far as the eye could reach—is a waste of ashes and ruin."

Chapter 8

EFFECTS OF THE ATOMIC BOMBS ON MORALE

The well-publicized story of the atomic bomb's use and the speculation concerning the weapon's implications for future conflicts have raised to a high level of popular interest the question of just what it did to the fighting spirit of those against whom it was used. What were their reactions when the bombs were dropped? Did they hate the United States for employing the weapon and resolve to avenge the losses which had fallen upon them? Or did they clamor for surrender in order to avoid further suffering and devastation? Did the survivors feel there was any use in continuing the struggle? How did people outside the target areas feel when the events in Hiroshima and Nagasaki were announced?

Morale of Hiroshima and Nagasaki before the Atomic Bombings¹

All sources, including cross-section interviews, indicate that prior to the bombing the people of Hiroshima and Nagasaki felt comparatively secure against the danger of serious raids. Nagasaki had undergone five relatively small raids in the previous year, and Hiroshima had gone almost untouched until the morning of 6 August 1945. In both cities many people felt that they would be spared destruction from the sky. The various rumors in circulation supporting this feeling covered a wide range of wishful thoughts. In both places, people said that they were not to be bombed because many Christians were concentrated there. One informant in Hiroshima reported:

We kept thinking that Hiroshima would not be bombed at all. There were rumors that some relative, perhaps the mother, of President Truman was here, and therefore Hiroshima was not to be bombed.

A doctor in Hiroshima said:

Before the bomb fell, day and night the B-29s were flying over Hiroshima, and it was odd to me that they did not drop bombs. The people in general did not believe that

they would drop bombs, but intellectual people thought that the B-29s were flying over for a reason.

The mayor of Kabe township, almost 10 miles northeast of Hiroshima, reported that many people who had evacuated to Kabe returned to Hiroshima during the summer because of a rumor that the city was to be spared since Miyajima, one of the scenic spots of Japan, is on the outskirts of Hiroshima and the Americans would want to preserve it. Another citizen of Kabe reported:

The majority of the people said that since most of the Japanese nationals in America are from Hiroshima prefecture, they thought that the Hiroshima city area was not going to be bombed.

One counter-rumor, current in both cities, was that they were being saved for "something big." Yet, neither city had tasted heavy bombing, and there was no inordinate amount of insecurity about future raids.

To the people of both the target cities the atomic raids came as a surprise. In Hiroshima, no raid warning was received at the time of the bombing, although there had been one earlier that morning. People were going about their usual morning business. School children and men from the suburbs were engaged in finishing the task of constructing firebreaks in Hiroshima, as a defense against incendiaries. In Nagasaki most people were also going about their usual affairs, working in offices and factories and tending their homes. Although the raid on Hiroshima had taken place three days before and some of them knew that that city had been virtually wiped out, the fact that an atomic bomb was the weapon had not appeared in the papers until 8 August—the day before the Nagasaki bomb was dropped. Moreover, the news was confined to a bare announcement, with no elaboration to explain the implications of the weapon, so that most likely only the most sophisticated in Nagasaki were forewarned.

The confidence in victory, on the part of the people of the Hiroshima and Nagasaki areas and their personal willingness to go on with the war—two important morale components—was higher than that of the people in the rest of Japan before the atomic bombs were dropped. Table 81 presents the percentages of persons who said they had

¹ The total number of persons interviewed in Hiroshima and Nagasaki cities was 128. All figures for Hiroshima and Nagasaki cities in succeeding tables are based upon these interviews. In addition, 120 more persons in the immediately surrounding areas were also interviewed; some of these were evacuated survivors of the atomic bomb raids. In discussing the cities of Hiroshima and Nagasaki alone, the phrase "Hiroshima and Nagasaki cities" will be used. In discussing the cities plus the surrounding areas, the phrase "Hiroshima and Nagasaki areas" or "atomic-bombed areas" will be used.

Seventy percent of all respondents in the Hiroshima and Nagasaki areas state that they directly experienced the atomic bomb; the remaining 30 percent were intimately affected in one way or another by the bomb.

doubts of victory, were certain that Japan could not win decisively, and who said they were personally unwilling to continue the war, before 1 July 1945 for the atom-bombed as compared with urban and rural areas of Japan.

TABLE 81¹

	Hiroshima-Nagasaki areas	Urban Japan	Rural Japan
	Percent	Percent	Percent
Percent of persons who said they were doubtful of victory before 1 July 1945.	59	74	75
Percent of persons who said they were certain that Japan could not win before 1 July 1945.	31	47	48
Percent of persons expressing personal unwillingness to continue the war, before 1 July 1945.	12	34	33

¹ The data appearing in Table 81 are based on responses given to the questions, "As the war wore on, did you ever begin to have doubts that Japan would win?" "When did you first feel certain that Japan could not attain sure victory?" and "Did you at any time during the war come to a point where you felt you could not go on with the war?" For a discussion of these questions, see Chapter 3.

Prior to the dropping of the atomic bombs, then, the people of the atomic-bombed areas appear to have had fewer misgivings about the war than people in other cities, although there is a slight possibility that, in talking about their reactions, the atomic bomb so colored their memories as to make the months prior seem easy and without fear of disaster.²

The probably higher morale of the Hiroshima and Nagasaki areas is very likely related to the comparatively small amount of bombing experienced by these cities and their surrounding areas prior to the atom bombings.³ What happened to this morale on those fateful days in August 1945, when the United States Strategic Air Forces dropped the first atomic bombs on the citizens of Hiroshima and Nagasaki?

Emotional Reactions to the Dropping of the Bombs

The primary reaction of the populace in the target areas to the bomb was fear—unqualified terror—

² Nevertheless, the evidence is that by the end of the war, morale in the atomic-bombed areas was not lower than in the rest of Japan, despite the larger morale drop after the atomic bombings. The indications this point to a previous state of relatively higher morale in the later atomic-bombed areas.

³ For example, the general air attack and military losses were given most often as reasons for doubts of victory. (These doubts occurred mainly prior to August 1945, and thus less than 1 percent mention the atomic bomb as a cause of doubts.) In urban and rural areas, more people mentioned the air attack than military losses. In the atomic-bombed areas, the reverse is true. Significantly fewer in these areas gave the air attack as a reason for doubts:

Furthermore, whereas 58 percent of urban people and 43 percent of rural people gave air raids and raid effects as their principal worry during the war, only 34 percent of respondents in the atomic-bombed areas did so.

strengthened by the sheer horror of the destruction and suffering witnessed and experienced by the survivors. The second most frequent reaction was that of admiration for the power and scientific skill which underlay the discovery and production of the bomb. Anger was the third most frequent reaction.⁴

TABLE 82.—Doubts of Victory

	Atomic-bombed areas	Urban areas	Rural areas
	Percent	Percent	Percent
Because of military losses-----	31	29	28
Because of the air attack-----	22	34	34

Community relief agencies in both cities were completely overwhelmed and the population was left in a complete state of helplessness immediately following the bombing.⁵ All previously prepared emergency organizations were utterly destroyed and spontaneous rescue efforts were almost non-existent.

The analysis of the specific emotional reactions to the bomb appears in Table 83.

TABLE 83.—Reactions to atomic bombing of people in atomic-bombed areas

	Percent
Fear—terror-----	47
Fear for own life-----	16
Admiration—impressed by bombs' physical power, by the scientific power behind the bomb-----	26
Jealousy—Why couldn't Japan make such a bomb?--	3
Anger—bomb is cruel, inhuman, barbarous-----	17
Hate of U. S. specifically because of atom bomb use---	2
No reaction indicated-----	11

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¹ The total percentage equals more than 100 because many respondents gave more than one answer.

Fear and Terror. There are some experiences which cannot be described by cold figures. A few representative excerpts from the descriptions of the victims of the bomb may serve to convey the violent emotional reaction to its impact.

A housewife in Hiroshima said:

My clothes were burned off and I received burns on my legs, arms and back. The skin was just hanging loose. The first thing I did was run in the air-raid shelter we had dug. I lay there exhausted for a while. Then I thought of my baby in the house and ran back for it. The whole house was knocked down and was burning. My mother and father came crawling out of the debris. Face and arms were just black. I heard the baby crying so I crawled in and dug it

⁴ The question asked was: "What did you think about the atomic bomb?"

⁵ For a full description, see USSBS report, *The Effects of Atomic Bombs on Hiroshima and Nagasaki*.

out from under the burning lumber. It was pretty badly burned. My mother carried it back to the shelter. Down by the river there were many people. Blood just dripping from their burns. Many of them were so badly burned that you could see the meat. Blood was just dripping from all parts of their bodies. By this time it was raining pretty badly. I went back in the air-raid shelter but just couldn't lie down or anything. Water poured into the shelter and I received water blisters as well as blisters from the burns.

A student who was about five miles from ground zero in Hiroshima reported:

Practically all the people who came to this section had no clothes on their bodies, for they were all burned. Their faces were all burned and the meat on their faces was hanging down, the lymph dripping all over their bodies. The womenfolks had no hair on their heads. Their hair was all burned. Some of the folks when they came seemed normal, but about one month later their hair all dropped off and they died . . . If you don't see it for yourself it can't be understood. The children two or three years of age were dead with the hair on their heads all falling off.

Father Siemes, a Jesuit missionary, gave a graphic description of the scene in Hiroshima a full day after the bombing:

The bright day now reveals the frightful picture which last night's darkness had partly concealed. Where the city stood, everything—as far as the eye could reach—is a waste of ashes and ruin. Only several skeletons of buildings remain. The banks of the river are covered with dead and wounded and the rising waters have here and there covered some of the corpses. On the broad street in the Hakushima district, naked, burned cadavers are particularly numerous. Among them are the wounded . . . a few have crawled under the burned out autos and trams. Frightfully injured forms beckon to us and then collapse. An old woman and a girl whom she is pulling along with her fall down at our feet. We place them on our cart and wheel them to the hospital at whose entrance a dressing station has been set up. Here the wounded lie on the hard floor, row on row . . . But we cannot move everybody who lies exposed in the sun. It would be endless and it is questionable whether those whom we can drag to the dressing station can come out alive, because, even here, nothing really effective can be done.

The following observations were offered by a Nagasaki woman:

People were running toward our place with terrible burns. (Tears in her eyes.) That night they slept on the road everywhere. Some collapsed during the day due to the effects of burns. People would stop by and ask for water, which was the most urgent need of these people. They were so upset that they couldn't think of food. It was a horrible sight—crying and screaming. I can't describe the burns (wiping her eyes) that were on these people, and the odor of burning flesh was in the air, and it was so awful you have to see it before you can actually describe it or even talk about it. It's hard to comprehend. Some father with his entire family dead would be yelling to die, so that he would not have to live alone.

The vice-mayor of Hera village, seven-and-a-half miles south of Hiroshima, said about the victims pouring into his village:

Everybody looked alike. The burns on the faces were horrible. They all looked like boiled lobsters. Most of the men were wearing battle caps so only parts of their faces were burned. Also, all around, the bare portions of the head looked like it was shaved. The eyes appeared as a mass of melted flesh. The lips were split and they looked like a mass of molten flesh. Only the nose appeared the same as before.

The sudden deaths produced by the bomb—days and even weeks after it was dropped—seem to have been particularly difficult to endure. The following are illustrative comments:

Like an explosive bomb . . . when it hits and you get killed, it's just your tough luck. The reason why I say I think it inhuman is that weeks or months later people die from it. Your hair starts to fall out, bruises and burns come out on your skin . . . That people die from it weeks later is very pitiful and sad.

One neighbor escaped death and came home. But after a week he died: If he were killed at the time of the bombing, we might have felt better.

There is considerable evidence to suggest that the duration of the fear reaction continued for many days after the bombing and interfered with the work of the survivors. The following excerpts from interviews clearly illustrate this reaction:

Whenever a plane was seen after that, people would rush into their shelters. They went in and out so much they did not have time to eat. They were so nervous they could not work.

I didn't venture out of the house for a week or so because we were told it was dangerous.

Respect for the Bombs and What They Represent. Approximately one-fourth of the Hiroshima-Nagasaki area respondents expressed admiration for the power and scientific knowledge behind the bomb (Table 83). This attitude probably reflects Japanese respect for technical achievement. Such admiration has grown even greater with the realization of the important factor which technical inferiority played in Japan's defeat. Moreover, there still exists a considerable remnant of the feudal attitude that "might makes right." One respondent, for example, when asked who was responsible for the war, stated that it was Japan's fault because she had lost but, if Japan had won, it would have been America's responsibility.

Hatred of Americans. Less than one-fifth of the respondents in Hiroshima and Nagasaki expressed hatred of the Americans for using the bomb.⁶ Typ-

⁶ (Table 83). This conclusion is borne out by the testimony of Father Siemes, an on-the-spot observer. He made special note of the small extent of hostility against America.

ical of the expressions among this group are the following:

They really despise the Americans for it; the people say that if there are such things as ghosts, why don't they haunt the Americans?

I only wonder why they did not let the people know of this bomb and give us a chance to give up before bombing us?

After the atomic bomb exploded, I felt that now I must go to work in a munitions plant . . . My sons told me that they wouldn't forget the atomic bomb even when they grew up.

I didn't know about the atomic bomb before. After the bomb dropped I thought it was terrible. I think that it was cruel to drop those in an area where ordinary people are living. I don't see why they didn't drop it on some army camps or something.

The proportion of respondents in the atomic-bombed areas who expressed hatred because of the atomic bomb is greater than the proportion in the rest of Japan who expressed hatred because of bombing in general (approximately 19 percent as compared with 9 percent). These figures probably underestimate the extent of hostility, for several reasons. No doubt one of the factors involved is that many Japanese, out of fear or politeness, did not reveal their feelings with complete candor to American interviewers.

It is also possible that people's subsequent attitudes served to color their reports of their experiences at the time of the bombing. The interviewing was conducted three months after the surrender, at a time when Japanese war leaders had become completely discredited and American prestige was very high. Many of the respondents, for example, were hoping that the Americans would supply them with food, so hostile attitudes expressed to American interviewers would be extremely inappropriate. There is evidence that the hostility was turned against their own government. In response to the question, "When the American planes bombed Japan, on which side did you feel the responsibility lay?" 35 percent of Hiroshima-Nagasaki area residents stated that it was Japan's fault. This percentage is much lower, however, than the percentage of people in rural and urban Japan who gave this same response (45 percent and 47 percent respectively).

A more basic factor is probably the general "c'est la guerre" attitude of the Japanese public, which had become long accustomed to calamity and deprivation. "Shikata-ga-nai" (it cannot be helped) is one of the most frequently used phrases in the Japanese language. The fatalistic meaning it conveys is probably an important explanation of the

relatively small amount of expressed hostility. A greater percentage of those in the Hiroshima-Nagasaki areas stated that they felt that neither side was responsible for the bombing of Japan—that it was the inevitable consequence of war—than respondents in the rest of rural and urban Japan. Twenty-nine percent of the former as compared with 16 percent and 21 percent, respectively, of the latter gave this response. The low prevalence of hostility in the Hiroshima-Nagasaki area must, then, be considered in part as a result of factors introduced by the interviewing situation (fear, politeness, retrospective distortion) but, in part, it must also be interpreted as a genuine expression of the sentiments of the Japanese people.

Effect of the Atomic Bombs on Morale in the Hiroshima and Nagasaki Areas

The emotional effect of the bomb, however, must be differentiated from its morale effect. The emotional effect was a specific response to a weapon. An emotional response to a weapon might be very intense and frightful, yet it might still leave morale relatively unaffected (Chapter 2). The effect of the atomic bomb on morale in the Hiroshima-Nagasaki areas will be discussed in the succeeding section.

The atomic bomb did not produce any different kind of morale effects than those produced by incendiary and high explosive bombs, as far as could be determined; nor, as has previously been mentioned in Chapter 3, was it the major factor leading to the destruction of the will to resist in all Japan. Ten percent of the Japanese people stated that they became certain that Japan could not win, and 10 percent said that they became unwilling to go on with the war, because of the atomic bomb. True, the atomic bombings had only a short time to affect confidence before the surrender, but even within the Hiroshima and Nagasaki areas, the proportions of the populations which stated that they reached a point of certainty that victory was impossible and unwillingness to go on with the war because of the atomic bombings were respectively 28 percent and 24 percent.

Furthermore, the morale of the Hiroshima and Nagasaki area's populations after the bomb was dropped did not fall below that of the rest of urban and rural Japan. Table 84 indicates the differences in confidence in victory and personal unwillingness to continue the war between the Hiroshima and

Nagasaki areas and the rest of urban and rural Japan.⁷

TABLE 84

	Hiroshima and Nagasaki areas	Rest of Japan
	<i>Percent</i>	<i>Percent</i>
Percent who said they never had doubts of victory-----	19	11
Percent who said they were never certain that Japan could not win-----	27	26
Percent who said they were never personally unwilling to continue the war-----	39	28

The difference in the "certainty" category is not statistically significant. However, the differences in the "doubts of victory" and the "personal unwillingness to continue the war" categories suggest that the percentage of people of high morale or at least confidence, after the bomb was dropped, was even greater than in the rest of Japan, although some of the atomic-bombed people may have so amalgamated the bombings and the surrender in their minds that they were thinking of their reactions up to the time of the bombings.

When Hiroshima and Nagasaki are compared with the remaining cities of Japan (arranged in order of bombing tonnage received and percent of destruction of built-up area), similar results are indicated.⁸ Hiroshima and Nagasaki are found to resemble the lightly bombed and unbombed cities in morale rather than the heavily bombed cities.

TABLE 85.—*Relative morale of Hiroshima and Nagasaki and four groups of Japanese cities arranged in order of bomb tonnage dropped and percent of destruction*¹

	Relatively low morale	Relatively high morale
	<i>Percent</i>	<i>Percent</i>
Heavily bombed cities, exclusive of Tokyo ² -----	56	44
Medium bombed cities, high percent of destruction-----	51	49
Medium bombed cities, low percent of destruction-----	46	54
Lightly bombed and unbombed cities-----	47	53
Hiroshima and Nagasaki-----	45	55

¹ Measure of morale used is the Morale Index (Appendix K). The two morale groups in this table each represent roughly half of the sample, when arranged in order of scores on the Morale Index.

² Morale scores for Tokyo are not presented here because it reacted quite differently than the rest of the heavily bombed cities in Japan. Reasons for this difference are discussed in Chapter 5.

The difference in morale between Hiroshima and Nagasaki has been measured by comparing the Mo-

⁷ The questions on which these data are based are given earlier in this chapter.

⁸ Comparisons are by urban bombing strata. (See Chapter 5 and Appendix M).

rale Index scores of people in each of the cities with the scores of people in each of some 60 cities and towns in which interviews were conducted in Japan. According to this comparison, Nagasaki ranked tenth highest in morale and Hiroshima ranked thirty-second highest in morale. When morale is measured by the criterion of certainty that Japan could not win, a similar relationship is demonstrated. Again, 34 percent of the population in Hiroshima city stated that they were certain of defeat because of the atomic bomb as compared to only 16 percent of the Nagasaki city population.

The greater height of Nagasaki's morale is probably the result of the fact that the Hiroshima bomb had a greater destructive effect against both the physical aspects of the city and its people.⁹ The importance of this factor is analysed in greater detail later in this report.

The Atomic Bomb as a Single Factor in Morale. Though the atomic bomb itself did not decisively break the morale of either the Japanese population as a whole or the morale of the people in and near Hiroshima and Nagasaki, it was the most important single factor in lowering the morale of the latter populations. In the rest of Japan, the atomic bomb was outranked by the general air attack and military losses in its effect on certainty that Japan could not achieve victory and unwillingness to go on with the war; in the atomic-bombed areas it was preeminent. The following data show the major reasons given by respondents:

TABLE 86¹

	Atomic- bombed areas	Rest of Japan
	<i>Percent</i>	<i>Percent</i>
Certain that Japan could not win:		
Because of atomic bomb-----	28	10
Because of military losses-----	23	21
Because of general air attack---	12	34
Personal unwillingness to go on with the war:		
Because of atomic bomb-----	24	9
Because of consumer deprivation	7	16
Because of military losses-----	6	6
Because of general air attack---	7	24

¹ Percentages are based on total sample in each area. The questions asked to elicit these data are given elsewhere in this chapter.

² Urban-rural differences in the rest of Japan are very small and statistically insignificant in regard to the subjects in this table.

Of those in the Hiroshima and Nagasaki areas who had reached the point of certainty that Japan could not achieve "sure victory," over 40 percent did so because of the atomic bomb. Similarly, among residents of these regions who reached the

⁹ For a detailed description of differential destructive effects in the two cities, see USSBS report, *The Effects of Atomic Bombs on Hiroshima and Nagasaki*.

point of personal unwillingness to continue the war, over 45 percent did so because of the atomic bomb. In the rest of Japan, groups of respondents with comparable attitudes approximated only 15 percent. The people spoke in the following terms:

If the enemy has this type of bomb, everyone is going to die and we wish the war would hurry and finish.

What would happen if it dropped all over Japan? If it were dropped on the four corners of Hiroshima, there would be no one left alive.

With all this tragedy around them, the people felt that we should stop this war. Since the bomb was so destructive, we had great doubts as to whether we could go on.

The timing of the points at which confidence in victory began to falter provides additional evidence for the predominant importance of the effect of the atomic bomb on morale in the target areas. It has been suggested that morale in the target cities and environs prior to 1 July 1945 was higher than morale in the remainder of Japan. An examination of confidence in victory after 1 July 1945 indicates that a greater percentage of respondents in the Hiroshima and Nagasaki areas said they reached these points during this time than was the case in other parts of Japan.¹⁰ Table 87 presents the data:

TABLE 87

	Hiroshima and Nagasaki Areas	Urban Japan	Rural Japan
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Percent who said they reached point of doubts of victory after 1 July 1945.....	19	10	10
Percent who said they reached point of certainty that Japan could not achieve victory after 1 July 1945.....	34	22	21
Percent who said they reached point of personal unwillingness to continue war after 1 July 1945.....	37	25	32

Since there are no known factors, other than the atomic bombs, which could have produced a greater decrease in confidence in victory in the Hiroshima and Nagasaki areas than in the rest of Japan after 1 July, it is reasonable to conclude that the atomic bomb was the important single factor in producing the decrease. The other data that have been previously presented support this conclusion.

This effect of the atomic bombings may have been reinforced by another factor. As shown in Chapter

¹⁰ It is to be noted that, even though the percent of persons who reached points of doubt, certainty, and unwillingness to continue the war after 1 July is greater for the Hiroshima and Nagasaki areas, the comparatively small number of cases who reached these points in Hiroshima and Nagasaki before 1 July still leaves the total number who reached these points in urban and rural Japan, during the war, equal to or greater than in the atomic-bombed areas.

These results do not of course, preclude the possibility that saturation attacks with incendiaries might have produced the same effects.

3, morale throughout Japan was sharply on the decline in the spring and summer of 1945, for a variety of causes. These causes continued to operate through July. Since the atomic-bombed areas had greater confidence before 1 July, it is possible that the biggest decline might have come in the last month of the war anyway, when morale crack-up reached highly serious proportions everywhere in Japan.

Morale Effects on Persons Bombed Physically. The most severe effects on morale were experienced by those who were physically affected by the bomb. A graduate of Neiji University, employed at the Newspaper office in Hiroshima, stated:

In Hiroshima, the main thought of the civilians was that they were fooled. Some felt that the atomic bomb was the end. Others felt we should go on regardless of the atomic bomb to the very finish. The people who actually experienced the bombing felt that it was hopeless to continue while people who did not have the experience wanted to carry on.

Hiroshima and Nagasaki respondents were divided into two groups on the basis of having been physically affected by the bomb. In the first group were placed all those who were knocked down, injured, or wounded in any way by the bomb. In the second were placed those who merely saw the effects of the bomb. The two groups were significantly different in respect to several indices of morale.¹¹

In a group of questions designed to measure confidence in victory, the physically affected group was much lower in morale than the unaffected group. Table 88 presents the percentages of each group which fell into high, medium, and low confidence-in-victory categories.¹²

TABLE 88

	Physically unaffected	Physically affected
	<i>Percent</i>	<i>Percent</i>
High confidence in victory.....	35	19
Medium confidence in victory.....	30	39
Low confidence in victory.....	35	42
	100	100

In the Morale Index, 31 percent of the physically-unaffected group fell into the highest of the four

¹¹ Physically affected and non-affected groups in Osaka and Toyama were also compared as to morale. No significant differences appeared. The differences in morale of physically affected and non-affected groups in the Hiroshima-Nagasaki areas are possibly the result of the more severe anti-personnel effects of an atomic bomb as compared to an incendiary bomb. In the rest of Japan, which experienced mainly incendiary attacks, bombs fell in a pattern all over a particular area. The bombs were thus possibly more equalized in their effects on the population of the area.

¹² The Confidences in Victory Index is a composite index comprised of three items: (a) doubts of victory; (b) certainty that Japan could not attain sure victory; and (c) personal unwillingness to continue the war (Appendix L).

morale index categories, while only 17 percent of the affected group fell into this category (Appendix K).

There were no significant differences between the two groups on the question, "During the war, what did you think of your leaders' conduct of the war?" On the other hand, an identically phrased question in regard to the way the leaders conducted the home front yielded significant differences. On the latter question, 64 percent of the physically-affected group were critical, as against only 51 percent of the unaffected group. The greater sensitivity of the home front question throws an interesting light on the manner in which morale deteriorated in Japan. Attitudes which were supported by strong abstract symbols—the Emperor, the spirit of Yamato Damishii, etc.—deteriorated least. On the other hand, a question which elicited attitudes based on an individual's concrete experiences was more liable to differentiate high and low morale groups.¹³

Effects of the Bomb on Japan as a Whole

Despite the quite natural interest in the effect of the atomic bomb on the confidence of the people in the target areas, of greater significance are the reactions of the Japanese people as a whole. The two raids were all-Japan events and were intended to be so. An important objective of the Allied Powers was to force a decision by breaking the Japanese people's will to resist and that of their leaders; the targets were not basically the people or the cities of Hiroshima and Nagasaki.

Emotional Reactions. Virtually all the Japanese people had had a chance to react to the bomb by the time the interviewing was begun. Only 2 percent in the rural areas and 1 percent in the urban areas had not heard of the bomb by this time.

As in the areas directly affected by the bombing, fear and terror were the most common reactions reported upon hearing of the bombs and their effects.¹⁴ Of those interviewed, approximately 57 percent expressed this feeling, almost the same proportion as in Hiroshima and Nagasaki. Over the islands as a whole, however, the proportion who expressed a personal fear of being killed was only half as great as those who had been more directly exposed to the

bomb's effects. In general, the terror feelings were much less intense than in the atomic-bombed areas.

A smaller percentage of people in Japan as a whole expressed feelings of anger or hatred at the use of the bomb (12 percent as against 19 percent in the Hiroshima and Nagasaki areas). Urban people, possibly because they had experienced the terrors of other kinds of bombings, acknowledge this feeling more frequently than those in rural sections (17 percent as against 11 percent). It is remarkable that those proportions should indicate such slight hostility, even considering the factors introduced by the interviewing situation.

As in the target cities, admiration for the power and scientific achievement represented by the bomb was the second most frequent response to the question, "What did you think of the atomic bomb?" Approximately one-fifth of the respondents in all Japan included this kind of statement among their comments—a smaller but probably not significantly smaller proportion than in Hiroshima and Nagasaki, where first-hand knowledge of the bomb's effects existed.

Attitudes toward the War. The effect of the bomb on attitudes toward the war was much less marked in the rest of Japan than in the target areas. There are several possible explanations of this difference. First, the level of confidence was quite low in Japan well before the time of the atomic bombing. Under these circumstances, the announcement of a new and devastating weapon merely added to the already eloquent evidence of national weakness. In Japan as a whole, military losses and failures—such as those at Saipan, the Philippines, and Okinawa—were cited twice as frequently as the atomic bomb in inducing certainty of defeat. The general air attack was nearly three times as important in this respect. Consumer deprivations, such as food shortages, were also more important in bringing people to the point where they felt they could not go on with the war (Tables 2 and 4).

Effects on Morale Limited. Furthermore, there are indications that expressions of certainty of defeat and unwillingness to continue the war because of the atomic bomb varied inversely with the distance from the target cities. The cities in the Morale Division sample were arranged in four groups according to distance from Hiroshima and Nagasaki. The results are presented in Table 89.

Thus we find a progressive decline in the proportion of the population who said they were certain Japan couldn't win and unwilling to continue the war because of the atomic bomb, as distance from

¹³ The OWI's analysis of morale of Japanese prisoners of war yielded a similar conclusion. Faith in the Emperor, Japan's mission in Asia, and government leaders remained strong, whereas faith in food, weapons, and the high command greatly deteriorated. (OWI Bureau of Overseas Intelligence, Foreign Morale Analysis Division, Semi-monthly Report No. 15, 1 January 1945.)

¹⁴ Since the interviewing was couched in terms of reaction to the atomic bomb upon first hearing of it, some of these reactions in other parts of Japan may have arisen after the war. In the Hiroshima-Nagasaki areas, the responses were operative before the surrender.

TABLE 89

Group of cities ¹	Percent of population certain Japan couldn't win because of the atomic bomb ²	Percent of population personally unwilling to continue the war because of the atomic bomb ³
	<i>Percent</i>	<i>Percent</i>
Hiroshima-Nagasaki cities.....	25	24
Cities nearest to target cities....	23	24
Cities near to target cities.....	15	12
Cities far from target cities.....	8	7
Cities farthest from target cities..	6	7

¹ The groups of cities were respectively within 60, 160, 500, and 800 miles of the target cities.

² The question asked was: "When did you first feel certain that Japan could not attain sure victory?"

³ The question asked was: "Did you at any time during the war come to a point where you felt you could not go on with the war?"

the target city increased. A substantial effect on the morale of the populace was confined mainly to the first group of cities, those within 60 miles of either of the target areas.

This result suggests an explanation for the problem of why the atomic bomb did not have a greater effect on morale. Psychological distance was widened by geographical distance and poor communication.

Indeed, almost no publicity was given to the bomb prior to the surrender. The policy of the military toward the release of information about the bomb is well illustrated by an excerpt from an interview with Sakomizu, chief cabinet secretary in the Suzuki government. Sakomizu stated:

I asked the Cabinet Board of Information to put all the information about the atomic bomb in the newspapers and on the radio in order to tell the people just how fearful it was. But the General Staff Information Office stopped it. They tried hard to emphasize that the people need not fear the atomic bomb if they were in shelters. I had much struggling with the Chief of Military Information. All the Cabinet Board of Information was finally allowed to say was that the atomic bomb had been used at Hiroshima. This item appeared in the morning papers of 8 August. Of course, all the intellectuals knew the meaning of the announcement because there had been so many stories and novels about atomic power. I wanted all the people to understand the meaning of the bomb, but it took a full day just to get a bare announcement released.

As a result, neither the people of the target cities nor the population outside of the target cities had knowledge of the military use of atomic energy. There is almost no evidence in interviews of any reorganization of thinking in terms of a new age of atomic power.

An important factor in producing deterioration of morale as a result of the atomic bomb was the physical effects of the bomb itself or the concrete appreciation of these physical effects. The data on differential effects on the morale of Hiroshima and Nagasaki and on the people within these areas

who were physically affected or non-affected by the bomb support this statement. Inasmuch as there were fewer people who knew about the physical effects of the bomb in the geographically more remote regions and almost no people who had previously experienced the physical effects of the bomb, the effect of the bomb on their morale was reduced.

Moreover, it is highly probable that the effect of the atomic bomb on the wartime morale of the Japanese people would have been far more extensive had sufficient time elapsed before the surrender to permit the spread of information to the geographically more remote regions of Japan.

While these considerations explain the minimal effect of the atomic bomb on the rest of Japan, they only partially explain the comparatively small effect on the morale of Hiroshima and Nagasaki. The most probable explanation is that with the short time span between bombings and surrender, the emotional effects of the bomb to a considerable extent remained separate in the minds of the Japanese from their morale attitudes.

Furthermore, the History of warfare contains many accounts of groups of men whose morale did not break even when they became emotionally and physically exhausted as a result of the onslaught of the enemy. In the case of the Japanese, nurtured on a Spartan philosophy of endurance of suffering, this phenomenon is not particularly difficult to understand. It is possible, too, that the factor of time may be important here. The atomic bombings took place so very close to the surrender that a sufficient amount of time was not available in which to connect the catastrophe of the bomb with the conduct of the war. Some of the respondents may have answered questions about morale during the war solely on the basis of the period before the atomic bombings.

This hypothesis is supported by the evidence that, with respect to many of the morale factors measured by the Survey, the atomic-bomb target areas reacted in the same way as the unbombed and lightly bombed groups of cities. If this hypothesis is correct, it is possible that morale in the target areas was actually somewhat lower than the statistical data indicate. It is rather improbable, however, that the confusion of the atomic bombings with the surrender was sufficiently widespread to substantially modify the principal conclusions of this report.¹⁵

¹⁵ Indeed, data on response to the surrender announcement show no difference with respect to the way the target area greeted it, as distinct from the rest of Japan. (Based on the question: "How did you feel when you heard that Japan had given up the war?")

Effect of the Bomb on the Japanese Government

The atomic bomb had more effects on the thinking of government leaders than on the morale of the rank and file of civilians outside of the target cities. This was only secondarily a morale effect, however. It cannot even be said that it was the atomic bomb which convinced the leaders who effected the peace that surrender was necessary. The decision to seek ways and means to terminate the war, influenced in part by knowledge of the low state of popular morale, had been taken in May 1945 by the Supreme War Guidance Council (Senso Saiko Shido Kaigi).

As early as the spring of 1944, a group of former prime ministers and others close to the Emperor had been making efforts toward bringing the war to an end. This group, including such men as Admiral Okada, Admiral Yonai, Prince Konoye, and Marquis Kido, had been influential in effecting Tojo's resignation and in making Admiral Suzuki prime minister after the fall of the Koiso government. Even in the Suzuki cabinet, however, agreement was far from unanimous. The Navy Minister, Admiral Yonai, was sympathetic, but the War Minister, General Anami, usually represented the fight-to-the-end policy of the Army. In the Supreme War Guidance Council, a sort of inner cabinet, Anami's adherence to that line was further strengthened by the participation of the Army and Navy chiefs of staff, so that on the peace issue this organization was evenly divided, with these three opposing the prime minister, foreign minister, and Navy minister. At any time, the military (especially Army) dissatisfaction with the cabinet might have eventuated at least in its fall, and possibly in the "liquidation" of the anti-war members.

Thus, the problem facing the peace leaders in the government was to bring about a surrender despite the hesitation of the war minister and the opposition of the Army and Navy chiefs of staff. This had to be done, moreover, without precipitating countermeasures by the Army which would eliminate the entire peace group. This was accomplished ultimately by bringing the Emperor actively into the decision to accept the Potsdam terms. So long as the Emperor openly supported such a policy and could be represented to the country as doing so, the military, which had fostered and lived on the idea of complete obedience to the Emperor, could not effectively rebel.

A preliminary step in this direction had been taken at the Imperial conference on 26 June 1945. At this meeting, the Emperor, taking an active part

despite his custom to the contrary, stated that he desired the development of a plan to end the war, as well as one to defend the home islands. This was followed by a renewal of earlier efforts to get the Soviet Union to intercede with the United States, which was effectively answered by the Potsdam Declaration of 26 July and the Russian declaration of war on 9 August.

The atomic bombings considerably speeded up the political maneuverings toward surrender within the government.¹¹ This in itself was partly a morale effect, since there is ample evidence that cabinet members were worried by the prospect of further atomic bombings, especially on the remains of Tokyo. Some indication of the great reaction to the atomic bombs is given by Sakomizu. He said:

On the 7th of August, early in the morning, about two o'clock, the bell rang beside my bed. It was Domei telling me that President Truman had announced that the atomic bomb had been used at Hiroshima. I already knew that the Hiroshima damage had been very severe and that it had been caused by just one airplane. Everyone said that America has used a new bomb, but they didn't think it was an atomic bomb because our scientists had told us that no country could finish the atomic bomb for use in this war. The military said that it was probably a four-ton bomb bursting in the air. They made their calculations but found that a four-ton bomb could not do that much damage. They suggested it might be a 100-ton bomb. After the announcement we sent some scientists to Hiroshima and they reported that it was a real atomic bomb.

When this news came in on the morning of the 7th I called the prime minister on the phone and reported the announcement. Everyone in the government and even the military knew that if the announcement were true, no country could carry on a war. Without the atomic bomb it would be impossible for any country to defend itself against a nation which had the weapon.

The chance had come to end the war. It was not necessary to blame the military side, the manufacturing people, or anyone else—just the atomic bomb. It was a good excuse.

Sakomizu was asked, "How long do you think the war would have continued if the atomic bomb had not been used?" He replied:

We had already asked the Russians to intercede, and we could expect that they would eventually give us some answer. If it had been unfavorable, there was just one way to bring peace and that was to broadcast directly to the United States. But it would have been difficult to find a good chance to do so. I think you can understand. Suzuki tried to find a chance to stop the war and the atomic bomb gave him that chance.

If the behavior of the militarists in government councils is adequate testimony, the bombs did not convince them that defense of the home islands was

¹¹ For fuller detail on the maneuvers and considerations in the surrender, see USSBS report, *Japan's Struggle to End the War*.

impossible. The atomic bombs did permit the government to say however, that no Army without the weapon could possibly resist an enemy who had it, thus saving "face" for the Army leaders and not reflecting on the competence of Japanese industrialists or the valor of the Japanese soldier. In the Supreme War Guidance Council, voting still remained divided, with the war minister and the two chiefs of staff unwilling to accept unconditional surrender. There seems little doubt, however, that the bombing of Hiroshima and Nagasaki weakened their inclination to oppose the peace group.

The peace effort culminated in an Imperial conference held on the night of 9 August 1945 and continuing into the early hours of 10 August, for which the stage had been set by the atomic bomb and the Russian declaration of war. At this meeting the Emperor, again breaking his customary silence, stated specifically that he wanted acceptance of the Potsdam terms.

A quip was current in high government circles at this time that the atomic bomb was the real Kamikaze, since it saved Japan from further useless slaughter and destruction. It is apparent that in the atomic bomb the Japanese found the opportunity which they had been seeking, to break the existing deadlock within the government over acceptance of the Potsdam terms.

Summary

Predominant reactions to the bomb, both in the target cities and the rest of Japan, were, in order, (1) fear, (2) admiration for the scientific achievement of the bomb, and (3) anger. The latter reaction was elicited in only 12 percent of the cases.

The 12 percent figure for "anger" responses is probably an underestimation resulting from respondents' fear or politeness in the interviewing situation. The small amount of hostility is also

probably somewhat explicable in terms of the Japanese turning their hostility toward their own government and their general *Shikata-ga-nai* attitude.

Only one-fourth of those in the Hiroshima and Nagasaki areas stated that they had reached a point of certainty of defeat and complete war weariness because of the atomic bomb. At the conclusion of the war, the morale of the target populations remained at an equal or higher level than morale throughout the rest of Japan. The atomic bomb was, nevertheless, the most important single factor in lowering the morale of the population of the target areas.

Subsequent to the bombings, morale in Nagasaki remained higher than in Hiroshima. Probable reasons for this effect are the relatively greater casualties and physical damage suffered in Hiroshima. Morale of those physically affected by the bomb was lower than that of those physically unaffected.

The effect of the atomic bomb on morale throughout the rest of Japan varied inversely with distance from the target cities. A substantial amount of effect was confined to the group of cities within 40 miles of either of the target areas. Previous demoralizing experiences, lack of publicity, and consequent lack of knowledge of the implications of the military use of atomic energy were forces which served to minimize the bombs' effect on the rest of Japan. It is probable that the effect of the atom bomb on the morale of the Japanese people would have been far more extensive had sufficient time elapsed before the surrender to permit the spread of information to the geographically more remote regions of Japan.

Breaking the confidence of the civilian population, however, was only incidental to the more decisive consequences of the bombs' use in the political maneuverings to achieve peace which took place within the Japanese government.