

Quality of U.S. Decision Making During the Cuban Missile Crisis

MAJOR ERRORS IN WELCH'S REASSESSMENT

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Obviously, the conclusions from any systematic investigation of historic crises may require modification when new information becomes available. In the previous article, David Welch claims that new information about the 1962 Cuban missile crisis, the most thoroughly documented of the 19 crises in our study of the relationship between decision-making process and outcome (Herek et al., 1987), casts doubts on our findings. Further, he questions the main conclusions of our entire study, not only on the basis of this new evidence but also because our "conception of a high-quality decision making process" (embodied in our definitions of the symptoms of defective decision making) is "seriously flawed" (p. 432). Are his claims warranted?

At first glance, Welch's article might seem convincing to some readers; it seems sensible as well as sophisticated. But such favorable impressions, we believe, cannot survive detailed scrutiny of the veracity of his assertions concerning both our article and the new evidence he describes.

In this rebuttal, we shall explain why Welch's claims are wrong by documenting two major types of errors that permeate his entire critique. Unfortunately, we cannot be brief. We feel it necessary to point out many misleading oversimplifications and misrepresentations in Welch's article that must be corrected both to assess the relationship between process and outcome reported in our paper and to extract

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“lessons” from the Cuban missile crisis. As the old saying goes, the devil is to be found lurking in details.

One important set of details pertains to the criteria we used to determine whether the decision-making process was of high or low quality. We shall show how Welch consistently misrepresents our criteria: He ignores our definitions (even though he quotes them), and replaces them instead with his own definitions framed in terms of an ideal rational actor model that we explicitly rejected as unrealistic. The second set of important details pertains to factual distortions and misinterpretations in Welch’s capsule summaries of the new (and some of the old) documentary evidence.

We began our article by rejecting the rational actor model. We stated:

Because we can neither predict the future nor know every alternative course of action in most cases, human beings cannot fully meet the requirements of a normative rational model. Instead, we must be satisfied with working to the best of our limited abilities within the confines of available organizational resources.

Rejecting a “rational-actor” model, however, does not necessarily preclude the possibility that the most effective policymakers engage in careful search for relevant information, critical appraisal of viable alternatives, and careful contingency planning, exercising caution to avoid mistakes in making important policy decisions. [Herek et al., 1987: 204]

We refer to this type of approach as *vigilant problem solving*, and we state that failure to use this high-quality type of decision making is marked by gross failures to adhere to seven criteria. For purposes of conducting empirical research on the quality of decision-making processes, failure to meet each criterion is conceptualized in terms of a *symptom* of defective decision making. In scoring a decision, we treat each symptom as a continuum ranging from extremely low-quality performance (when the symptom is present) to adequately high-quality performance (when the symptom is absent).¹ In our original paper

1. Vigilant problem-solving procedures were described by Janis and Mann (1977), where seven criteria were specified for high-quality decision making. In the course of our work prior to the 1987 study, we found that graduate students in the social sciences had difficulty making reliable judgments about adherence to these criteria, i.e., the presence of high-quality decision making. Their difficulty resulted from ambiguities about what reasonably could be expected from decision makers under conditions of time pressure and limited organizational resources for information search and analysis. For example, we found no way of specifying criteria for reliably judging when decision makers had reached the point of diminishing returns – that is, when a great deal of work already had been done and it was no longer worthwhile to procure and process additional information, explore additional alternatives, make additional contingency plans, and so on.

We found fewer ambiguities and substantially higher inter-coder reliabilities, however, when we asked graduate students to judge whether decision makers had done so

(Herek et al., 1987), we provided explicit definitions for the symptoms of defective (low-quality) decision making, and stressed that symptoms are present only when gross errors or omissions occur. We were consistently careful not to set unrealistically high standards that decision makers could not possibly meet under crisis conditions.

After taking such pains to explain our approach, we find it difficult to understand how Welch could so badly misrepresent our criteria and the general orientation underlying them. By ignoring our definitions, exploiting ambiguities in the 1962 crisis situation, and setting impossibly high standards for decision makers, he concludes that five symptoms of defective decision making scored by us as *absent* definitely were manifested by President Kennedy and the members of his ExComm group during the Cuban missile crisis. Further, he misrepresents some of the most important documentary evidence on the crisis. In order to document our claims, we examine in detail Welch's comments about each symptom.

GROSS OMISSIONS IN SURVEYING ALTERNATIVES

Our definition of this symptom emphasizes failure to consider more than one or two alternatives. Welch himself states: "*Three* broad alternatives quickly surfaced in the discussions and *several variants* of each were at least mentioned for consideration" (p. 432, our emphasis). In all, he lists at least six alternatives that were discussed, and thereby supports our coding of this symptom as absent. Welch, however, argues the contrary: He rates the symptom as present because the president and his advisors limited their "sustained scrutiny" to only two alternatives (p. 432). "Sustained scrutiny" of a large number of alternatives, however, is not required by this criterion, nor, as Welch later acknowledges, should it be.

Along with his disregard for our definition of the symptom, Welch misstates some of the historical facts. His claim that all diplomatic

little that they failed badly in meeting each criterion (i.e., decision makers did *not* carry out the bulk of the work relevant to the criterion and consequently displayed two or more substantial avoidable errors or omissions). Accordingly, we decided to code the decision-making process in terms of the presence or absence of *symptoms of defective decision making*. Decision makers receive an overall rating of high-quality decision making if they generally succeed at carrying out the essential steps, i.e., if they display no more than one of the seven symptoms. For further elaboration of our conceptualization of high- versus low-quality decision making, see Janis (1989: 31-33, 89-106, 271-274).

options were quickly dismissed directly contradicts his own statements in a recent publication. Welch and Blight (1987-1988), after pointing out that Adlai Stevenson had suggested early in the missile crisis that a trade should be considered as a lever for a negotiated withdrawal of the Soviet missiles, assert: "In fact, President Kennedy and his advisors had the trade option in the back of their minds throughout, and at various times some expressed the view that the trade might be necessary" (p. 13). Here Welch and Blight cite evidence from minutes of an October 19 meeting of some of the principals and also from a later meeting. (Trachtenberg [1985] also presents some evidence in support of the same conclusion.) Welch and Blight add that "Since a trade was among the available options, the Administration had explored its implications long before it was actually proposed in Khrushchev's second letter. No one was blind to the costs of a public trade" [p. 14].

Another erroneous claim in Welch's critique is that "the surgical air strike option was never seriously examined, possibly because the Air Force never prepared a plan for one" (p. 433). As the source for this allegation, he cites two pages in Allison's *Essence of Decision* (1971: 124-125). On the very next page in that book, however, Allison asserts the exact opposite: "During the second week of the crisis, civilian experts examined the surgical air strike" and "this strike was added to a list of live options for the end of the second week" (p. 126). Allison's actual statements on pages 124-125 are that during the first week of the crisis, the Air Force experts gave the members of the ExComm a misleading impression about the extensiveness of the damage that would be caused by a surgical air strike; by week's end, however, "the misunderstanding [created by the Air Force planners] became apparent to several of the leaders."

Finally, Welch mentions two extreme alternatives not considered by the ExComm, including that of risking nuclear war by issuing an inflexible ultimatum to the Soviet Union. Here Welch seems to suggest that decision makers should be expected to consider in their survey of viable alternatives even the most risky courses of action, those that they regard as out of the question because of obvious crippling objections. Using this unrealistic requirement, Welch might also have faulted the ExComm for not considering a preemptive nuclear strike against Cuba and the Soviet Union.

In the latter half of his article, Welch forgives the ExComm for omitting the extreme alternatives, although he still does not admit that our rating of the first symptom as absent is correct. He says that the

members could not be expected to explore all conceivable options and that during a crisis it is “not unreasonable for a decision maker to focus quickly on a small set of basic alternatives” (p. 442). Thus, Welch essentially accepts our approach to the symptom after attacking the straw man he sets up by attributing to us his own unrealistic, ideal norm for problem-solving procedures.

GROSS OMISSIONS IN SURVEYING OBJECTIVES

Our definition of this symptom emphasizes minimal consideration of objectives by decision makers or their complete failure to consider them at all, with the result that two or more important objectives never are taken into account during the decision-making process. Here again, Welch disregards our definition, offers his own ideal standard that is completely unrealistic for crisis managers, and claims that the symptom is present in the missile crisis decision making. He says that no evidence shows that the ExComm members “debated” the objective of removing the Soviet missiles or gave “sustained consideration” to *why* the missiles in Cuba were unacceptable (p. 433). Yet, neither debating nor engaging in *sustained* consideration is included in our definition of the symptom.

Welch admits that quite a number of goals or values implicated by the choice were discussed by the ExComm members from time to time. But he adds his own requirements for the criterion and faults the ExComm for failing to meet them: Their discussions did not focus on “ultimate objectives as such” (p. 433); they failed to “attain closure on the relationships between the various means available and the goals or values they sought to further” (p. 433), a requirement that we doubt could ever be met by even the most capable and intelligent team of policy makers in a crisis situation.

FAILURE TO EXAMINE MAJOR COSTS AND RISKS OF THE PREFERRED CHOICE

Welch opens his comments on this symptom by admitting that “the president and his advisors were *aware* of most of the main costs and risks associated with the quarantine,” which emerged as the preferred choice (p. 434, emphasis in original). Thus, according to our definition,

which emphasizes failure to consider practically any of the costs or risks, the symptom was absent. Welch, however, concludes that it was present.

One of Welch's arguments is that "there is no evidence of sustained examination of contingency plans should a confrontation at sea occur" (p. 434). But contingency planning is irrelevant to this symptom. It is relevant to the seventh symptom, and is discussed below. The only additional argument he offers is that certain costs and risks were not gauged accurately. This is not relevant to the symptom for the simple reason that information in every crisis is incomplete or ambiguous and often distorted by opponents' deliberate deceptions. As a result, a careful examination of the costs and benefits of viable alternatives does not preclude mistakes in judgment under such conditions. The symptom would be rated as present only when evidence shows that the crisis management group either deliberately disregarded clear-cut information about costs and risks or never put the topic on the agenda for group discussion.

It is noteworthy that most of Welch's evidence of misgauging is weak and not very cogent. When he says, for example, that President Kennedy and his advisors misjudged how long the crisis would last, the only evidence he offers is that the president declared in a public speech that "many months of sacrifice and self-discipline lie ahead" (p. 434). Given the well-known fact that many statements in presidential speeches are designed for public relations purposes and do not necessarily indicate what the president and his advisors truly believe, this evidence by itself is not particularly convincing.

POOR INFORMATION SEARCH

We rate this symptom as present when the decision-making group conducts only a minimal search for information. In his comments about this and several other symptoms, Welch acknowledges that President Kennedy and his advisors were keenly interested in securing pertinent information. And the account by Welch and Blight (1987-1988), like those that we used, indicates that the ExComm obtained a considerable amount of information. In his critique of our study, however, Welch concludes that this symptom was present. We find it difficult to understand how Welch arrives at this conclusion unless he in effect blames the crisis managers for not being omniscient.

Most of the evidence to which Welch refers pertains to the operational status of the Soviet missiles in Cuba. He claims that although President Kennedy repeatedly asked for information about the warheads, he and his advisors maintained mistaken beliefs about the operational status of the missiles. The following quotation from the final version of Welch's article, which we received for rebuttal in December 1988, contains alleged statements of fact that subsequently were called into question by news reports in January 1989:

[I]t appears that the ExComm's concern about the operational status of the missiles in Cuba was chiefly associated with the fear that at least one missile would be launched during an American air strike, possibly resulting in millions of American deaths. In fact, there was sufficient information available to suggest that the risks of a launch during the envisioned air strike were negligible. Even with assumptions of ample warning and unrealistically high attrition rates by Cuban air defenses, and granting all benefits of the doubt to the Soviet crews manning the missile sites, the odds against a launch-under-attack were overwhelming because of the extensive period of time needed to fuel, arm, and target an SS-4 missile (8 to 20 hours), the complexity of the task (requiring 20 calm men), and the vulnerability of the sites (Blight and Welch, 1989: 209-212). This information was all available in 1962; the ExComm never assimilated it, and consequently feared a virtually impossible contingency. [p. 436]

Quite a different set of facts is presented in press releases from the January 1989 international conference in Moscow (which was attended by various experts, as well as national leaders from all three countries who had participated as crisis managers). A *New York Times* article undercuts Welch's definitive statements of the alleged facts:

Soviet officials disclosed today for the first time that in the 1962 Cuban missile crisis, Soviet nuclear warheads had already been deployed in Cuba and could have been launched at American cities within a few hours. . . [Keller, 1989, p. 1]

The news reports suggest that Kennedy and his advisors were not, after all, operating from a faulty assumption that could have been corrected by a more adequate information search. This example of alleged facts being undercut by new alleged evidence reinforces a point made in a recent publication by Welch and his collaborator, Blight (1987-1988): We cannot be certain about essential facts of the case because the record remains incomplete and new sources of evidence can

be expected to reveal new facts crucial to understanding the 1962 crisis. As more evidence becomes available, it could turn out that Welch's conclusion is supported. But at present it is not warranted to assert definitively that the ExComm "feared a virtually impossible contingency," and to use this alleged fact as a basis for concluding that the ExComm's information search was poor.

Obviously, we cannot expect that the ExComm members had access to all relevant facts, nor does our definition for the fourth symptom require it. Our criteria for coding the symptom as present are not so stringent as to require the decision-making team to have sought out every conceivable piece of relevant information; rather, we look for a pattern of consistent failures to seek information that was both available and relevant to the decision. Welch, however, again tries to apply an ideal and unattainable standard, and uses it to fault the decision makers on this symptom.

SELECTIVE BIAS IN PROCESSING INFORMATION AT HAND

Welch asserts that no one could possibly judge whether this symptom is present "because insufficient data exist to enable us to reconstruct the subtleties of their cognitive thought processes" (p. 437). Our definition of this symptom, however, specifies consistent rejection of new information that does not support the decision makers' preferred course of action, manifested in obvious instances of their ignoring or refuting nonsupporting information. Such extremely deficient forms of behavior on the part of crisis managers are neither subtle nor impossible to observe reliably and validly when they occur in what Welch calls "the real world of crisis management" (p. 437). Among the well-known examples are the numerous observations reported in the *Pentagon Papers* and other sources indicating that in 1965 and 1966, President Johnson and his advisors consistently ignored and refuted the information they received from government intelligence analysts. They discounted or refuted the mounting indications that were repeatedly called to their attention concerning the ineffectiveness of their policy of escalating the air and ground war in Vietnam.

FAILURE TO RECONSIDER ORIGINALLY REJECTED ALTERNATIVES

In order to meet the deadline for submitting this rebuttal, we did not take time to check carefully to determine whether we agree with Welch that this symptom now should be coded as absent rather than present in the light of the new evidence published since we completed our original study. Our initial impression is that Welch might be correct on this point. If so, the quality of decision making by President Kennedy and his advisors would be rated even higher than we reported, i.e., none of the seven symptoms of defective decision making would be rated as present. However, such a revision in our coding would hardly support Welch's questioning of the conclusions of our study.

FAILURE TO WORK OUT DETAILED IMPLEMENTATION, MONITORING, AND CONTINGENCY PLANS

We were truly amazed at Welch's conclusion that this symptom should have been coded as present. The evidence in practically all accounts of the Cuban missile crisis consistently indicates that the ExComm was remarkably thorough in developing plans for implementing and monitoring their chosen course of action and they spent considerable time and effort on contingency planning.

Welch's contention is based on two arguments. First, not all members of the ExComm were aware of certain antisubmarine warfare activities after the quarantine decision had been made and while it was being implemented; here he redefines the symptom by adding the unrealistic requirement that every participant in the decision-making process must be aware of every difficulty encountered while the decision is being implemented in order to rate the symptom as absent.

Welch's second argument is that the records for October 26-27, when the crisis was entering its most dangerous phase, provide no evidence that any members of the ExComm engaged in "meaningful discussion of contingency plans in the event hostilities with the Soviets broke out" (p. 439). Here Welch ignores his own published comments on the ExComm transcripts of October 27, 1962: "A record of this sort will always remain incomplete and suggestive; it contains only some of the discussions that occurred in the Cabinet Room" (Welch and Blight,

1987-1988: 6). Welch and his collaborator also point out that the published records have been “sanitized” by government officials, who have deleted all classified material. They call attention to various statements made by Secretary of Defense McNamara during the ExComm meetings on October 27 about the likely consequences of an American air strike on the Cuban missile sites, including Soviet retaliation that could lead to war. Classified material was deleted in two of these quotations. Is it likely that discussions of contingency plans in the event of a nuclear war with the Soviet Union would be declassified and allowed to appear in the “sanitized” records? Does the absence of declassified records of meetings containing discussions of war contingency plans by the Joint Chiefs of Staff with the secretary of defense and other ExComm members show that the topic never was on the agenda? We think not.

DISCUSSION

After his series of erroneous statements about the various symptoms of defective decision making, Welch makes some sensible statements, toward the end of his article, about the criteria that should be used for judging decision making by taking account of what realistically can be expected of crisis managers. His comments here are in line with our definitions of the seven symptoms. Having finally reached more realistic criteria for appraising U.S. decision making during the missile crisis, Welch might be expected to correct his earlier misstatements by concluding that five of the symptoms we coded as absent *actually were absent*; that the ExComm group’s decision-making process was of high quality; and that the Cuban missile crisis provides an example of a favorable outcome following a high-quality decision-making process in line with the major conclusion in our study. Instead, Welch allows his erroneous conclusions to stand: “If the outcome of the crisis was favorable, and if the Kennedy administration’s decision-making process failed to meet the standards of vigilant problem solving, then we must conclude that, at least in this case, the quality of the process as Herek, Janis, and Huth conceive it was not related to the quality of the outcome” (p. 441). This presumably is one basis for Welch’s assertion in his abstract that “the conclusions of the Herek, Janis, and Huth study . . . are called into question.” [p.430]

We can make sense of Welch's mistake in adhering to his conclusions about the Cuban missile crisis only by assuming that he has ignored the realistic criteria that he himself describes in the last section of his article. He evidently reverts back to the unrealistic conception (which he mistakenly attributes to us) of an ideal rational actor who carries out every step of vigilant problem solving almost perfectly and who manages to obtain and utilize almost every possible bit of relevant information, thus practically never making mistakes.

Welch's misrepresentations of the seven symptoms led us to wonder how our definitions could be so completely misconstrued. What could have led a serious scholar to claim that we have set up all sorts of exorbitant requisites, including the requirement that crisis managers would have to "acquire, assimilate, and use a larger body of information than was humanly possible" (p. 442)? We are willing to entertain the possibility that, despite our best efforts, some ambiguities remain in our definitions of the seven symptoms of defective decision making that invite the kind of misinterpretations that Welch presents. We leave it to readers of this journal to judge that issue for themselves.

Welch's alternative wordings of the requirements for high-quality decision making call to mind a genuine research problem: Within the range of realistic criteria, other researchers might formulate somewhat differing definitions of high-quality decision making, which could be more stringent or less stringent than ours. Comparative studies are needed to formulate the most productive definitions for coding decision-making procedures and for determining which definitions yield the strongest relationships between process and other variables.

Another real problem is implied by Welch's assertions that in some cases a poor-quality decision-making process could nevertheless be followed by a favorable outcome, and that "under certain circumstances, a favorable outcome may depend upon a process that does not exhibit the characteristics of vigilant problem solving" (p. 440). In our article, we pointed to the role of such factors as "unforeseeable accidents and other chance occurrences commonly referred to as 'bad luck'" (p. 221). It follows that uncontrollable and chance factors might sometimes also result in "good luck," i.e., a satisfactory crisis outcome even though the decision-making process was of poor quality.

One example of a factor that could preclude vigilant problem solving is an externally imposed time constraint. A completely unexpected crisis, for example, might allow only a few minutes in which to make a crucial decision, as happened in the Persian Gulf in July 1988 when

the captain and crew of the U.S.S. *Vincennes* detected an approaching Iranian plane and shot it down because it seemed ready to attack them. A similar situation could arise if national leaders suddenly received information indicating an immediately looming enemy missile attack. When such severe time pressures exist during an international crisis, the decision-making process may depend entirely upon the individual crisis managers' talents, training, and experience in pattern recognition and related judgmental skills. In effect, they may need the same qualities that enable some chess masters to make fairly good snap judgments in circumstances where they are not given time to deliberate. But this was not the situation for the Cuban missile crisis or for any of the other 18 international crises in the sample we investigated; in each crisis, many days or even weeks were available for information search and deliberation. Welch's claim that the Cuban missile crisis is a case in point is based on his erroneous statements about what the evidence shows concerning the ExComm's decision-making process.

After we examined carefully the new evidence published since our study was completed, we were perplexed about Welch's unwarranted claim. We noted that the various pieces of evidence Welch uses to support his contentions about our alleged miscodings of five symptoms of defective decision making are consistently summarized in a way that markedly overstates the definitiveness of the evidence. Worse yet, as we have indicated above, many of his statements oversimplify, distort, or report the opposite of what the evidence actually shows, in addition to misconstruing the definitions of each of the seven symptoms.

Yet another aspect of Welch's critique requires comment. Although it is minor compared with the two major types of errors we have documented in this article, we do consider it important because Welch makes statements implying that we used inadequate sources and thereby raises doubts about our conclusions. After claiming (erroneously) that the new evidence published since our study was completed reveals that five symptoms of defective decision making were displayed by the ExComm, Welch argues that our findings based on our entire sample of 19 crises are called into question. He states that the works used for coding the Cuban missile crisis were based on inadequate sources of information because the transcripts of the meetings and other documents "were not available when those works were written" (p. 439). Welch then goes on to say: "There are grounds, therefore, for wondering about the confidence we can place in the codings used by Herek, Janis,

and Huth for the other cases they consider. Consequently, there are grounds for questioning the conclusions of their study" (p. 439).

These two statements contain an unstated premise, namely, that the sources we used in our study were inadequate for the Cuban missile crisis and therefore were probably inadequate for many, if not all, of the other 18 crises as well. As we have already indicated, however, the new evidence Welch cites from the five fairly recent studies does not substantially contradict our ratings of the quality of U.S. decision making during the Cuban missile crisis. For example, the article by Trachtenberg (1985), which appeared shortly after we had completed our coding, contains slight indications that the sixth symptom (failure to reconsider originally rejected alternatives) might have been absent rather than present as we coded it, but does not contain any new evidence that could be regarded as contradicting or even as raising any question about our ratings of the other six symptoms.

Welch's assertion that there are grounds for questioning the coding of the other 18 cases, which implies that the sources we used were inadequate, is a very serious criticism of our systematic research investigation. He presents it without mentioning the careful procedures we used both to obtain the best available sources for each of the 19 crises and to avoid any bias on our part in the selection of sources. Our original article contains three paragraphs that describe (a) our compilation of sources from standard reference works, (b) our limiting of the initial list to scholarly accounts by reputable political analysts and historians, (c) our submission of the list of sources to three outside experts to obtain their ratings of the adequacy of the scholarship of each bibliographic source, and (d) our use of special procedures to ensure that the judges making these ratings were unaware at that time of the hypothesis we were investigating. We conclude our description of source selection procedures with the statement that: "The coding of decision making, therefore, was based on a sample of accounts and analyses by leading social science scholars . . . whose accounts of these crises are generally regarded as being among the very best" (Herek et al., 1987: 210).

From Welch's comments, one certainly would never guess that such care was taken in selecting sources and carrying out all the other steps in our systematic research investigation. The statements Welch makes about the sources we used for all the crises in our study, his omission of any summary of our procedures for selecting the sources, his misinterpretations of our definitions of the seven symptoms, and his errors in summarizing new evidence—all these defects have left us with the

painful task of attempting to set the record straight. And so, we have had to devote much of our rebuttal to dealing with Welch's misstatements. Frankly, we wish that this could have been a scholarly exchange devoted entirely to alternative interpretations of the available evidence about the quality of U.S. decision making during the Cuban missile crisis, and to other productive, controversial issues.

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