A Research of the Historiographical Approach to the Cuban Missile Crisis: Exploring the Impact of Irrational Factors on the Peaceful Ending

Baisen Qiao^{1,a,*}

¹School of International Relations and Diplomacy, Beijing Foreign Studies University, Beijing, China, 100089 a. 20160067@bfsu.edu.cn *corresponding author

Abstract: With the outbreak of the Russian-Ukrainian war in 2022, a new nuclear crisis and violent geopolitical shocks seem to be looming worldwide. At this juncture, reviewing the historical lesson of the Cuban missile crisis appears imperative. The previous studies investigated the causes of the peaceful end of the Cuban missile crisis, but downplaying the role of irrational factors. Based on the analysis of relevant research approaches, numerous primary sources and case study, this paper is bent on the role of irrational factors including emotional variables, contingency and uncontrollable agents during this crisis. The result of this research reveals that irrational factors played a significant role in the peaceful resolution of the Cuban missile crisis. The favorable development of some irrational factors (e.g., the choice of frontline soldiers in the "Soviet submarine incident") due to fortunate or contingency even became crucial in preventing this crisis from degenerating into a nuclear war. This paper can expand the scope of the studies of the Cuban Missile Crisis and provide guidance for preventing nuclear war and instability in the present era. Hence, it is of theoretical and practical value.

Keywords: Cuban Missile Crisis, Peaceful ending, Irrational factors, Reason analysis

1. Introduction

As the closest moment of the Cold War to nuclear war, the reasons for the peaceful settlement of the Cuban missile crisis have long been widely debated. The epistemological paradigm for the historiography of this crisis has gone through three periods: traditionalism, revisionism, and post-revisionism [1]. As academic analyses of the Cuban missile crisis have become comprehensive, holistic, and focused more on historical detail, the research approach has gradually shifted from a single state rationality perspective to bureaucratic politics, organizational behavior, and individual rational approach. In recent years, research on the psychology of leaders and the role of individual decision-making seems to gradually become mainstream. However, although a few scholars have begun to trace the contingent and uncontrollable factors, there is still a lack of systematic analysis of the impact of these irrational factors on the peaceful ending of this crisis. Accordingly, the existing analytical and explanatory approaches to the Cuban missile crisis are also flawed.

In view of this, this paper seeks to refine the research approaches related to the Cuban Missile Crisis and clarify the role of irrational factors in its peaceful ending. Based on a critical evaluation of the research approaches, this study will use the Soviet submarine incident as an example to further analyze the irrational factors in this crisis. In this paper, irrational factors are defined as contingent, uncontrollable and emotional factors that are beyond the control of human reason. The methodology of this paper is mainly based on literature research and case study analysis, through the collection and review of a large number of primary and secondary sources. This study will provide guidance for future research methodologies on the Cuban missile crisis, and may also provide relevant references on the stockpiling, deployment, and command of nuclear weapons by current nuclear powers, thus providing both theoretical and practical values.

2. A Brief Analysis of the Cuban Missile Crisis Research Approaches

2.1. The Diplomatic Decision-Making Model from Allison

In response to the common use of the state as a unified rational actor in the analysis of international relations, Allison proposes the 'rational actor', 'organizational process' model and " bureaucratic politics" model to explain the Cuban missile crisis [2]. And more than 20 years later the book has been re-edited and republished. Whereas the new edition utilizes more new material and makes changes to some specific issues, its central ideas and framework structure remain the same as the old edition. Meanwhile, Allison and Zelikow have consistently confirmed that the "rational actor" model itself is not sufficient to explain the course of the Cuban missile crisis and that analysts also need to use the other two models [3]. Indeed, although this series of foreign policy-making models have a profound impact on international relations research, it has a number of shortcomings in explaining the peaceful end of the crisis.

On the one hand, the organizational process model is not suitable to explain the peaceful end of the Cuban missile crisis. This model treats the decision-making process as an organized activity, assuming that the various parts of the government will distribute and act according to predetermined organizational processes (programs). Also, the behavior and structure of organizations tend to be stable, so that when new situations arise, organizations rarely construct entirely new processes and are characterized by uncertainty avoidance [3]. However, as the Cuban Missile Crisis was a very rare nuclear crisis, the US and the Union of Soviet Socialist Republics (USSR) did not have adequate standard operating processes in place beforehand, thus leading to significant organizational change in the face of this major crisis. A case in point is the fact that the US did not follow the same organizational model as in the past during this crisis, but urgently set up a new temporary organization, the Executive Committee of the National Security Council. Moreover, in this crisis, US decisionmakers did not choose between the options offered by the parties, as the organizational process model assumes. In fact, on 20 October, among the options of "blockade" and "air strikes", Kennedy finally integrated and proposed a new compromise, namely "...go ahead with the blockade and to take actions (airstrikes) necessary ... " [4]. Hence, Allison's model of the organizational process is not appropriate for analyzing this crisis.

On the other hand, the bureaucratic politics model is also not appropriate to interpret the course of the Cuban missile crisis. This model sees events in diplomacy as a composite of bargains between political players in government, based on interests and objectives [3]. But in urgent crisis scenarios, it is difficult for decision-makers (except the top leaders) themselves to weigh the benefits of certain choices for individuals (or for a few interest groups) due to the irrational factors caused by time constraints and crises. In the US, the leadership during this crisis can be roughly divided into hawks who support the airstrike, and doves who demand to resolve the crisis by other means. However, some members in these two factions were actually shifting from one to the other. Robert Kennedy,

for example, has shifted from being hawkish to dovish [5]. Indeed, the members of the shifting factions are hardly likely to form a common interest in favor of some smaller group or individuals in a short period, which means that their considerations and choices are likely to be based more on the judgment of the facts and an analysis of the overall interests of the country. Thus, if President John F. Kennedy (JFK)'s choices are in the interests of the US, he will not have much resistance to reaching a consensus with the rest of the leadership. For USSR, Allison speculates that Khrushchev may have formed his own "executive committee" or his own advisory council to help him during the crisis like America. Nevertheless, there is no evidence of this from the Soviet side. The decision-making process of Khrushchev is, according to other scholars, more akin to personal decision-making. By doing a relevant investigation, Zhang found that the idea of deploying missiles, and the final decision was made by Khrushchev himself [6]. Therefore, to conclude, the bureaucratic politics model is also flawed in analyzing the Cuban missile crisis.

2.2. The Rational Actor Model

Similar to Allison, some scholars such as Cohen, Nathan and Voorhees have moved away from viewing the state as a rational single actor and instead examined the rational choices made by actors within the state, and have highlighted the rationality of certain individuals, such as Khrushchev and Kennedy in this crisis [7, 8, 9]. Accordingly, some of these scholars have wrongly attributed the peaceful end of the Cuban missile crisis to the rationality and calmness of decision-makers on one or both sides (especially the core decision-makers), while ignoring the existence of irrational emotional factors.

For the peaceful resolution of the crisis, the assumption of rational actors at the individual level is also inconsistent with historical facts. It must be acknowledged that some "rational decisions" did contribute to the peaceful resolution of the crisis. For instance, the rational decision from the soviet leadership on 27 October 1962 that "prohibited from using nuclear weapons ...without orders from Moscow" also prevented Cuban missile upgrades further to a large extent [10]. However, this only means that certain rational performance by political actors was important to end the crisis peacefully, which constituted only a necessary but not a sufficient condition for the peaceful ending. Besides, nor does it mean that actors remained rational throughout the course of the crisis. Indeed, even the assumption of rationality for a single individual level rather than the whole state still has severe flaws. Because this assumption is inherently flawed due to the fact that humans are not inherently rational like machines and are often influenced by emotional factors. Especially in crises, evidence shows that it is difficult for individuals to react rationally because of the enormous stress, as well as fear and anxiety factors. And it is more likely for them to behave irrationally [11]. For example, President Kennedy's discourse repeatedly showed anger and anxiety beyond reason during the crisis. On 16 October 1962, JFK showed anxiety in the face of the situation, repeatedly using the word "goddam" to describe the danger and mystery he met [12]. Furthermore, when JFK discovered that a U-2 reconnaissance plane had mistakenly entered the airspace of the Soviet Far East area, he expressed his anger at the American pilot in offensive and rude phrases again [13]. For the political actors in the USSR, the two letters written by Khrushchev on 14 October and 16 October, with very different tones and meanings, and the emotional expression of the statements in the letters, also testify to the fact that the individual decision-makers had emotional fluctuations in the management of this crisis and were not completely rational. Accordingly, as many studies have confirmed that these irrational factors can seriously influence the choices made by decision-makers in a crisis [14], the usefulness of the "rational" assumption in this crisis is greatly diminished. Therefore, even if certain rational factors did play a role at certain moments, the impact of irrational factors (including emotional factors) cannot be ignored. Thus it is improper to analyze the peaceful resolution of this crisis purely from the rational realm. Perhaps the assumption of rationality might be more suitable for other events, and

even more applicable to explain the origin of the Cuban missile crisis, which took place over a longer period of time (thereby people are more likely to adjust themselves and to be rational), but not the course during the crisis.

2.3. "Leader-Focused" Research and Psychological Analysis of Decision-Making

In recent years, research on the resolution of the Cuban missile crisis has focused more on "the psychological, emotional and decision-making analysis" of the top leaders--Khrushchev and Kennedy, in view of their important role in the crisis. For instance, Steinburg uses psychoanalysis to assess the impact of experiences of shame and humiliation on the decisions of leaders during the Cuban missile crisis. Haas attempts to use prospect theory to analyze and explain the risk-taking behavior of Khrushchev and Kennedy. However, the approaches of this research have some shortcomings. Furthermore, the role of the leaders seems to be overemphasized, which alone is not sufficient to explain the peaceful resolution of the Cuban missile crisis.

As Kennedy said, "The essence of the ultimate decision remains impenetrable to the observer often, indeed, to the decider himself " [12], the psychological decision-making of leaders is very complicated. Their psychological situation is influenced by numerous detailed factors, say, personal experience, information accessed, environmental factors, contingency, and the discourses of others. Due to the difficulty of considering the influence of all these factors, much current research is implemented by using one or two psychological approaches to analyze. Yet some seemingly minor but important roles in influencing the choices and psychological changes of leaders are often overlooked. From the perspective of fear, for instance, Bright argues that because the leaders of the U.S. and the USSR feared the crisis would get out of control, they took the opportunity to seek compromise timely and finally defuse the crisis [15]. Nevertheless, the seemingly unrelated event of the "Japanese attack on Pearl Harbor" also might affect Kennedy's decision-making in this crisis. Evidence shows that the choice of a direct "airstrike on Cuba" was so similar to the "Pearl Harbor attack". And the Japanese attack was considered despicable and immoral, which led the American leader to make the analogy that the airstrike sounded very much like a reverse "Pearl Harbor" [5]. Therefore, the moral burden placed on the attack may also have contributed to Kennedy's ultimate choice. Indeed, there exist many easily overlooked irrational detailed factors and contingency. Such as the impact of the book The Guns of August on JFK and the opera Boris Godunov in Bolshoi on Khrushchev based on the recency effect and anchor effect [16]. Once these factors are overlooked, the final conclusion of the research will be influenced greatly.

Furthermore, while leadership does contribute to a large extent to the peaceful resolution of crises, it is still impossible for them to completely control all conditions and thus avoid irrational variables on the battlefield. Firstly, the core leadership does not have a real-time view of what is happening on the frontline, and its receipt of information and convey of which requires multiple layers of transmission that are time-consuming and error-prone. One of the examples is that many American core decision-makers do not appear to be well aware of the deployment situation of Jupiter missiles in Turkey:

"Rusk: Also we have nuclear weapons nearby, in Turkey and places like that. Um...

JFK: How many weapons do we have in Turkey?

Taylor: We have Jupiter missiles?

Bundy: Yeah...We have how many?" [17]

Similarly, Khrushchev once thought that the four submarines sent to Cuba during the early stages of the Cuban crisis were nuclear-powered submarines that had better performance, but indeed they were all diesel-powered [18]. Secondly, soldiers on the front line may ignore these instructions and act on their own. For example, on October 27, an American U-2 plane was shot down by soviet frontline soldiers without any permission from senior leaders (including the core leadership of the USSR),

which nearly worsened the crisis [19]. Thirdly, in reality, there are some irrational factors that are completely out of the control of the leadership, say, some contingency and other certain unexpected situations, which will be described in more detail in the next part. Overall, the study of leader psychology and decision-making, while breaking away from the assumption of rationality and considering the influence of irrational factors on individuals, still needs to pay as much attention as possible to the influence of irrational factors including details and coincidences. Besides, the leader-focused approach cannot fully analyze the overall reasons for the nonviolent settlement of the Cuban missile crisis, more detailed variables and uncontrollable and irrational factors (coincidences & contingency) beyond the decision-making level should be further investigated.

3. Further Exploration of the Impact of Irrational Factors during the Crisis: the Soviet Submarine Incident

As mentioned before, the favorable development of some detailed irrational variables (contingencies, uncontrollable factors) really matters, especially some of which are beyond the control of the leadership (the decision-making level) has contributed significantly to preventing the escalation of the US-USSR conflict, thus hindering atomic warfare. The following part will further explore the influence of irrational factors using the case of some incidental acts of front-line soldiers committed during the Soviet 'submarine incident'.

The Soviet Union confidentially sent four diesel-powered Foxtrot-class submarines (B-4, B-36, B-59, B-130) to Cuba during the U.S. blockade in this crisis, each equipped with one nuclear torpedo [19,20].

Initially, the inconsistencies in the authorization for the use of nuclear torpedoes created significant uncertainty in the development of this incident. According to the recollections of Ryurik Ketov, Vice-Admiral Rassokha spoke of three scenarios in which nuclear weapons could be used. The first was in the case of a damaged submarine under attack. The second was when the submarine was attacked and forced to float up. The third was when ordered to do so by Moscow. At the same point, the Vice-Admiral said: "I suggest to you, commanders, that you use the nuclear weapons first." [18] Yet when the crew opened the package that could only be opened after boarding, the instructions inside read a contradictory directive: the use of nuclear weapons should be under the special command of the Soviet Minister of Defense [21].

Later, during the blockade, three Soviet submarines were spotted by US navy forces, and the B-59 submarine was in the most serious situation. When the American navy spotted this submarine, they tried to force B-59 to the surface by firing practice depth charges, but the sailors in the submarine believed they were under attack. Indeed, at that time, the mariners lost communication with Moscow and did not know whether the war had started. This submarine was seriously broken with temperatures up to "45 to 50°C" and oxygen deficiency and many soldiers "were falling like dominoes". Under this circumstance, the captain "became furious" and considered using the nucleartorpedo --" We will die, but we will sink them all...we will not disgrace our Navy! ", but he finally forwent doing so [22].

Indeed, without knowing whether war would break out, the aim of the other side and whether Moscow would authorize the use of nuclear weapons at such a moment, the choice to launch or not to launch a nuclear torpedo presents a very wide range of possibilities.

By utilizing counterfactuals, the Figure below will sort out their roughly overall choices and the results from a completely "rational" perspective. (Use the individual "rational actor" Model) [23].

	The USA and the USSR were at war	
	With Authorisation	Without Authorisation
Launching torpedoes	Increasing the probability of escape from encirclement, but the use of nuclear weapons may be morally reprehensible	Increase the probability of getting out of the encirclement, but may be punished by the Soviets for disobeying military orders
Not Launching torpedoes	May be sunk, killed, or even captured; disobey military orders The USA and the	Could be sunk, killed or even captured (a disgrace to the USSR) USSR were not at war
	With Authorisation	Without Authorisation
Launching torpedoes	Out of the encirclement, but may be seen as directly responsible for provoking nuclear war	Out of the encirclement, disobeys military orders and is directly responsible for starting a nuclear war
Not Launching torpedoes	May be captured (becoming a disgrace to the Navy), foolish choices, disobeying military orders	May be captured (became a disgrace to the Navy)

Figure 1: The Possible Choices and Corresponding Results of B-59 Submarine Crew.

As it can be seen, the crew of B-59 was faced with numerous choices and possible results (expected scenarios). And the possibilities of each scenario are not known, so even from a completely "rational" perspective, no choice can be made. Even worse, with time emergency, terrible milieu condition and even severe physical discomfort, it was more impracticable for the captain to formulate plans and make rational choices in such a complex situation. Therefore, the submarine commanders should have made the final choice based on intuition or fortune.

Luckily, it was this key choice based on irrational factors (intuitive and luck) made by frontline soldiers that prevented the B-59 from firing a nuclear torpedo, which directly inhibited the escalation of the US-USSR conflict. In fact, at the time US ships were also fitted with nuclear depth charges [18]. And even after the B-59 abandoned the nuclear attack and came to the surface, aircraft and helicopters from US carriers chose to fly over the submarine and attacked it with their cannons. Once the Soviet submarine used its nuclear torpedoes, the United States was bound to counterattack, possibly even with a nuclear strike [24]. In this regard, the choice of the B-59 crew prevented the Cuban Missile Crisis from turning into a real nuclear war (at least on a local scale).

In retrospect, the choice of an uncertain presence of a soldier on the front line could have determined whether the entire Cuban crisis could have been resolved peacefully, whereas the influence of the leader was negligible in the face of this.

By and large, these irrational factors beyond the control of the leadership, including the intuitive choices of certain seemingly unimportant individuals and objective factors, contributed to the peaceful resolution of the Cuban missile crisis to a large extent and even became indispensable. Taken together with the irrational factors (details and chance) that influenced the decisions of the leaders, as well as the irrational factors that decision-makers have as human beings themselves, the fact that the Cuban missile crisis did not turn into a nuclear war and ended peacefully may have been greatly dependent on the luck of all humanity.

For this reason, the Cuban Missile Crisis may have been closer to nuclear warfare than we think, and the ending of the Cuban Missile Crisis could have been much different if some small change in

irrational factors had occurred, such as if B-59 had chosen to launch a nuclear torpedo or Khrushchev had watched an opera during the Cuban Missile Crisis about *Jus ad bellem* instead of *Boris Godunov*. Thus, well-developed irrational factors, by chance or even fortune, also constituted the necessary conditions for a peaceful end to the Cuban missile crisis.

4. Conclusion

Based on literature analysis and case study, this paper evaluates research methods related to the Cuban missile crisis and further explores the vital role of small irrational factors in the peaceful ending of this crisis through the instance of the Soviet submarine incident. The results demonstrate certain shortcomings and flaws exist in Alison's model of foreign policy-making, the rational actor model, 'leader-centered' research and the research approach of psychological analysis of decision-making. Furthermore, the smooth development of irrational factors was very decisive in bringing the crisis to a peaceful end. In this respect, the Cuban missile crisis may have been closer to nuclear war than we thought. In future studies on the Cuban missile crisis, scholars should continue to break away from the assumptions of rational actors (whether states or individuals), while paying more attention to the details and irrational factors.

References

- [1] FitzGerald, R. (2007) Historians and the Cuban Missile Crisis: the Evidence–Interpretation Relationship as seen through Differing Interpretations of the Crisis Settlement. Irish studies in international affairs. [Online] 18 (1), 191–203.
- [2] Allison, G. (1971) Essence of Decision: Explaining the Cuban Missile Crisis, HarperCollins, first edition.
- [3] Zelikow, P. and Allison, G. (1999) Essence of decision: explaining the Cuban Missile Crisis. New York: Longman.
 [4] National Security Council (NSC). (1962) Minutes of the 505th Meeting of the National Security Council. [Online]
- [4] National Security Council (NSC). (1902) Minutes of the 505th Meeting of the National Security Council. Available at https://microsites.jfklibrary.org/cmc/oct20/doc1.html [Accessed 19 November 2021]
- [5] Tierney, D. (2007) Pearl Harbor in Reverse: Moral Analogies in the Cuban Missile Crisis. Journal of cold war studies. [Online] 9 (3), 49–77.
- [6] Zhang, S. (2012) An Analysis of Khrushchev's motivation and Decision to deploy nuclear missiles in Cuba -- written on the occasion of the 50th anniversary of the outbreak of the Cuban Missile Crisis. Russian Central Asian and Eastern European Studies (06),57-70+98.
- [7] Cohen, A. (2012) A crisis of character; Cuban Missile Crisis ended peacefully because two leaders resisted hardline pressure. Toronto star. 25–.
- [8] Nathan, J. A. (2012) The Cuban Missile Crisis Revisited: Why It Matters Who Blinked. Foreign affairs (New York, N.Y.). 91 (6), pp.163–165
- [9] Voorhees, T. (2020). The Silent Guns of Two Octobers: Kennedy and Khrushchev Play the Double Game. University of Michigan Press.
- [10] Malinovsky, R (1962) Telegram from TROSTNIK (Soviet Defense Minister Rodion Malinovsky) to PAVLOV (General Isa Pliev), October 27, 1962, History and Public Policy Program Digital Archive [Online], Available at https://digitalarchive.wilsoncenter.org/document/117326>.
- [11] Kringlen, E. (1985) The myth of rationality in situations of crisis. Medicine and war, 1(3), 187-194.
- [12] FRUS (1962) Off the Record Meeting on Cuba the White House Washington", October 16, 1962, 6:30-7:55 p.m., [online], Available at<https://microsites.jfklibrary.org/cmc/oct16/doc3.html>.
- [13] John F. Kennedy Presidential Library and Museum (1962) "The Cuban Missile Crisis: An Eyewitness Perspective" [online], Available at<https://www.jfklibrary.org/events-and-awards/forums/past-forums/transcripts/the-cubanmissile-crisis-an-eyewitness-perspective>.
- [14] Liu, C. (2017) Psychological Transmission and Crisis Decision-making: A Study based on the Cuban Missile Crisis, Ph. D. Dissertation, China Foreign Affairs University, 2017.
- [15] Blight, J. (1992) The shattered crystal ball: Fear and learning in the Cuban Missile Crisis. Rowman & Littlefield.
- [16] Winter, D. G. (2013) Khrushchev Visits the Bolshoi: [More Than] a Footnote to the Cuban Missile Crisis. Peace and conflict. [Online] 19 (3), 222–239.
- [17] National Security Council (NSC). President Kennedy's appointments, October 16, 1962[online], Available at<https://microsites.jfklibrary.org/cmc/oct16/doc2.html >.

- [18] Savranskaya, S. (2005) New Sources on the Role of Soviet Submarines in the Cuban Missile Crisis. Journal of strategic studies. [Online] 28 (2), 233–259.
- [19] Norris, R. and Kristensen, H. (2012) The Cuban Missile Crisis: A nuclear order of battle, October and November 1962. Bulletin of the atomic scientists. [Online] 68 (6), 85–91.
- [20] Natioanl Security Archive. (2002) The submarines of October: U.S. and Soviet Naval Encounters During the Cuban Missile Crisis.", National Security Archive Electronic Briefing Book. No. 75. [Online] Available at https://nsarchive2.gwu.edu/NSAEBB/NSAEBB75/>.
- [21] Ketov, R. A. (2005) The Cuban Missile Crisis as Seen Through a Periscope. Journal of strategic studies. [Online] 28 (2), 217–231.
- [22] Mozgovoi, A. (Translated by Svetlana Savranskaya) (2002) Recollections of Vadim Orlov (USSR Submarine B-59) We Will Sink Them All, But We Will Not Disgrace Our Navy. The Cuban Samba of the Quartet of Foxtrots: Soviet Submarines in the Caribbean Crisis of 1962, The National Security Archive. Available at https://nsarchive2.gwu.edu/NSAEBB/NSAEBB75/asw-II-16.pdf>.
- [23] De Mesquita, B. (2010) Foreign policy analysis and rational choice models. Oxford Research Encyclopedia of International Studies.
- [24] Scott, L. (2022) The essential inevitability of worrying about the bomb: new writing on the Cuban missile crisis. Intelligence & National Security. [Online] 37 (3), 438–463.