THE DECLINE OF PUBLIC CONCERN OVER THE ATOM BOMB

Mary P. Lowther
Topeka, Kansas

The article discusses the reasons for the decline of the atom bomb and nuclear warfare as a public interest issue. It is hypothesized that the decline in public interest came at the point in history when Americans perceived themselves to be powerless to protect themselves against nuclear attack and therefore could no longer define the Bomb as a traditional weapon. An historical analysis of data available from mass media supported the hypothesis indicating that the nuclear question has ceased to be an issue. To determine the impact of nuclear technology today as a public issue, an attitude survey was administered to college freshman at KU, measuring the relationship between powerlessness towards social and political events and complacency towards the growth of nuclear technology. The questionnaire contained statements from the I-E powerlessness scale adapted from Melvin Seeman and statements measuring complacency toward nuclear technology constructed by the author. A Likert scale was employed. It was hypothesized that the greater powerlessness felt by the subject toward social and political events, the greater would be his complacency toward the growth of nuclear technology. The results of the survey indicated that the majority of subjects did not have sufficient preformulated opinions about nuclear technology to be complacent, and that nuclear technology is no longer an issue.

The atom bomb is a dead issue. It is no longer an editorial topic for local newspapers or a conversation piece at dinner tables. It is seldom mentioned at political rallies and may or may not be included in national party platforms. The Bomb has ceased to be an issue except where the effects of atomic blast become an environmental problem. The Bomb issue died quietly around 1963. Although men such as Goldwater, McNamara, and Laird have tried to revive the issue, the American public has simply refused to renew interest in it. The Bomb may no longer be a public issue, but as a piece of technology, the stockpile of nuclear weapons has grown in quantity and complexity every year. In 1962, immediately before the end of the shelter craze the United States possessed around 174 ICBM's plus 80 Polaris missiles. In 1969 the United States had about 1,054 ICBM's plus 656 Polaris missils (Bottome, 1971:120-122). It is the purpose of this paper to probe the reasons why the Bomb issue did not flourish as well as Bomb technology.

There are at least three ways to demonstrate that the Bomb has ceased to be a public issue. The first is a comparison of public reaction to the three "gaps" in the history of the arms race, the bomber gap, missile gap, and deterrent gap. The bomber gap began as a belief of many American leaders that the Soviet Union had the capability and desire to make a tremendous

advance in production of Bison bombers so that the United States would not be able to retaliate in event of attack. The gap began when the Soviet Air Show in July 1955 first publically displayed the new Soviet long-range bomber. Before this time the U.S.S.R. did not have a bomber capable of reaching the United States. American experts predicted that the U.S.S.R. could easily build up a 3-1 bomber superiority over the United States. However, at no time during the 1955 - 1956 bomber gap did the U.S.S.R. have more than 300 bombers capable of reaching the United States, while the United States achieved a strength of 500 long-range bombers and 1,500 medium-range ones capable of reaching the U.S.S.R. with in-flight fueling (Bottome, 1971:35-36). Americans clearly over-reacted to what was merely a hunch.

The bomber gap anticipated the biggest myth in nuclear history, the missile gap, which was triggered in 1957 by the successful launchings of the first Soviet Inter-Continental Ballistic Missile and Sputnik I. Immediately after the Soviet launchings, American intelligence predicted that the U.S.S.R. would mass-produce 1,000 to 1,500 missiles by 1961 - 1962 while the United States would have less than 100 ICBM's.[1] The myth of the missile gap ended suddenly when a background briefing between McNamara and Kennedy indicating that there was not nor never had been a missile gap was made public. During the entire missile gap period the U.S.S.R. had at most ten ICBM's. By 1961 all major news periodicals had revised their figures to give the United States parity with the Soviet Union and even a slight advantage. The January 10th, 1963, issue of the New York Times gave the United States a 2-1 advantage in ICBM's. American public reaction to the bomber and missile gaps bordered upon paranoia. Both gaps received wide publicity in the mass media. Major periodicals, except for The Nation, accepted and propagated the missile gap myth (Bottome, 1971:51, 60). Public support of these myths encouraged great boosts in arms expenditures.

In 1964 Goldwater, with the support of General Curtis LeMay, tried to create a campaign issue based on the deterrent gap (also called the bomber gap of 1964). According to Goldwater, the United States was again lagging behind in the arms race because the U.S.S.R., through the development of new long-range bomber, was capable of producing more long-range bombers than the United States. But the deterrent gap did not appeal to the American people (Bottome, 1971: 85). It was not popular enough to promote Goldwater's election, nor did it create sufficient interest to become an important campaign issue. Clearly something had happened to make the Bomb decline as an issue between the years 1961 and 1964.

The second way of showing that the Bomb is no longer an issue requires an examination of the materials written concerning the Bomb since 1946. There has always been a sizable amount of technical material published concerning the Bomb, i.e., material written by experts for experts on such subjects as the production of and experimental developments in nuclear weaponry, military and diplomatic policies concerning nuclear arms, economic and historical aspects of producing nuclear weapons, legal problems concerning arms control, and the psychological and physiological effects from exposure to radiation. The number of technical books on the Bomb has grown proportionately with the expansion in nuclear technology (See Table 1).

Moreover, for any public issue there is a great deal of editorial or opinion material written which makes its appeal to the average person. The number of opinion books has not grown in proportion to the growth of nuclear technology (Table 1). The distinction between technical and opinion books does not mean that technical books do not offer opinions or a particular bias concerning Bomb technology. Similarly the opinion books may offer a simplified

version of technical subjects in addition to dealing with personal survival and the impact of the Bomb upon the individual. The upsurge in opinion books in the 1959-1964 year span came mainly from the popularity of Kennedy's shelter program and the emphasis placed upon methods of personal survival in case of an attack. After 1964, the number of new opinion books published declined by 50% which illustrates again that the Bomb had declined as an issue.

Table 1. Frequency of publication concerning the Bomb

	1946-1952	1953-1958	1959-1964	1965-1970
technical books	50	65	126	135
opinion books	20	36	95	44

A third indication that the Bomb is no longer an issue derives from the results of the attitude survey administered in 1972 to measure the relationship between social and political powerlessness and complacency concerning the nuclear status quo. The overwhelming response of "no opinion" to the powerlessness, and particularly to the complacency questions, illustrated that the college students who participated in the survey has not formulated sufficient opinion concerning the Bomb to be either satisfied or dissatisfied with the nuclear status quo. (For a more detailed discussion of the measure, see the results of the attitude survey.)

To understand the nature of the Bomb as a public issue some background as to the technical growth, public reaction, and diplomatic policies concerning nuclear weaponry is helpful. To illustrate the public reaction concomitant with nuclear growth this section is divided into three periods according to the nature of governmental policy: the Truman and Eisenhower administrations, the Kennedy years, and the period from the inauguration of Johnson to the present.

At the end of World War II, the government relied on atomic weapons as the major military instrument of diplomacy; this "atomic diplomacy" was felt to be the most effective way of containing the Soviet Union (Bottome, 1971:3). From 1945 to 1961, the United States stockpiled nuclear arms at the expense of more conventional weapons. The threat of atomic warfare was presented to the public as America's sole hope for undermining the Soviet Union. Thus atomic power was initially presented in the form of a weapon, though peaceful uses of this power have been stressed from time to time. The policy of deterrence, which from 1945 to 1961 was the military's primary contribution to international diplomacy constituted the bulk of America's foreign policy.

During most of this early period the Bomb was no different from any other weapon except that it was more powerful. The dangerous effects of fall-out did not become a serious problem until about 1960, although some of the effects of radioactive fallout were known as early as 1955. The means of delivering the Bomb was similar to delivery of conventional bombs; a personal element was still involved in dropping the Bomb. The ICBM was not stressed until after 1957.

Before 1955, recorded American attitudes toward the Bomb bordered on the naive and the philosophic. There were speculations that perhaps the dropping of the Bomb on Hiroshima ushered in a new era, an era of world-wide peace. One author speculated that perhaps the Bomb would be the answer to urban crime. His thesis held that large, crime-infested cities would be dispersed since heavily populated areas would be the prime targets for atomic attack (Ogburn, 1946:269-270). The opinion books of this period generally stressed a personal identification with atomic energy, books such as How to Make an Atom Bomb in Your Own Kitchen and Atomic Energy for the Layman. In this early period two trends may be seen in American attitude. The notion of mass death was introduced for the first time, even though the Bomb was still a personalized weapon. And the aftermath of Hiroshima resulted in the need to rationalize the moral consequences of the Bomb. Nevertheless the Bomb did not become a real threat until 1955 when Russia developed an effective means of delivering it upon the United States.

After 1955 a good deal more of the literature on the Bomb dealt with the moral consequences of nuclear warfare. While the United States was safe from attack, there was little question of the necessity of the Bomb. For example, in the Dun Report of 1950 issued by the Federal Council of Churches, America's religious leaders stated that the use of the Bomb was necessary in Japan and would be necessary again if America had to come to the defense of her European allies (Christian Century, 1950:1491). However, by 1955-1956 there was some question of the necessity of dropping the original Bomb on Hiroshima (Muste, 1955:117). The growth of the Bomb as an issue increased proportionately to the threat of death presented to the American people by the Soviet Union.

With the Kennedy administration (1961-1963) the strategy of a first-strike nuclear force was relaxed and the policies of flexible response and a second-strike counterforce made a national civil defense program necessary. Thus the event that characterized this period was the "shelter craze." Before Kennedy's advocation of a national shelter program there was little recognition by the people of the dangers of actual attack. In May 1955, bombers over California were mistaken as Russian and a real alert was sounded over Berkeley and Oakland, but a sociological study of the after-effects of the alert indicated that people were not worried. In November of 1958 air-raid warnings were accidentally set off in Washington, D.C., yet only 5% of the people sought shelter. When Kennedy persuaded Congress in 1961 to allocate $207 million for a national shelter program and civil defense, public interest in the Bomb issue rose to its peak. Perhaps a new awareness of the Bomb instilled a fear of death through nuclear attack and the Bomb became personal during this period. The vague fear of death Americans felt during the early days of the Atomic Age became specific with the Soviet threat during the missile gap and was made an individual threat through the perceived necessity of the shelter program. The opinion books of the shelter craze period posed problems and possibilities for individual survival which were carried to extremes. Moral questions such as "Do you have a right to shoot your neighbor if he tries to get into your shelter?" were posed. Books with step-by-step survival procedures also became popular (Bongartz, 1970:130, 202).

Two developments in the early 1960's carried the Bomb beyond the definition of any weapon known up to that time. First, the capacity for mass death was mechanized when ICBM became the major means of delivery. The mechanization tended to de-personalize the Bomb. Second, the problem of fall-out became prominent, and despite realistic appraisals of shelters as a poor risk for survival in event of nuclear attack, the public saw in them their only solution to nuclear threat (Bongartz, 1970:203). However, when the facts about the inadequacy of

shelters were emphasized in the press, the mass shelter program collapsed within two years, and hence the de-personalization of the Bomb was complete.

Johnson's advisor, W. W. Rostow, summed up the Johnson definition of deterrence by saying, "credible deterrence in the nuclear age lies in being prepared to face the consequences if deterrence fails -- up to and including all-out nuclear war" (Bottome, 1971:113). Thus official policy spoke of the possibility of war, though there was no adequate means of protection. The United States has continued to emphasize and escalate its second-strike capacity through the development of more Polaris missiles and an Undersea Long-Range Missile System. Much of the potential threat in the Johnson and Nixon administrations has been perceived as coming from Red China.

In spite of increased arms escalation in the Johnson-Nixon years, the Bomb has not been a public issue, because, it is theorized here, the public no longer conceive it as an object of personal control. Perceived and actual control are two distinct phenomena. Actual control of the Bomb has always been the power of the government and the military. The source of the nuclear myths discussed above derives from the military through the mass media. The object of the myth creations is to acquire public support for escalations in arms expenditures. Active public support is present when the public perceives that it possesses the ability to control. Passive support exists when weaponry control appears to be mechanized and impersonal.

Although active public interest has declined, the myth process continues. Much of the drive that resulted in a limited Anti-Ballistic Missile system, the Sentinel, came as a result of military claims to a Soviet ABM system, the Tallinn Line. Yet Intelligence has shown that the Tallinn Line is actually an anti-bomber system not anti-missile. This evidence has not, however, deterred the military from perpetuating a myth about the superiority of Soviet ABM systems (Bottome, 1971:125-130). Since the early 1950's the military has used fear tactics to promote public support for military expenditures, and the public has accepted these myths without examining the credibility of the statements (although many times the facts are not available). As C. W. Mills has pointed out, the American mass does not comparatively analyze the facts available through the mass media (Mills, 1956:313).

By its very nature as a means of national security and by its technical complexity, the Bomb never could have been placed under public control, although the goal of the Atomic Energy Commission when it was created in 1947 was effective civilian control. The reason people felt they had personal control over the Bomb stemmed from the fact that traditionally, the simple technical level of warfare has meant that the means of violence for a nation must remain decentralized (Mills, 1956:178), and therefore civilian dominance over the military was feasible. But even initially, the technology of the Bomb required management by a central authority which was most logically the military.

Yet it was not until the means of delivery became impersonal and mechanized with the ICBM that people realized that the traditional definition of a weapon was not satisfactory for the Bomb. The Bomb ceased to be an issue not when it technically was beyond the control of the American people, but when they perceived it to be beyond their control. At the moment of this realization, American people were powerless to deal with the Bomb. This construct of powerlessness is a measure of expectancy; it does not depend on either the objective conditions in society or the value of the power wielded (Seeman, 1959:784). The individual American could

be expected to feel powerless toward the Bomb under two conditions: inability to prevent a nuclear attack and lack of protection from a nuclear attack. The first officially came when the United States shifted its military strategy to an emphasis on a second-strike rather than a first-strike force. Lack of protection probably started to dissipate in the minds of the American people as soon as Russia was capable of making an attack on the United States. As shown before, when official policy advocated a second-strike force the policy for the public shifted from stress on prevention to stress on protection via the Bomb shelter. Thus when their lack of protection was gone too, the American people felt powerless toward the situation of the Bomb.

This feeling of powerlessness was accompanied by a complacency towards the nuclear status quo because the always present threat of death made it a psychological necessity for people to rationalize or minimize their fears of the Bomb. Jerome Frank cites some "escape mechanisms" that people use today to minimize the danger (1961:361-362). One method is simply to ignore the danger and to justify the action by saying, "If the attack hasn't come yet it probably never will." The person that uses this rationalization can use the recent examples in Viet Nam, Laos, Cambodia, and Santo Domingo where conventional weapons have been used to back his argument. Probably the recent diplomatic recognition of Red China will bring even further support of this type of rationalization. However, simply ignoring the danger does not stop nuclear stockpiling; the potential threat is still there.

Two other escape mechanisms deal with the weapon status of the Bomb. One requires defining the Bomb as having the effects of a conventional weapon, while permitting the Bomb to retain its full potential against the enemy. This tactic was illustrated in an article in the Wall Street Journal in 1961 when four and a half columns were devoted to our destruction of the U. S. S. R. but only two columns to what damage they could do to us. The other rationalization involves an examination of history. The development of a new weapon has always been hailed as bringing the destruction of mankind and the Bomb was no exception (Frank, 1961:361). Thus the rationalization is made that since none of the other weapons destroyed us, the Bomb will not either.

The last rationalization is simply to be fatalistic about the dangers of the Bomb -- to say to oneself that we will probably all get blown up someday. Acceptance of this rationalization is possibly more destructive to the individual than simply ignoring the danger because while this attitude may allay some of the immediate anxieties over the Bomb, it makes people aware of their powerlessness toward the Bomb. W. E. Olson says that when the individual thinks he loses his capacity to control the Bomb, then he comes to accept such things as horror and violence as inevitable. What occurs is a casual acceptance of violence, from TV violence to napalm to neutron bombs (Olson, 1963:2-4). Thus probably the ultimate reason for lack of concern is not the realization of the possibilities of mass nuclear death, but that there is nothing the individual can do about it, and this self-perception of powerlessness merely tends to extend the individual's apathy to other problems.

The Bomb is currently a unique technological phenomenon. It is the first of a series of technological developments in which escalation of its complexities has the potential for mass death. The rapid industrial growth that has occurred since World War II could possibly bring about more technological advancements with the consequences of death. The impact of the growth of industrialization is tremendous. Within one lifetime atomic power became a reality, developed, became a public issue, and died as an issue while continuing to grow in complexity.

No other weapon or source of power in the history of mankind has made such rapid technological progress.

The key to the powerlessness the individual feels over the situation of the Bomb lies with his conception of personal worth in the face of mechanization. The individual feels no control over mechanization. Thus once the technology of the Bomb reached the mechanized, push-button warfare stage, the technical definition of the Bomb exceeded personal grasp. For nuclear warfare to become an issue again, the issue of nuclear death must be redefined within a new technological structure. For example, the nuclear test on Amchitka Island brought the Bomb into public light again as an environmental issue. Perhaps the Bomb can once more become a public issue if its technological definition is changed to deal with thermonuclear pollution rather than warfare.

But even such an issue as environmental pollution may be short-lived. The problem of environmental pollution currently parallels the early days of the Bomb development. Both the Bomb and pollution are offspring of technology. The greatest consequences of both the Bomb and pollution are mass death. Now the problem of pollution is being stressed on a personal level. For example, people are urged to use anti-pollutant detergents and recycle wastes. Yet the major polluters are large industries. Not only industries control the start and stop mechanisms of pollution, but they control the technical expertise with which to fight pollution. It is predicted on the basis of the public reaction to the Bomb, that individuals will feel they no longer personally control pollution and it, too, will cease to be an issue.

A Test of the Hypothesis

The purpose of the survey was to determine whether or not college students are complacent about the existing nuclear status quo. Complacency is defined as the degree of satisfaction a person feels with existing situations. Complacency toward nuclear power is the degree to which a person is satisfied with the nuclear status quo. It is expected that a person with a high degree of complacency toward nuclear power would feel that the growth in quantity and complexity of nuclear weapons has taken place at a gradual rate, and that the importance of nuclear power as a factor in international affairs is no more important than other social, political, or economic factors. A person with a high degree of complacency[3] would also feel no personal threat from nuclear power and generally trusts the powers that control the status quo.

In contrast, a person possessing a low degree of complacency would tend to see nuclear power as developing at an abnormally fast rate and playing a salient role in international affairs. He would tend to feel that a nuclear attack is imminent if nuclear power is not checked,[4] and would feel more compelled to keep informed about nuclear developments than a person with a high degree of complacency.

Powerlessness, as defined by Melvin Seeman, is that category of the construct "alienation" which expresses "the expectancy or probability held by the individual that his own behavior cannot determine the occurrence of the outcomes, or reinforcements he seeks" (Seeman, 1959:784). By using powerlessness as an expectancy, it can be closely related to Rotter's "internal vs. external control of reinforcements" (Seeman, 1959:785). Consequently, a person with a high degree of powerlessness would feel that the determination of events in society was beyond his personal control, whereas a person with a low degree of powerlessness

would feel that events in society were subject to personal control. The person with a low degree of powerlessness would not only feel that his own actions could influence social events but would also feel a personal responsibility and accountability for the actions of society. A person with high powerlessness would attribute both the outcome and responsibility for society's actions to some institution or phenomenon he feels is greater than the individual. A high degree of individual powerlessness may be related to passive public interest discussed above, while low powerlessness would be characteristic of active public interest.

The rationale for relating complacency and powerlessness is that a person with a high degree of powerlessness would tend to rationalize his perception of world events (since he feels he could do nothing personally about them) so that he is satisfied with situations as they are. A person feeling a high degree of powerlessness toward the situation of nuclear power would tend to rationalize his ineffectuality and express satisfaction toward the nuclear status quo.

It was hypothesized that there would be a high positive correlation between powerlessness and complacency. People feeling a high degree of powerlessness toward the nuclear situation would tend to rationalize their ineffectiveness and thereby would be highly complacent with the nuclear status quo. With regard to factual knowledge, it is hypothesized that those people with a low measure of complacency would be oriented to the expectancy of changing the nuclear status quo and would, in the process of studying various possibilities for change, have acquired knowledge of the major events and terminology in this area. Thus the individual with a high degree of powerlessness would have a high degree of complacency toward the nuclear situation; but this person would be less knowledgeable regarding nuclear facts than a person with a low complacency rate.

The subjects for the study were 110 college students in lower division sociology classes at the University of Kansas. The range of ages for the 45 female and 65 male participants was 17 to 31, and the majors of the participants varied greatly.

A questionnaire consisting of 33 items was constructed to measure three areas: powerlessness, complacency, and factual knowledge about nuclear development. The 12 powerlessness items were adapted from the internal vs. external reinforcement (I-E) powerlessness subscale developed by Seeman and Neal and were answered using a 5-point Likert Scale ranging from "strongly agree" to "strongly disagree." These 12 were actually six pairs of items tapping different *aspects* of powerlessness. Within a pair, one item was stated as a positive expression of power and its counterpoint as a positive expression of powerlessness. This item duplication was done in order to evaluate inner-item reliability. The following pair of items exemplifies the paired expressions of power and powerlessness used in the questionnaire:

I think we have adequate means of dealing with current domestic problems.
There is very little we can actually do to solve our domestic problems.

Complacency was evaluated by 14 items also in a 5-point Likert form. The related opposites were separated and only used to achieve a measure of reliability. These items were selected by sampling the opinions expressed by individuals and groups both with and without technical expertise on the subject of nuclear weaponry and warfare. An example of the paired complacency items used is the following:

The development of the nuclear bomb in the 1960's has had no more effect on world affairs than any weapons would.
The development of the nuclear bomb has had tremendous impact on foreign relations since 1965.

The remaining seven items in the questionnaire were multiple-choice questions dealing with major events in the history of nuclear power and current nuclear activities. It was thought that all items could have been answered correctly with a general and continuing awareness of the nuclear situation as presented by mass media.

Two (one set of paired items) of the complacency items and two of the powerlessness items were not used in the analysis because they measured constructs other than complacency and powerlessness. To decide which of the remaining items were to be used in the powerlessness and complacency scales, a split-half reliability, corrected by the Spearman-Brown Prophecy Formula, was calculated for each pair. The criterion of .71 was used as acceptable, and all pairs with reliabilities of .70 or less were eliminated. Thus four (two pairs) of the powerlessness items and two of the complacency items were deleted from the final results for lack of sufficient internal consistency. The remaining range in the reliability of the paired items was .73 - .91. Scores for each of the three scales were the total score obtained by summing all items included in the respective scale.

Findings

Table 2. Range of Responses on the Powerlessness and Complancey Scales and the Factual Questions

		range		frequency
powerlessness	low	8 - 18		15
	medium	19 - 28		80
	high	29 - 40		15
	mean	23.35	S.D. ±4.80	
complacency	low	8 - 14		9
	medium	15 - 23		85
	high	24 - 40		16
	mean	19.35	S.D. ±4.39	
multiple choice items	low	0 - 1		16
	medium	2 - 5		78
	high	6 - 7		6
	mean	3.39	S.D. ±1.08	

The range for both the powerlessness and complacency scales was 8 to 40. Scores were grouped into low, medium, and high degrees of powerlessness and low, medium, and high degrees of complacency as indicated in Table 2. Generally, most scores tended to be in the medium or "no opinion" range on both the powerlessness and complacency scales. The arithmetic mean for the multiple choice items was determined, from the number of correct responses out of seven, as 3.39. Most of the subjects scored 2 - 5 correct answers out of seven, lying in the medium range as indicated by Table 2.

The correlation between the powerlessness and the complacency scales was $r = .14$, indicating a low or slight relationship between powerlessness and complacency. There was no correlation between the degree of complacency and the number of correct responses made by each participant on the multiple choice items.

Discussion

It was assumed in the hypothesis that while people probably would not be able to organize or define their opinions in terms of complacency or powerlessness, their responses to the survey items would indicate some direction in their opinions -- either a high or low degree of powerlessness or a high or low degree of complacency toward the nuclear status quo. However, the responses indicated confusion and a lack of direction as was evident by the large number of "no opinion" responses. A possible explanation for the majority of "no opinion" responses on both the powerlessness and complacency scales is
toward the issues involved. It is possible there was a problem of validity with the items of the complacency scale, but the powerlessness items have been used previously and found to have adequate validity. Thus, the results of the survey showed that in terms of complacency toward the existing nuclear situation, the subjects did not care enough about nuclear warfare or weaponry to have a pre-formulated opinion. For the majority of college students who took this survey the present nuclear situation simply is not an issue. It is recognized that due to the age of the subjects in the sample, the results of the questionnaire may not be representative of other age groups within the population.

The lack of a correlation, $r = .00$, between the multiple-choice items and the items measuring complacency bore out the lack of concern toward the nuclear issue. A significant correlation between a high number of correct responses on the multiple choice and a low measure of complacency would indicate a deliberate organization by the participant to become more knowledgeable about nuclear warfare. But since nuclear power is not an issue, there is no need to be knowledgeable.

The arithmetic mean for the powerlessness scale, 23.35, showed that the subjects do not feel either ineffectual or personally effective in dealing with the events; so that there was no need to either recognize nuclear warfare as an issue or reationalize it. Therefore, the indifference to powerlessness merely enhanced nuclear warfare's unimportance as an issue.

Footnotes

[1] Projected estimates such as these, reportedly from American intelligence, appeared in the July, 1959, issue of the Reporter and the January 12, 1959, issue of the New York Times.
Edgar M. Bottome, The Balance of Terror (Boston: Beacon Press, 1971), p. 156.

[2]The initial list of technical and opinion books was compiled from the Cumulative Book Index. To verify the type of content included in the books, annotated bibliographies, book reviews, and personal knowledge of the subject content of certain books were used by the author.

[3]The use of the word "complacency" will, for the sake of brevity, refer to complacency toward the nuclear situation unless otherwise designated. "Powerlessness" is to be limited to its social and political usage as defined by Seeman.

[4]Even the person with a high degree of complacency may realize the fatality of nuclear warfare. However, this person usually rationalizes that either warfare will not occur during his lifetime, or if it did, there is nothing he can do about it anyway, so why worry. Generally, the highly complacent person's fear of nuclear death is much more vague than that of the low complacency person.

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