

# Alternate History: An Additional Source for Anticipating and Managing Future Strategic and Operational Problems

A Monograph

by

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Fort Leavenworth, KS

2020

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<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved</i> <i>OMB No. 0704-0188</i>		
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<b>1. REPORT DATE (DD-MM-YYYY)</b> 14-06-2019		<b>2. REPORT TYPE</b> Master's Thesis		<b>3. DATES COVERED (From - To)</b> JUN 2019 – MAY 2020	
<b>4. TITLE AND SUBTITLE</b>  Alternate History: An Additional Source for Anticipating and Managing Future Strategic and Operational Problems			<b>5a. CONTRACT NUMBER</b>		
			<b>5b. GRANT NUMBER</b>		
			<b>5c. PROGRAM ELEMENT NUMBER</b>		
<b>6. AUTHOR(S)</b>  Major Brianne Petersen			<b>5d. PROJECT NUMBER</b>		
			<b>5e. TASK NUMBER</b>		
			<b>5f. WORK UNIT NUMBER</b>		
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301			<b>8. PERFORMING ORG REPORT NUMBER</b>		
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> Advanced Military Studies Program			<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>		
			<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>		
<b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for Public Release; Distribution is Unlimited					
<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b> In the US military, history provides the foundation for understanding war. History, however, presents several problems, including the inability to fully separate fact from the historians' perspective and the inability to test historical hypotheses. To overcome these problems, planners can use counterfactuals to examine alternative, unrealized futures. However, the US military's use of counterfactuals has stagnated over time and have not adopted more rigorous frameworks to develop and analyze counterfactuals. This monograph examines the alternate history form of counterfactuals and proposes five criteria on which to evaluate them. Alternate history looks longer and deeper into unrealized futures, thus expanding planners' cognitive models. The case study includes the three novels in Harry Turtledove's alternate history, <i>The Hot War Trilogy</i> . In this trilogy, the departure from the original timeline begins with a failure of the withdrawal of US forces at the Chosin Reservoir during the Korean War. This failure results in President Harry S. Truman's counterfactual decision to use the atomic bomb against the Chinese, and the subsequent atomic war with the USSR. The trilogy examines the political, military, and societal repercussions of the US atomic attack. This monograph proposes that military planners leverage alternate history as a supplement to 'normal' history for expanding their experience to better understand war, analyze various strategic contexts, and explore decision-making.					
<b>15. SUBJECT TERMS</b> Counterfactualism, counterfactuals, alternate history, alternative history, what if history, fiction, Korean War, USSR, China, Harry S. Truman, atomic bomb, nuclear war, WWII, Harry Turtledove, The Hot War Trilogy					
<b>16. SECURITY CLASSIFICATION OF:</b>			<b>17. LIMITATION OF ABSTRACT</b>	<b>18. NUMBER OF PAGES</b>	<b>19a. NAME OF RESPONSIBLE PERSON</b>
<b>a. REPORT</b> (U)	<b>b. ABSTRACT</b> (U)	<b>c. THIS PAGE</b> (U)	(U)	59	<b>19b. PHONE NUMBER (include area code)</b>

## Monograph Approval Page

Name of Candidate: Maj Brianne Petersen

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Future Strategic and Operational Problems

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## Abstract

Alternate History: An Additional Source for Anticipating and Managing Future Strategic and Operational Problems, by Maj Brianne Petersen, 59 pages.

In the US military, history provides the foundation for understanding war. History, however, presents several problems, including the inability to fully separate fact from the historians' perspective and the inability to test historical hypotheses. To overcome these problems, planners can use counterfactuals to examine alternative, unrealized futures. However, the US military's use of counterfactuals has stagnated over time and have not adopted more rigorous frameworks to develop and analyze counterfactuals. This monograph examines the alternate history form of counterfactuals and proposes five criteria on which to evaluate them. Alternate history looks longer and deeper into unrealized futures, thus expanding planners' cognitive models. The case study includes the three novels in Harry Turtledove's alternate history, *The Hot War Trilogy*. In this trilogy, the departure from the original timeline begins with a failure of the withdrawal of US forces at the Chosin Reservoir during the Korean War. This failure results in President Harry S. Truman's counterfactual decision to use the atomic bomb against the Chinese, and the subsequent atomic war with the USSR. The trilogy examines the political, military, and societal repercussions of the US atomic attack. This monograph proposes that military planners leverage alternate history as a supplement to 'normal' history for expanding their experience to better understand war, analyze various strategic contexts, and explore decision-making.

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## Acknowledgments

First, I want to thank Dr. Matthew S. Muehlbauer who helped turn my love of fiction into something the US Army would accept as a monograph. Second, my thanks to Dr. James Sterrett and Mike Dunn, who taught me the basics of wargaming through fun Friday afternoon gaming sessions. Next, I want to thank my seminar classmates in the Academic Year 2020 School of Advanced Military Studies, who ventured headlong with me into the realm of counterfactuals.

## Abbreviations

ATL	Alternate Timeline
NATO	North Atlantic Treaty Organization
OTL	Original Timeline
RAF	Royal Air Force
UN	United Nations
USSR	United Soviet Socialist Republic

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## Introduction

History is a cruel tutor. It hammers a lesson into our minds so sternly that no one dares to mention the many exceptions that must be allowed. Yet as soon as we have learned that lesson – and ignored its exceptions – history punishes us for not following another rule that posits the very opposite.

—Fred Charles Ikle, *Every War Must End*

US military officers and scholars are expected to have a solid foundation in military history and apply the lessons of history to develop theories and doctrine that guide planning.<sup>1</sup> US military officers and scholars analyze the employment of military forces in historical campaigns and battles to derive theories that best achieve national objectives. These theories are the fundamental principles upon which US joint doctrine is based. In other words, military officers and scholars convert particular knowledge of a historical event by distilling it to a general knowledge, which then is deduced to create common behaviors codified by military doctrine.

Studying history to learn how to be successful in war has been an appealing and durable notion since Enlightenment-era military theorists sought to find the scientific formula for strategy.<sup>2</sup> This task is not as straightforward as it seems. To derive theories from historical campaigns and battles, one must treat history as fact rather than competing versions of the truth, where “facts are seldom fully known and the underlying motives even less so.”<sup>3</sup> Historian Christopher Prendergast labels this type of history as ‘normal’ history, i.e., the literature of events that happened.<sup>4</sup> Historian John Lewis Gaddis argued all history is written through the lens of the

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<sup>1</sup> US Department of Defense, US Joint Staff, Joint Publication 1-0, *Doctrine for the Armed Forces of the United States* (Washington, DC: Government Printing Office, 2017), B-1.

<sup>2</sup> John Shy, “Jomini,” in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, edited by Peter Paret, 143–85 (Princeton, NJ: Princeton University Press, 1986), 144-146.

<sup>3</sup> John Lewis Gaddis, *The Landscape of History* (New York: Oxford University Press, 2002), 10; Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 156.

<sup>4</sup> Christopher Prendergast, *Counterfactuals: Paths of the Might Have Been*, (London: Bloomsbury Academic, 2019), 3; Robert Cowley, *What If? The World’s Foremost Military Historians Imagine What Might Have Been: Essays* (New York City, NY: Berkley Books, 2000), xi.

author: the historian uses selectivity, simultaneity, and various scales of analysis to interpret the past to understand the present and manage the future, in addition to the problem of record survival.<sup>5</sup> Thus, all history is revisionist history.

Furthermore, history cannot be treated as a science. It is impossible to test history using a control group, as “history does not allow for exact comparisons between its always highly unusual events, episodes, and personnel.”<sup>6</sup> History seldom provides absolute proof as to why a particular tactic or objective was successful at a specific time, as US Air Force wargaming expert Matthew Caffrey argued in *On Wargaming*.<sup>7</sup> He wrote that he is “unaware of a single case where all elements of a fight remained the same except for one single element that could therefore be said to be *the* cause of a different outcome.”<sup>8</sup> Gaddis echoed this opinion in *The Landscape of History* when he wrote that there are interdependent and dependent variables that dynamically react in predictable and unpredictable ways.<sup>9</sup> Given the many problems with history, how, then, can US military officers and scholars ensure the correct historical lessons have been learned or that the right theories and principles have influenced doctrine?

Counterfactuals, specifically the alternate history form, offer a means to analyze decisions, causation, and variables within a strategic context. Counterfactualism, therefore, is a useful process for historians, policymakers, and military officers and scholars. For the historian, challenging historical preconceptions and determining cause and effect can lead to a new understanding of the past.<sup>10</sup> For the policymaker, developing a more complete or accurate

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<sup>5</sup> Gaddis, *The Landscape of History*, 10, 22-26, 41.

<sup>6</sup> Catherine Gallagher, *Telling it Like it Wasn't* (Chicago, IL: Chicago University Press, 2018), 7.

<sup>7</sup> Matthew B. Caffrey Jr., *On Wargaming: How Wargames Have Shaped History and How They May Shape the Future*, (Newport, RI: Naval War College Press, 2019), 278.

<sup>8</sup> Ibid.

<sup>9</sup> Gaddis, *The Landscape of History*, 73-78.

<sup>10</sup> Simon T. Kaye, “Challenging Certainty: The Utility and History of Counterfactualism,” *History and Theory* 49 No 1, 38-57 (Middletown, CT: Wiley for Wesleyan University, 2010), 38, 57.

understanding of the past can ultimately lead to the improved application of historical cases to develop policy.<sup>11</sup>

The purpose of this study is to explore the potential benefits alternate histories offer military planners. Alternate histories, a type of counterfactualism, can assist in how we understand the world and the conditions, variables, and decisions made that led to victory or defeat, to escalation or lessening of tensions, to something or nothing. Alternate histories may better enable the military planner to gain knowledge of the past for the sake of future planning.<sup>12</sup>

This study is organized into four sections. The first section defines counterfactual terms, describes the history and current use of counterfactuals by the US military, and explores the alternate history form of the counterfactual. Section two examines the case study of *The Hot War Trilogy*, an alternate history focused on the use of atomic weapons in the Korean War. Section three analyzes the case study. Finally, section four offers recommendations to the US military for adopting alternate histories to supplement ‘normal’ history to broaden planners’ experience and help in understanding the past to manage future strategic and operational problems.

## Counterfactualism

The term ‘counterfactual’ is not common military parlance; it is a term used in academia within the disciplines of philosophy, history, social sciences, economics, linguistics, jurisprudence, cosmology, biology, and cognitive and behavioral psychology.<sup>13</sup> A definition of terms, exploration of uses, and a demonstration of the value of counterfactuals will aid military officers’ and scholars’ understanding of counterfactualism.

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<sup>11</sup> Gallagher, *Telling it Like it Wasn't*, 5; Ronald J. Granieri, “Review: Telling It like It Isn't? Alternate History and International History,” in *the International History Review* 29, no 2, 338-348 (June 2007), 338, 346-348.

<sup>12</sup> Gaddis, *The Landscape of History*, 1, 5.

<sup>13</sup> Prendergast, *Counterfactuals*, 2.

Counterfactuals are counter to facts. In other words, counterfactuals are not the opposite of facts, which in today's vernacular are alternative facts or lies; rather, they are 'instead of's representing what factually might have been.<sup>14</sup> In more precise terms, counterfactuals are "subjective conditionals in which the antecedent is known to be false."<sup>15</sup> The most straightforward way to describe counterfactuals is that a counterfactual is a thought experiment akin to a hypothetical that comes to life in the phrase "what if." What if I had not missed my alarm this morning? I would have missed hitting the deer with my car on the way to work. What if I had not met my significant other? I might live a solitary existence as an old maid, preferring to socialize with twelve cats. Or I might meet someone new.

While these counterfactual scenarios may seem trite when compared to decisions made in war, they demonstrate the basic cognitive theory. English professor Catherine Gallagher asserted that wishing the course of history had gone differently is as old as history itself.<sup>16</sup> Historian Niall Ferguson argues we cannot resist imagining alternative scenarios.<sup>17</sup> The two trite examples above demonstrate both the backward- and forward-looking mode of counterfactuals. The backward-looking counterfactual, or causal look, indicated by perfect tense verbs, highlights how something that happened might not have, and therefore, "we arrive at a better explanation of what, as a matter of historical fact, did occur."<sup>18</sup> The forward-looking mode, indicated by the imperfect tense, looks into an unknown future.

In *Thinking, Fast and Slow*, psychologist Daniel Kahneman explained the human mind operates most quickly and simply by creating a model of the world from past experiences to

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<sup>14</sup> Richard Ned Lebow, *Forbidden Fruit: Counterfactuals and International Relations* (Princeton, NJ: Princeton University Press, 2010), 30; Prendergast, *Counterfactuals*, 53-54.

<sup>15</sup> Lebow, *Forbidden Fruit*, 30.

<sup>16</sup> Gallagher, *Telling It Like It Wasn't*, 50.

<sup>17</sup> Niall Ferguson, *Virtual History: Alternatives and Counterfactuals* (London, UK: Penguin Books Ltd, 2011), 2.

<sup>18</sup> Prendergast, *Counterfactuals*, 12-13.

interpret present events and future expectations.<sup>19</sup> The mind absorbs information, cuts out irrelevant data, and abstracts patterns to create a model.<sup>20</sup> The mind imagines “what if” scenarios and runs through various possibilities to improve the model without experiencing everything directly. A vital part of the way the brain learns is by imagining alternate scenarios, which offer a framework to analyze future possibilities by considering the relationship between cause and effect.<sup>21</sup> This type of counterfactual is most often found in stressful, urgent, or perplexing conditions like high politics, diplomacy, and warfare.<sup>22</sup>

Essentially, counterfactuals are a tool to help make sense of the world by uncovering possible causes and effects or futures. They are used in circumstances that cannot guarantee a definitive answer due to constraints in collecting, evaluating, and testing observable data. History is a field of study that is rife with research constraints the counterfactual approach attempts to overcome. A historian rarely observes the data firsthand; rather, she relies on primary source material. A historian uses tools of selection and scale, therefore introduces her and her sources’ subjectivity into her field of study.<sup>23</sup> Furthermore, a historian cannot replicate the historical context and circumstances, thus cannot conduct tests to reproduce the outcome or observe alternate outcomes. In effect, there is no scientific method of determining cause-and-effect in the field of history. The counterfactual approach in history refers to unobserved potential outcomes, and therefore, offers a framework to compare possible historical outcomes that would result from alternative causes.<sup>24</sup>

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<sup>19</sup> Daniel Kahneman, *Thinking, Fast and Slow* (New York City, NY: Farrar, Straus and Giroux, 2011), 20-21, 43, 71.

<sup>20</sup> Raph Koster, *Theory of Fun for Game Design* (Sebastopol, CA: OReilly Media, 2014), 18.

<sup>21</sup> Ferguson, *Virtual History*, 2.

<sup>22</sup> Prendergast, *Counterfactuals*, 13-14.

<sup>23</sup> Gaddis, *The Landscape of History*, 22-26.

<sup>24</sup> Stephen L. Morgan and Christopher Winship, *Counterfactuals and Causal Inference: Methods and Principles for Social Research* (New York City, NY: Cambridge University Press, 2015), 37.

Counterfactual history is imagined possible, but unrealized alternative consequences.<sup>25</sup> Gallagher explained the counterfactual-historical hypothesis as “an explicit or implicit past-tense, hypothetical, conditional conjecture pursued when the antecedent condition is known to be contrary to the fact.”<sup>26</sup> Historian Richard J. Evans put it more simply: historical counterfactuals are “alternate versions of the past in which one alteration in the timeline leads to a different outcome from the one we know actually occurred.”<sup>27</sup> Historical counterfactuals offer options to look into the relationship between causes and their associated effects more deeply.<sup>28</sup>

However, counterfactuals are not fully accepted as legitimate analytical tools. Historians, in particular, have rejected counterfactuals. The best-known critic of counterfactuals, historian E. H. Carr, wrote in 1961 that counterfactual history is a mere parlor game that does not have anything to do with history.<sup>29</sup> Worse still is the claim by British historian E. P. Thompson that counterfactual history is “Geschichtswissenschloppf,” translated into “unhistorical shit.”<sup>30</sup> These views are understandable given the lack of rigor in early counterfactualism. The two best known early historical counterfactuals demonstrate the merits of Carr’s and Thompson’s claims. The first example, known as Cleopatra’s nose theory, was written by French mathematician Blaise Pascal in 1699. He wrote, “Cleopatra’s nose, had it been shorter, the whole face of the world would have been changed,” suggesting the beauty of one woman caused the end of the Roman Republic and the beginning of the Roman Empire.<sup>31</sup> The second example, an English proverb from the Middle Ages, suggests, “For want of a nail the shoe is lost, for want of a shoe the horse is lost, for want

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<sup>25</sup> Gaddis, *The Landscape of History*, 1, 5.

<sup>26</sup> Gallagher, *Telling It Like It Wasn’t*, 2.

<sup>27</sup> Richard J. Evans, *Altered Pasts: Counterfactuals in History* (London, UK: Little, Brown, 2014), xi.

<sup>28</sup> Gallagher, *Telling It Like It Wasn’t*, 2.

<sup>29</sup> Evans, *Altered Pasts*, 6; Ferguson, *Virtual History*, 4; Prendergast, *Counterfactuals*, 38; Kaye, “Challenging Certainty,” 43-44.

<sup>30</sup> Ferguson, *Virtual History*, 4; Prendergast, *Counterfactuals*, 38.

<sup>31</sup> Blaise Pascal, *Pascal’s Pensées* (New York City, NY: E.P. Dutton & Co., Inc, 1958), 162.

of a horse the rider is lost.”<sup>32</sup> Modern writers expanded the proverb to include that once the rider is lost, the battle is lost, and the failure of the battle led to the loss of the kingdom.<sup>33</sup> These two historical counterfactuals demonstrate implausibility, lack sufficient details, contain logical fallacies, and omit any consideration of second-order counterfactuals.

Criticism of similar counterfactuals over the past few decades has led to the development of more rigorous methodologies for constructing them.<sup>34</sup> Economic or econometric history, in particular, has contributed to the rigor of counterfactual speculation. Economic historian Robert Fogel changed the narrative of counterfactuals from “might-have-been” speculation to statistical probabilities of causes and effects that challenge historical assumptions.<sup>35</sup> Additionally, since the 1990s, counterfactual publications in the United States and Europe have increased exponentially, renewing and spurring new interest in the genre.<sup>36</sup> Finally, the rise of “postmodernism restored a belief in the subjectivity of the historian as it undermined the scientific search for objectivity,” thereby blurring the lines between factual, counterfactual, and fiction.<sup>37</sup> These conditions energized the serious development of counterfactual history.

Analyzing counterfactuals used in alternate history is the basis for this monograph. The methodology proposed consists of five criteria derived from several counterfactual authors and theorists. These are plausibility, sufficiency, consistency or co-tenability, conjunction fallacy avoidance, and the consideration of second-order counterfactuals. Plausibility synthesizes the ideas of Evans, Prendergast, historian Niall Ferguson, and political scientist Richard N. Lebow. The criterion of sufficiency comes from Evans, Ferguson, and the author’s own experience in

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<sup>32</sup> John Ray, *A Collection of English Proverbs* (Cambridge, UK: University of Cambridge, 1678), 27.

<sup>33</sup> James Baldwin, *Fifty Famous People: A Book of Short Stories* (Syracuse, NY: American Book Company, 1912), 51-54.

<sup>34</sup> Evans, *Altered Pasts*, 37-38.

<sup>35</sup> *Ibid.*, 37-38.

<sup>36</sup> *Ibid.*, 39-41.

<sup>37</sup> *Ibid.*, 42.

military planning. The third is a combination of several criteria proposed by Lebow in *Forbidden Fruit: Counterfactuals and International Relations*. The fourth and fifth are as written from the same book.

The overarching criterion of plausibility is related to all other criteria. Similar to imagining alternative scenarios, plausibility is vital to cognition. Organizational theorist Karl E. Weick argued that “stories tend to be plausible when they tap into an ongoing sense of current climate, are consistent with other data, facilitate ongoing projects, reduce equivocality, provide an aura of accuracy, and offer a potentially exciting future.”<sup>38</sup> Limiting counterfactuals by plausibility is a practical limitation; otherwise, there would be an infinite number of alternatives to consider.

Prendergast narrows the plausible for counterfactual history into the “thinkable,” the “thought,” and the “declared.”<sup>39</sup> The “thinkable” is what could have been thought of at the time, e.g., Napoleon could not have considered using stealth bombers, as they had not yet been invented. The “thinkable” is further constrained by what the actor could have done with those thoughts. Napoleon equally could not have thought of sending 1,000 divisions against the Russians, as he did not have 1,000 divisions in his army. Therefore, the “thinkable” is “steadied by a corresponding sense of the ‘doable.’”<sup>40</sup> Next, the “thought” is subjective, as memoirs may be inaccurate.<sup>41</sup> Memoirs are often written long after specific events when immediate or intermediate effects of his decisions have been experienced and likely colored his memory; therefore, victim to the actor’s own revisionist history. Hindsight may be portrayed as insight or foresight. Lebow maintained the certainty of hindsight is deeply rooted and difficult to eliminate

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<sup>38</sup> Karl E. Weick, Kathleen M. Sutcliffe, and David Obstfeld, “Organizing and the Process of Sensemaking,” *Organization Science* 16 (July-August 2005), 415.

<sup>39</sup> Prendergast, *Counterfactuals*, 14-15.

<sup>40</sup> *Ibid.*, 15.

<sup>41</sup> *Ibid.*



entirely.<sup>42</sup> Historian Margaret MacMillan argued we do not always remember accurately, nor carved in stone; instead, they are not only selective but malleable.<sup>43</sup> Finally, the “declared” are found in contemporaneous correspondence and newspapers, as well as military plans and orders.

Historian Niall Ferguson echoed the plausibility requirement but limited it to Prendergast’s “declared” category. He argued the number and variety of possible alternatives are not infinite; rather, one must only consider possible alternatives that contemporaries themselves actually considered as proven in historical records, i.e., declared.<sup>44</sup> However, both Evans and Lebow reasoned omitting the “thinkable” creates a problem by ruling out factors like impulsive behavior, accidents, unanticipated errors, other contingencies grounded in the human condition, acts of nature, or the confluence of independent chains of causation, the very contingencies counterfactuals can assist in identifying.<sup>45</sup> The “thinkable,” “thought,” and “declared” constraint on plausibility ensures counterfactuals remain in the domain of history and outside science fiction. While science fiction can be used like counterfactuals to introduce new ideas, lessen political or other bias, and examine assumptions, it is beyond the scope of this paper to demonstrate such. Lebow argued, “as a general rule, the fewer and more trivial the changes we introduce in history, the fewer the steps linking them to the hypothesized consequent, and the less temporal distance between antecedent and consequent, the more plausible the counterfactual becomes.”<sup>46</sup>

The second criterion for counterfactual usefulness to the military planner and scholar is sufficiency. Counterfactual histories must be composed of well-researched details taken from

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<sup>42</sup> Lebow, *Forbidden Fruit*, 38.

<sup>43</sup> Margaret MacMillan, *Dangerous Games: The Uses and Abuses of History* (New York City, NY: Modern Library, 2010), 45.

<sup>44</sup> Ferguson, *Virtual History*, 85-87; Evans, *Altered Pasts*, 67.

<sup>45</sup> Evans, *Altered Pasts*, 67-68; Lebow, *Forbidden Fruit*, 49.

<sup>46</sup> Lebow, *Forbidden Fruit*, 48.

‘normal’ history.<sup>47</sup> Not only does sufficiency contribute to plausibility, but ‘normal’ historical details provide a known starting place from which to understand the myriad of contextual events and conditions that precede the counterfactual.<sup>48</sup> Much less time will be devoted to learning the scenario, thereby permitting more time for critical and creative thinking.

The third criterion is consistency or co-tenability. Counterfactuals involve a much more complex argument than the “what if” statement implies. Lebow proposed separate criteria for historical, logical, and theoretical consistency, but the primary concept behind each is that the argument must hold together. Historical consistency ensures actors and environments remain as plausible as possible in the alternate world.<sup>49</sup> Logical consistency is characterized by sound reasoning connecting the antecedent and the consequent.<sup>50</sup> Theoretical consistency gives the reader insight into established assumptions on which the argument may be anchored, i.e., the author’s use of social science theories must be explicit to prime the reader to unstated assumptions.<sup>51</sup> Finally, co-tenability implies the antecedent does not undercut any of the principles linking it to the consequent, and any enabling counterfactuals, or additional counterfactuals that make the primary counterfactual possible, do not undercut the antecedent.<sup>52</sup> Simply put, the counterfactual argument is capable of being defended because it does not contradict itself.

The fourth criterion is conjunction fallacy avoidance. A conjunction is the simultaneous application of two or more counterfactuals to create the alternative. Mathematically, “the probability of a consequent is the multiple of the probability of each counterfactual step linking it

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<sup>47</sup> Evans, *Altered Pasts*, 23.

<sup>48</sup> Evans, *Altered Pasts*, 23.

<sup>49</sup> Lebow, *Forbidden Fruit*, 55.

<sup>50</sup> *Ibid.*, 54-55.

<sup>51</sup> *Ibid.*, 56.

<sup>52</sup> *Ibid.*, 54-55.

to the antecedent,” meaning that any compound counterfactual has a lower probability than a simple counterfactual.<sup>53</sup> One must consider the probability of the consequent to understand this formula. The conjunction fallacy gets to the fact that ‘normal’ history is already complex, interconnected, and contingent; combining multiple counterfactuals simultaneously further complicates analyzing conditions, variables, and decisions. Additionally, counterfactual conjunctions work against the plausibility criterion. Following this principle allows the construction of scenarios that avoid the concurrent combination of counterfactuals while recognizing that one change in the past may require other changes to make the primary counterfactual possible, as considered in the consistency criterion.<sup>54</sup>

Finally, the fifth criterion is a consideration of second-order counterfactuals, especially those that result in a return to ‘normal’ history, a common plot device authors use to conclude a story. A change in the past is almost certain to generate changes in addition to the expected consequent.<sup>55</sup> For example, the antecedent may produce the desired consequent initially, but the interaction of the initial counterfactual with subsequent or enabling counterfactuals may return history to the ‘normal’ course of events. It would be an exercise in futility to identify and analyze *all* potential second-order counterfactuals; however, attention should be paid to identify the most likely course or courses of action that would negate the primary consequent. Lebow reasoned a good counterfactual must explicitly consider what else is expected to change, within reason, as well as consider the impact of those on the primary consequent.<sup>56</sup> An analysis of counterfactuals used to conclude a narrative must include identification of literary devices that may have less utility to the operational planner.

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<sup>53</sup> Lebow, *Forbidden Fruit*, 56.

<sup>54</sup> *Ibid.*

<sup>55</sup> *Ibid.*, 56-57.

<sup>56</sup> *Ibid.*

Two modes of historical counterfactuals meet these criteria and present planners the opportunity for more in-depth historical investigation. The first, categorized as “counterfactual histories,” is an analytical form that features counterfactual speculation that tends to indicate multiple unrealized possibilities. In contrast, the second, placed under the heading “alternate fiction,” is a narrative form that describes one continuous sequence of departures from the historical record.<sup>57</sup> While military historians and scholars have used the first mode since the Enlightenment, the narrative form has not been given the same consideration. The next section will describe the military’s use of counterfactuals.

## The Military’s Use of Counterfactuals

Military theorists and historians have been using counterfactuals for over two centuries. The military uses both the backward- and forward-looking modes of counterfactuals to better understand past wars to better plan for future wars.<sup>58</sup> Caffrey reasoned that the military is morally compelled to conduct war at a lower cost in blood, time, and treasure.<sup>59</sup> However, because the military has been using counterfactualism for over 200 years, its mode of analysis has reached ‘success syndrome.’ Stanford professor Michael Arena suggested that an organization builds structures, procedures, and processes to replicate its success.<sup>60</sup> Such structural inertia has stifled the advancements in counterfactual inquiry other social sciences have been forced to develop.

Great military thinkers in the late eighteenth and early nineteenth centuries used counterfactuals to analyze history to gain a better knowledge from the past for the sake of future

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<sup>57</sup> Gallagher splits the narrative form into two separate forms: the first, “alternate history,” draws on the dramatis personae exclusively from the actual historical record; the second, “alternate-history novel” invents fictional characters to allow for the illusion of a more complete alternative reality. Both invent a long counterfactual narrative with a correspondingly divergent fictional world, and therefore this author treats them as one category.

<sup>58</sup> Gaddis, *The Landscape of History*, 1, 5.

<sup>59</sup> Caffrey, *On Wargaming*, v.

<sup>60</sup> Michael Arena, *Adaptive Space: How GM and Other Companies are Positively Disrupting Themselves and Transforming into Agile Organizations* (New York City, NY: McGraw-Hill Education, 2018), 109.

planning.<sup>61</sup> Gallagher posited that while counterfactuals were stifled in cultural and intellectual history, they flourished in military history because wars make for plausible, detailed, and engaging “what ifs.”<sup>62</sup> Wars are full of unpredictable turning points that meet the counterfactual need for multiple possibilities with widespread ramifications.<sup>63</sup> Enlightenment-era military historians and theorists used counterfactuals to close the gap between contextually-focused history and empiricism and reason. This critical military history typified Enlightenment thought in trying to make warfare scientific. Counterfactual frameworks allow the critical study of empirical historical data to identify which among numerous factors were decisive for victory or defeat of battles and wars.<sup>64</sup>

To identify the conditions, decisions, and interactions during battles that lead to either victory or failure, the hierarchical nature of armies facilitates tracing decisions back to individual commanders, which offers insight into perceived options, intended action, decisions, and actual conduct.<sup>65</sup> Furthermore, the memoirs, correspondence, and plans for both realized wars and never materialized contingencies kept by commanders and staffs permit plausible counterfactual histories to be based on Prendergast’s narrowed categories of the “declared,” and if recorded in memoirs, the “thought.”<sup>66</sup> In identifying these factors, one could learn how to fight wars more effectively; therefore, military historians formulated principles of warfare based on the causes and effects illuminated in their counterfactual analysis.<sup>67</sup> The military continues the tradition of developing doctrine based on enduring principles.

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<sup>61</sup> Gallagher, *Telling It Like It Wasn't*, 5.

<sup>62</sup> Gallagher, *Telling It Like It Wasn't*, 27-28.

<sup>63</sup> *Ibid.*, 26-27.

<sup>64</sup> *Ibid.*, 27.

<sup>65</sup> *Ibid.*, 27-28.

<sup>66</sup> *Ibid.*, 27.

<sup>67</sup> *Ibid.*, 27, 31.

In addition to the practice of backward-looking counterfactualism to find how to fight wars better, the US military uses the forward-looking mode to formulate innovative, adaptive alternatives to solve unknown, complex challenges in unknown, complex futures.<sup>68</sup> Additionally, the military uses this mode in its scenario development in creating deep, complex histories.<sup>69</sup> The forward-looking mode of counterfactuals may enhance understanding by revealing both the stakes of a confrontation and its potential abiding consequences.<sup>70</sup> Every future war plan starts off as a counterfactual: an assumption that diplomacy has failed, and there will be war.

However, the US military does not explicitly recognize the counterfactualism upon which war plans begin. The term ‘counterfactual’ is not used in US military joint doctrine publications, nor is counterfactualism per se taught in professional military education. Therefore, planners unwittingly use counterfactuals. The lack of acknowledgment prevents planners from learning from the growing academic canon of counterfactualism.

Despite such ignorance, counterfactuals are incorporated into the US military planning processes. As part of normal cognitive activity, counterfactuals are instinctual to analyzing potential combatant command campaign, contingency, or crisis plans. Given enough time and motivation, planners may use counterfactuals to gain a more thorough understanding of the operational environment. Cowley argued that there is no better way to understand what actually happened in history than to contemplate what might have happened.<sup>71</sup> Counterfactual speculation can compensate for the always-varying strategic context by empowering planners to examine

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<sup>68</sup> US Department of Defense, Joint Staff, Joint Publication (JP) 5-0, *Joint Planning* (Washington, DC: Government Printing Office, 2017), xxi.

<sup>69</sup> Scenario development in the US military is outside the scope of this monograph and would be a good topic for future study. For more information, see Joseph Trevithick, "The U.S. Army Once Created a Whole Alternate History For Its War Games," *War Is Boring* (blog), July 23, 2014.

<sup>70</sup> Cowley, *What If*, xi.

<sup>71</sup> Robert Cowley, *What If II: Eminent Historians Imagine What Might Have Been: Essays* (New York City, NY: Berkley Books, 2000), xix.

assumptions.<sup>72</sup> By using counterfactual analysis, planners can better understand the composite of the conditions, circumstances, and influences that affect capability employment and decisions of the commander. Furthermore, a better understanding of the operational environment helps to better identify and frame problems as well as anticipate potential outcomes.<sup>73</sup>

The US military supplements instinctual, informal counterfactualism by integrating counterfactual analysis into the concept development planning functions of Red Teaming and wargaming. A Red Team is an element chartered to challenge an organization in order to improve its effectiveness.<sup>74</sup> They are tasked to root out misunderstandings, logical fallacies, false assumptions, institutional bias, the conscious or unconscious hierarchical stifling of good ideas, plan or theory blindness, and other human mistakes made during complex problem-solving.<sup>75</sup> The Red Team's "devil's advocate" or contrarian charter provides an opportunity for critical and creative thinking by the commander and staff.<sup>76</sup> While counterfactualism is not explicit in either joint or army doctrine, the US Army's *Red Teaming Handbook* includes a short section *What If Analysis*. However, it specifies that *what-if analysis* does not dwell on consequences or the probability of an event in favor of identifying indicators of events.<sup>77</sup>

In addition to Red Teaming, military planners use counterfactuals in wargaming to explore decision-making, train commanders and staff, examine concepts and capabilities, question assumptions, and test courses of action.<sup>78</sup> Wargames are "representations of conflict or

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<sup>72</sup> Gaddis, *Landscape of History*, 1, 5.

<sup>73</sup> US Joint Staff, JP 5-0, *Joint Planning*, IV-10.

<sup>74</sup> US Joint Staff, JP 5-0, *Joint Planning*, K-1; US Department of the Army, *The Red Team Handbook: The Army's Guide to making Better Decisions* (Fort Leavenworth, KS: University of Foreign Military and Cultural Studies, 2019), 3.

<sup>75</sup> US Department of the Army, *The Red Team Handbook*, 3; US Joint Staff, JP 5-0 *Joint Planning*, IV-3, K-1.

<sup>76</sup> US Joint Staff, JP 5-0, *Joint Planning*, K-1-K-2.

<sup>77</sup> US Department of the Army, *The Red Team Handbook*, 206.

<sup>78</sup> US Joint Staff, JP 5-0, *Joint Planning*, IV-34, V-9.

competition in a synthetic environment, in which people make decisions and respond to the consequences of those decisions.”<sup>79</sup> Caffrey described wargaming as a type of laboratory experiment that tests various hypotheses on winning wars in varying contexts by identifying probable adversary reactions to joint force actions, which is vital to military planning.<sup>80</sup> Wargames allow us to replay events or scenarios to bring about different outcomes.<sup>81</sup> Therefore, Caffrey argued, wargames produce outcomes that may, or may not, suggest plausible futures.<sup>82</sup> However, Army doctrine recommends that each critical event within a proposed plan “should be wargamed using the action-reaction-counteraction methods of friendly and enemy forces interaction.”<sup>83</sup> However, this method constrains analysis of the future state to first-order effects.

Multiple shortfalls of the US military’s future-looking counterfactuals used in wargaming and Red Teaming are evident. Like early counterfactuals, wargaming and Red Teaming lack methodological rigor. The lack of rigor is partly due to ignorance of academic developments regarding counterfactualism in US military doctrine. The *Red Teaming Handbook* describes the process simply: assume an event has occurred, find triggering events that would make the event more plausible, and develop a chain of argumentation, based as much on logic as evidence to explain how the outcome could have come about. This methodology not only lacks plausibility, sufficiency, and co-tenability criteria, but the frequency of conjunction fallacies could increase as the planner attempts to find ways to defend her argument. Equally detrimental to the planner is the focus on first-order effects in both Red Teaming and wargaming. A lack of a continued story is detrimental to exploring long-term or widespread ramifications of decisions and actions and unintended consequences. Alternate history, a type of counterfactual, offers opportunities for

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<sup>79</sup> Ibid., V-31.

<sup>80</sup> Caffrey, *On Wargaming*, 5, 277-8; Joint Pub 5-0, IV-34, V-9.

<sup>81</sup> Evans, *Altered Pasts*, 43.

<sup>82</sup> Caffrey, *On Wargaming*, 279.

<sup>83</sup> US Department of the Army, FM 6-0, *Commander and Staff Organization and Operations* (Washington, DC: Government Printing Office, 2014) 9-26.



deeper analysis both in the backward-looking mode to determine causes of effects, and the forward-looking one to plan for an unknown future. The next section will define alternate history and describe its origins before examining a case study that demonstrates the potential usefulness for the military planner and scholar.

## Alternate History: The Neglected Counterfactual

The narrative form of counterfactual history is known as “alternate history,” “alternative history,” ““what if” history,” or “allohistory.”<sup>84</sup> An alternate history is a work “that describes one continuous sequence of departures from the historical record.”<sup>85</sup> The result is an invented narrative with resultant socio-cultural, technological, and cognitive totalities in a correspondingly divergent fictional world.<sup>86</sup> Despite the invention of essential fictional details, alternate history aims to keep the reader grounded in ‘normal’ history with allusions to well-known events from the actual record.<sup>87</sup> Alternate histories demonstrate how accidents, split-second decisions, or tough decisions can have major repercussions.<sup>88</sup> Essentially, alternate history supplements ‘normal’ history, which is often incongruous to what those in the past would have expected to happen. Alternate history allows the imagination to address this void and demonstrate what could have happened, *if only*.<sup>89</sup>

French philosophers were the first modern authors of alternate history. They expressed their disappointment in the political and social reversals of nineteenth-century France to propagate the idea that people can produce a superior civilization by keeping the destination in view.<sup>90</sup> Their goals were political: to make history morally meaningful by reviving the dialogue

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<sup>84</sup> Kaye, “Challenging Certainty,” 38-57, 38.

<sup>85</sup> Gallagher, *Telling It Like It Wasn't*, 3.

<sup>86</sup> Ibid.

<sup>87</sup> Ibid., 51.

<sup>88</sup> Cowley, *What if*, xii.

<sup>89</sup> Gallagher, *Telling It Like It Wasn't*, 55.

<sup>90</sup> Ferguson, *Virtual History*, 8-9, 442; Gallagher, *Telling it Like it Wasn't*, 49-50.

of unrealized possibilities to use as a guide for future action.<sup>91</sup> For example, *Uchronie*, published in 1876, is subtitled a *Historical and Apocryphal Essay on the Development of European Civilization as it has not been, but as it might have been*, demonstrating resolve for progress.<sup>92</sup> The first alternate histories expressed what the French philosophers judged should have been, in an effort to illustrate that history is not predetermined.<sup>93</sup>

Moreover, these French philosophers created and systematized the alternate history methodology used today. In 1836, Louis Geoffroy-Château wrote the first full-length alternate history, *Napoléon and the Conquest of the World*, which used classical counterfactualism to identify a moment of indeterminacy when Napoleon might have chosen a different path.<sup>94</sup> Geoffroy-Château then diverged from his counterfactual predecessors by not dwelling on the indeterminate moment; instead, he replaced the moment with an imaginary action, which started a different causal sequence.<sup>95</sup> In 1857, French philosopher Charles Renouvier systemized Geoffroy-Château's alternate history methodology. Renouvier's alternate history began with the initial moment at which imaginary history deviates from real, or 'normal' history, which he called the *point de scission*.<sup>96</sup> This point must be a "conjuncture at which more than one consequence can be envisioned," thus fulfilling a plausibility requirement.<sup>97</sup> The narrative diverges at the *point de scission* causing the *première déviation*, which stretches along a *trajectoire imaginaire*.<sup>98</sup> He further argued for just enough change to start a new chain of causes and effects, but not so much

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<sup>91</sup> Gallagher, *Telling It Like It Wasn't*, 26, 50, 58.

<sup>92</sup> Ferguson, *Virtual History*, 8-9, 442.

<sup>93</sup> Evans, *Altered Pasts*, 12-14.

<sup>94</sup> Gallagher, *Telling It Like It Wasn't*, 49-52.

<sup>95</sup> *Ibid.*

<sup>96</sup> Evans, *Altered Pasts*, 12.

<sup>97</sup> *Ibid.*; Gallagher, *Telling It Like It Wasn't*, 63.

<sup>98</sup> Evans, *Altered Pasts*, 12.

as to precipitate chaos, i.e., for a plausible deviation and subsequent imaginary trajectory.<sup>99</sup>

Renouvier's systemization of Geoffroy-Château's methodology gave rise to the current alternate history lexicon: Renouvier's *point de scission*, or indeterminate moment from which the new, fictional narrative originates, is currently branded the "nexus;" the fictional narrative, or Renouvier's *trajectoire imaginaire*, is the Alternate Timeline (ATL); whereas, the actual or 'normal' history is thus referred to as the Original Timeline (OTL).<sup>100</sup>

Alternate history is written for various purposes. Prendergast categorized the purposes ranging from serious to frivolous counterfactuals.<sup>101</sup> The first French alternate history authors obviously belong to the serious category. They saw counterfactuals as a "civic responsibility: when we judge the decisions of historical figures, we assert that our own actions should be subject to similar judgments" leading one to understand progress and work to change the world for the better.<sup>102</sup>

Conversely, nineteenth-century American alternate history authors were more concerned with the human experience in time and space. Novelist Nathaniel Hawthorne's "P's Collection," published in 1845, focused on the dislocations and experiences of fictional characters while adding "personal regret and wonder at the changes wrought by time" to alternate history methodology.<sup>103</sup> "P's Collection" is centered around what might have happened if several famous authors had not had early deaths. While Hawthorne's timeline remains within what is humanly feasible, novelist and social reformer Edward Everett Hale jumped headlong into an alternate history created by the meddling of an unearthly, trans-time observer on an experimental planet

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<sup>99</sup> Gallagher, *Telling It Like It Wasn't*, 63.

<sup>100</sup> Gallagher, *Telling It Like It Wasn't*, 52; Evans, *Altered Pasts*, 12.

<sup>101</sup> Prendergast, *Counterfactuals*, 3.

<sup>102</sup> Gallagher, *Telling It Like It Wasn't*, 62.

<sup>103</sup> *Ibid.*, 79-80.

very much resembling Earth.<sup>104</sup> Hale's nexus in *Hands Off* could have remained plausible as it was a story of a boy escaping his abduction by successfully running from dogs. Though a small change in the course of history, that boy was Joseph from the Bible, whose escape could have precipitated a major historical transformation.<sup>105</sup> But Hale intentionally anchored the reader to the possibilities of multiple universes and outside agents. This necessitates the invention of imagined resources, and Gallagher argued, influenced American alternate historians' later interest in science fiction plots.<sup>106</sup>

By the 1930s, alternate histories were becoming part of popular culture. Evans argued the function of counterfactuals in the first published collection of alternate history essays were more entertainment than historical judgment; therefore, lacking in plausibility and sufficiency.<sup>107</sup> In the 1960s and 1970s, alternate history articles appeared sporadically to ensure the evils of Nazism were not forgotten.<sup>108</sup> In the last quarter of the twentieth century, American alternate history gravitated toward how the United States might have lost wars, rather than wonder how they might have won in Vietnam, thus further distancing itself from the serious alternate histories begun 100 years prior.<sup>109</sup> American alternate history trended toward nostalgia instead of using the *might-have-beens* of the past to move into a better future.<sup>110</sup>

Alternate history is a type of counterfactual that can supplement 'normal' history. Alternate histories offer deeper, longer, more complicated "dives" into alternative scenarios than wargames or red teams; therefore, they provide opportunities for US military planners to learn

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<sup>104</sup> Edward Everett Hale, *Hands Off* (Boston, MA: J. Stilman Smith and Co, 1895), 3-14; Gallagher, *Telling It Like It Wasn't*, 81-83.

<sup>105</sup> Gallagher, *Telling It Like It Wasn't*, 82.

<sup>106</sup> *Ibid.*, 83-84.

<sup>107</sup> Evans, *Altered Pasts*, 16.

<sup>108</sup> *Ibid.*, 21-22.

<sup>109</sup> Gallagher, *Telling It Like It Wasn't*, 97.

<sup>110</sup> Prendergast, *Counterfactuals*, 23; Evans, *Altered Pasts*, 18.

from the past. The totalities in alternate histories offer military planners a broader perspective and context than ‘normal’ history alone can provide. Thus, planning using both alternate history and ‘normal’ history affords a more comprehensive knowledge of the past, present, and potential alternate futures. The next section will present a case study of an alternate history trilogy the US military can use to broaden experience and examine long-term consequences of decisions and actions in war.

### Alternate History Case Study: *The Hot War Trilogy*

*The Hot War Trilogy* by Harry Turtledove offers a unique case study of a counterfactual history based around the use of atomic weapons during the Korean War, which then escalates into World War III. A short synopsis of the trilogy will precede an analysis of the counterfactuals used in key events, political and military leaders’ decisions, and the strategic context surrounding what would have been the second use of an atomic weapon - considering the two bombs dropped on Hiroshima and Nagasaki during World War II as the first use.

The first book in *The Hot War Trilogy*, *Bombs Away*, begins in November 1950 during the Korean War. In the OTL, the war began in June 1950 when North Korea attacked south of the 38<sup>th</sup> parallel. Two days later, the United Nations Security Council adopted Resolution 83, which authorized UN member states to provide military assistance to South Korea.<sup>111</sup> By September, North Korean troops controlled most of the south, apart from the port city of Pusan and the surrounding area. General MacArthur, in arguably one of the best examples of American military capability, changed the course of the war with his amphibious maneuver at Inch’on on September 15, which cut North Korean supply lines and led to the recapture of Seoul ten days later.<sup>112</sup> MacArthur, determined to exploit the success at Inch’on, quickly advanced his forces north to the

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<sup>111</sup> UNSCR, *Resolution 83: Complaint of aggression upon the Republic of Korea* (June 27, 1950).

<sup>112</sup> William Lee Miller, *Two Americans* (New York City, NY: Alfred A. Knopf, 2012), 224-225; T. R. Fehrenbach, *This Kind of War* (Lincoln, NE: Potomac Books, 2008), 163-165.

Yalu River on the Chinese border (see Figure 1).<sup>113</sup> On October 1, 1950, Mao Tse-Tung announced Chinese intolerance to the foreign invasion of Korea.<sup>114</sup> Additionally, the Chinese foreign minister informed the Indian Ambassador of China's intention to send troops if the US or UN forces crossed the 38<sup>th</sup> parallel, with the correct expectation that the Indian government would pass the information to New York and Washington.<sup>115</sup> MacArthur ignored this and other intelligence that indicated a Chinese offensive. Not only did he fail to anticipate Chinese intervention, but on October 15, 1950, during a conference on Wake Island, MacArthur personally convinced Truman that there was very little chance of it.<sup>116</sup>

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<sup>113</sup> Fehrenbach, *This Kind of War*, 181, 190.

<sup>114</sup> *Ibid.*, 187.

<sup>115</sup> Fehrenbach, *This Kind of War*, 187.

<sup>116</sup> Omar N. Bradley, "Substance of Statements Made at Wake Island Conference on 15 October 1950," *The Korean War and Its Origins* from the Harry S. Truman Administration File at the Harry S. Truman Library, 11-12.

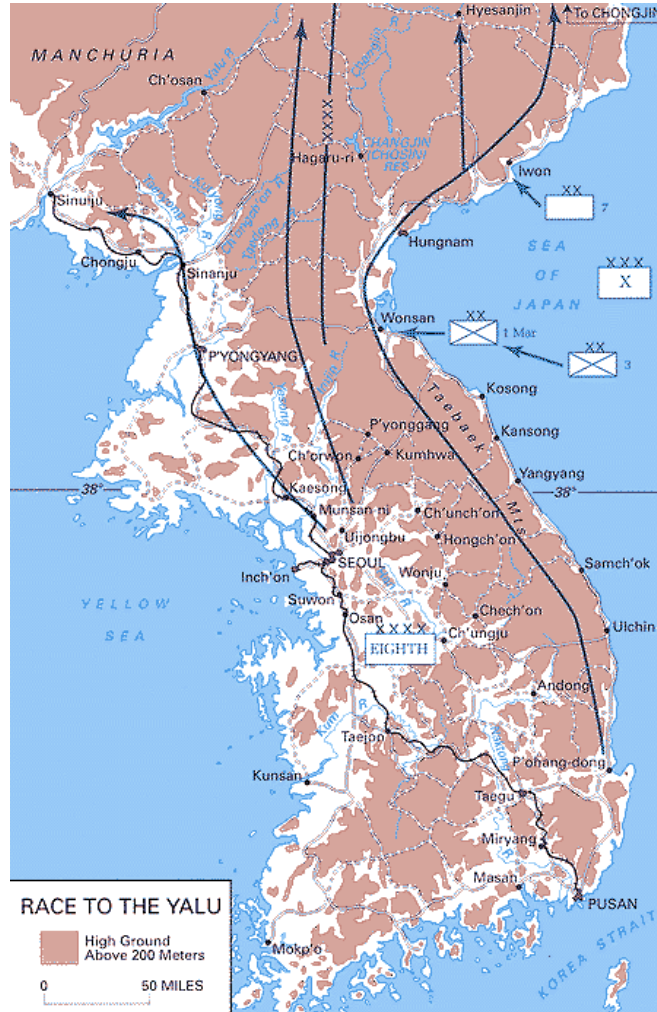


Figure 1. MacArthur's Race to the Yalu. Richard W. Stewart, *The Korean War: The Chinese Intervention* (Washington, DC: US Army Center of Military History, 2003)

During the last half of October, the Chinese deployed roughly 300,000 men to Korea, undetected by UN intelligence assets.<sup>117</sup> Ignorant of the enemy force they were about to face, Eighth Army and X Corps planned scattered offensive spearheads to take as much terrain as possible to achieve MacArthur's objective of the Yalu.<sup>118</sup> In the OTL, these Chinese forces encircled UN and American forces at the Ch'ongch'on River (see Figure 2) and the Chosin Reservoir (see Figure 3). Eighth Army and X Corps were forced to transition to the defense and

<sup>117</sup> Richard W. Stewart, *The Korean War: The Chinese Intervention* (Washington, DC: US Army Center of Military History, 2003), 7.

<sup>118</sup> *Ibid.*, 7-8.

withdraw south of the 38<sup>th</sup> parallel. The coalition forces were able to withdraw and evacuate from the ports of Chinnampo and Inch'on on the peninsula's west coast and Hungnam on North Korea's east coast.<sup>119</sup> The forced withdrawal marks the point of departure from the OTL to the ATL in *The Hot War Trilogy*.

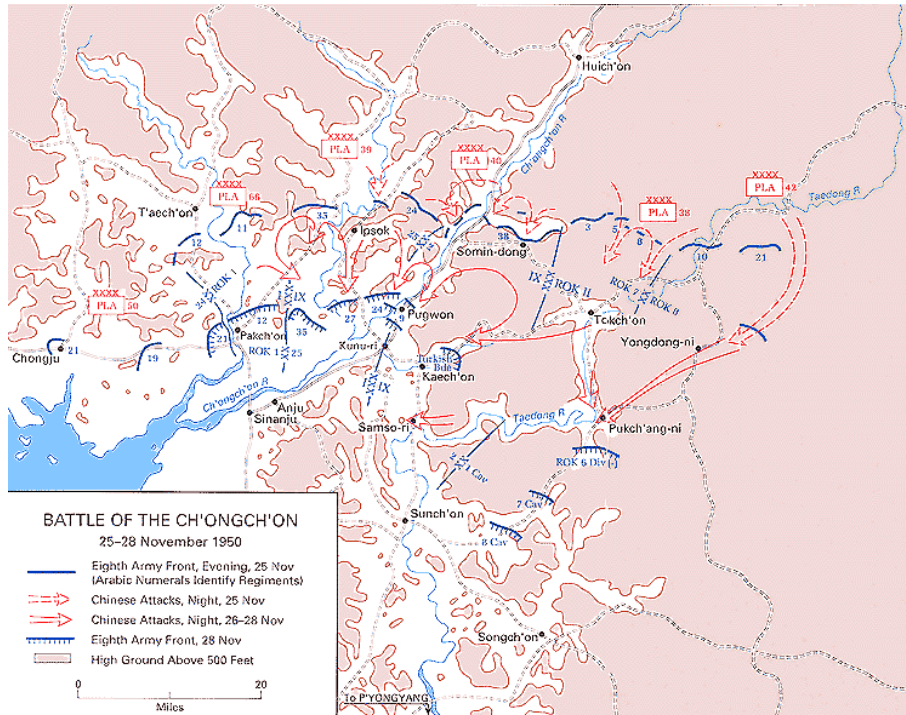


Figure 2. Battle of the Ch'ongch'on. Richard W. Stewart, *The Korean War: The Chinese Intervention*, (Washington, DC: US Army Center of Military History, 2003).

<sup>119</sup> Fehrenbach, *This Kind of War*, 240-249.



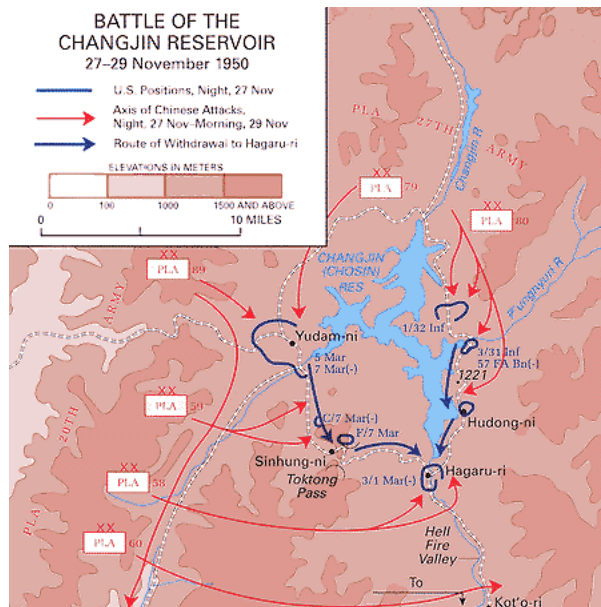


Figure 3. Battle of the Changjin (Chosin) Reservoir. Richard W. Stewart, *The Korean War: The Chinese Intervention*, (Washington, DC: US Army Center of Military History, 2003).

In the ATL, the Chinese Communist Forces were able to block the evacuation and cut off three divisions' worth of US and UN troops between the Chosin Reservoir and Hungnam. This initial enabling counterfactual changes the entire nature of the war and alters US senior leaders' policy toward the Korean peninsula, China, and the USSR.

The ATL continues with President Truman's meeting with MacArthur in Hawaii to discuss options for the future conflict. McArthur convinces Truman that employing atomic bombs against Chinese bases and rail lines was necessary to stop reinforcement and supply to the peninsula.<sup>120</sup> Turtledove masterfully illustrated the counterfactual when he wrote that Truman would not have considered MacArthur's suggestion to use the atomic bomb against the Chinese, "If we'd been able to get our forces out through Hungnam."<sup>121</sup>

On January 23, 1951, ATL, Truman authorizes the use of atomic bombs against several cities in Manchuria and other areas of northeastern China.<sup>122</sup> Despite Truman's public

<sup>120</sup> Harry Turtledove, *Bombs Away* (New York City, NY: Del Ray, 2015), 54.

<sup>121</sup> *Ibid.*, 10.

<sup>122</sup> Turtledove, *Bombs Away*, 54.

announcement emphasizing that the United States did not attack the territory of the Soviet Union, Premier of the Soviet Union Joseph Stalin responds with atomic bomb attacks against Aberdeen and Norwich in Great Britain; Rouen and Nancy in France; and Bremen and Augsburg in Germany.<sup>123</sup> Stalin then uses the same phrasing as Truman had in a public address stating the USSR had reciprocated by not attacking US territory, rather using atomic bombs against provincial cities belonging to its allies, the same as Truman had done.<sup>124</sup> Stalin stressed the USSR response was not an increase in terror.<sup>125</sup> But it triggers NATO Article 5, Collective Defense, which states that an attack on one member of NATO is an attack on all its members, and deserve individual or collective action to restore and maintain security.<sup>126</sup>

Despite Truman's and Stalin's verbal attempts to not escalate the war in the ATL, on February 4, the United States responds to Stalin's attacks with an atomic bomb against Pechenga, the USSR airbase from which the bombers had originated in the ATL European attack. Three days later, Stalin responds with an atomic bomb against Elmendorf Air Base in Anchorage, Alaska. At this point in the ATL, a conventional war begins with Soviet tanks invading the Federal Republic of Germany (West Germany) through the Fulda Gap, Austria, and northeastern Italy, and the US Air Force engaging in the conventional bombing in Poland, Czechoslovakia, and Hungary.<sup>127</sup> The Americans then drop atomic bombs on Zywiec, Poland; Szekesfehervar, Hungary; and Ceske Budejovice, Czechoslovakia, citing the cities as transport hubs for Soviet troops into Western Europe.

Truman and his Secretary of Defense George C. Marshall recognize that stopping the Red Army from taking all of Germany and driving their tanks to the Atlantic is near impossible, so the

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<sup>123</sup> Ibid., 61, 72.-73.

<sup>124</sup> Ibid., 73.

<sup>125</sup> Ibid.

<sup>126</sup> North Atlantic Treaty Organization, "Article 5," *The North Atlantic Treaty* (Washington, DC: 1949).

<sup>127</sup> Turtle dove, *Bombs Away*, 113-115, 123.

United States drops atomic bombs against supply lines in the Soviet satellites.<sup>128</sup> The tit-for-tat atomic bombing escalates: the Soviets respond with atomic bombs against the within-bomber-range west coast cities of Seattle, Portland, San Francisco, and Los Angeles; prompting the United States to drop atomic bombs on Kyiv, Ukraine, Minsk, Belarus, Vladivostok, Yuzhno-Sakhalinsk, Magadan, Petropavlovsk in eastern Russia, and Provideniya on the west coast, which provokes the Soviets to use atomic bombs on ships in both the Panama and Suez canals.<sup>129</sup>

The escalation between the United States and the USSR in the ATL focuses their war efforts in Europe, but the Korean War continues. Despite the first atomic bombs dropped in Manchuria, the Chinese continue to reinforce the Korean front.<sup>130</sup> The United States responds by dropping atomic bombs on Khabarovsk and Blagoveshchensk, Trans-Siberian Railway centers on the Russian side of the Chinese border, in an effort to stem Russian supplies to the Korean front.<sup>131</sup> *Bombs Away* ends with a Russian atomic attack against Paris.<sup>132</sup>

*Fallout*, the second book in *The Hot War Trilogy*, continues in the ATL with the Soviets maneuvering westward through Europe, provoking an American atomic strike against Russian forward positions in West Germany despite Chancellor Konrad Adenauer's plea for non-atomic responses.<sup>133</sup> The USSR then responds with atomic bombs against the United States and South Korean forces in Pusan and Chongju, the RAF airbase in Sculthorpe, England. The Soviets also bomb Antwerp, the most important port for the US and English resupply in Europe.<sup>134</sup> Military technology continues to develop in the USSR despite the war raging on two fronts. The Soviets

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<sup>128</sup> Turtledove, *Bombs Away*, 136-140.

<sup>129</sup> *Ibid.*, 145-148, 151, 154, 156-157, 164, 167, 170, 172, 179, 181, 245-246, 294, 297, 312, 314.

<sup>130</sup> *Ibid.*, 204.

<sup>131</sup> *Ibid.*, 376.

<sup>132</sup> *Ibid.*, 430-432.

<sup>133</sup> Harry Turtledove, *Fallout* (New York City, NY: Del Ray, 2016), 87, 99, 101-103; Turtledove, *Bombs Away*, 137.

<sup>134</sup> Turtledove, *Fallout*, 116-117, 131-132, 165-169.

develop air-to-air refueling in order to extend the range of their bombers to reach the political and military leaders in Washington, DC, and the highly populated and productive East Coast.<sup>135</sup>

While the wars continue in Europe and Korea in the autumn of 1951 ATL, Truman decides not to run for a third term. In the OTL, the 22nd Amendment, passed in March 1947 and ratified in 1951, set the two-term limit for presidents. Truman, while eligible to run for a third term, decided against it because he believed in the term limits, his presidency approval rating was at an all-time low, and he lost the New Hampshire Democratic primary.<sup>136</sup> In the ATL, Truman makes his announcement to the citizens via a television and radio broadcast quoting General Sherman in 1884: that he will not accept if nominated nor serve if elected.<sup>137</sup> His reasoning is twofold. First, there have been claims that Truman is fighting the Korean war in a way to make his chances for reelection better rather than to win the war, which he refutes by saying that he is now free to carry on the war how he sees fit without his political career becoming an obstacle.<sup>138</sup> Second, Truman questions his own suitability as President, given his decision to start the atomic escalation.<sup>139</sup>

*Fallout* closes with a Soviet atomic strike against the East Coast, which US senior leaders had assessed impossible.<sup>140</sup> Atomic bombs struck Boston, New York, and two locations in DC: the Pentagon and the White House.<sup>141</sup> Most of the serving legislators had been in DC during the strike and had not survived, initiating an extension of Presidential authority in the absence of a working Congress before elections can be held.<sup>142</sup>

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<sup>135</sup> Ibid., 262-265, 345-346.

<sup>136</sup> Andrew Glass, "The Day in Politics: Truman declines to seek another term, March 29, 1952," *Politico* (March 29, 2019).

<sup>137</sup> Turtledove, *Fallout*, 209.

<sup>138</sup> Ibid.

<sup>139</sup> Ibid., 88.

<sup>140</sup> Ibid., 350.

<sup>141</sup> Turtledove, *Fallout*, 349-350.

<sup>142</sup> Ibid., 358.

Two intertwined events dominate *Armistice*, the final book in the *Hot War Trilogy*. In the ATL, while the atomic and conventional wars continue in Europe and Korea, Truman's administration develops the hydrogen bomb. *Armistice* refers to the successful November 1952 H-Bomb test on the Eniwetok Atoll in the South Pacific, grounding the reader in events from the OTL. In the 1951 OTL, the development of the hydrogen bomb occurred at the Theoretical Division at Los Alamos Scientific Laboratory.<sup>143</sup> Contemporaneous military strategist Bernard Brodie declared the hydrogen bomb was not so absolute as to disregard target selection, but that strategic bombing was so potent that prioritizing what *not* to hit may be the appropriate decision.<sup>144</sup>

The second event on which *Armistice* focuses is the climax of the war in Europe with the use of the H-bomb against Russia (see Figure 4). Truman decides Joseph Stalin is the appropriate target for the first use of the H-bomb.<sup>145</sup> A US Air Force B-29 bomber drops an H-bomb on Omsk, a city in the southern region of the Ural Mountains, where Stalin had been attending a Communist rally.<sup>146</sup> Turtledove uses several fictional characters' dialogue to demonstrate their perceptions of catastrophic Soviet vulnerability exposed by the H-bomb attack. After receiving the news of Stalin's death, Russians display overwhelming emotion while voicing counterfactual concerns that without Stalin, the German invasion would have been successful, portending the current war would also be doomed without him.<sup>147</sup> Russian fears and American expectations that ridding the USSR of its leader would result in an armistice are realized when the new USSR leader, Vyacheslav Molotov, accepts Truman's offer of a *status quo antebellum* peace in

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<sup>143</sup> Fred Kaplan, *The Wizards of Armageddon* (Redwood City, CA: Stanford University Press, 1983), 62-63.

<sup>144</sup> *Ibid.*, 79.

<sup>145</sup> Harry Turtledove, *Armistice* (New York City, NY: Del Ray, 2017), 70-73.

<sup>146</sup> *Ibid.*, 74-79.

<sup>147</sup> Turtledove, *Armistice*, 84.

exchange for control over the Soviet satellite states.<sup>148</sup> Furthermore, the Soviets agree to cease its support of Mao's forces in Korea if America ceases atomic warfare in that theater.<sup>149</sup> The remainder of the trilogy illustrates the impact of a rebalance of American forces to Korea, the lack of Soviet support to the Korean theater, and the Chinese fear of the H-bomb, which ultimately result in a similar armistice of the *status quo antebellum*.<sup>150</sup>

**The Hot War Trilogy**  
**Global Atomic War**

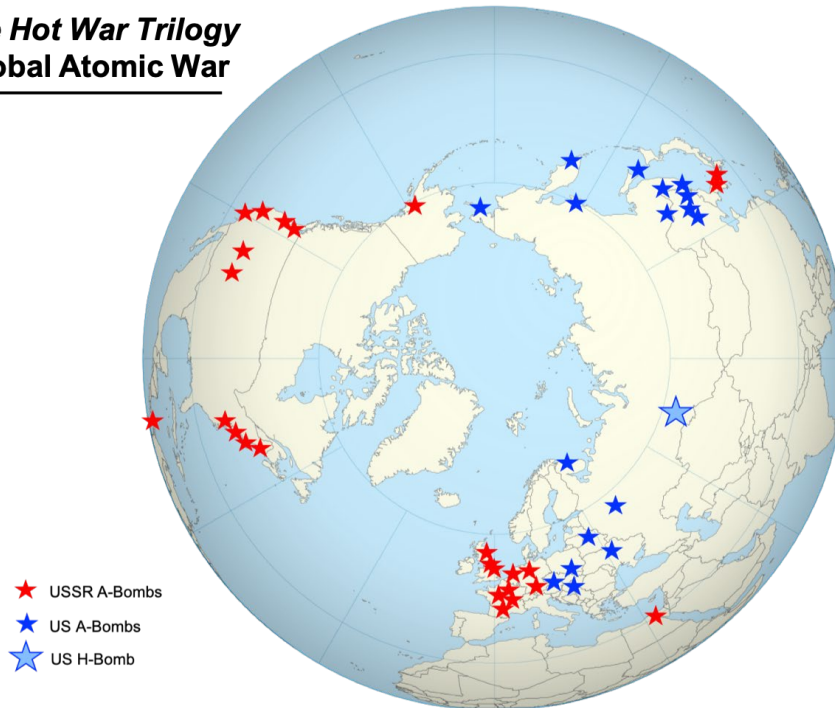


Figure 4. *The Hot War Trilogy's* Global Atomic War. Created by author, based on data from Harry Turtledove's *The Hot War Trilogy* (New York City, NY: Del Ray Books, 2016-2019)

*The Hot War Trilogy* explores some of the effects the war has on civilian populations in the United States, Europe, and Asia. Turtledove describes cordons and evacuations the various governments implement to keep people out and deal with the devastation in the radiated areas.<sup>151</sup> Displacement camps pop up to house those affected by the atomic strikes. Turtledove explores

<sup>148</sup> Ibid., 102-105, 119-120, 156-158.

<sup>149</sup> Ibid., 157-158.

<sup>150</sup> Ibid., 277-281.

<sup>151</sup> Turtledove, *Bombs Away*, 133; Turtledove, *Fallout*, 349-352; Turtledove, *Armistice*, 3-4.

the medical, sanitary, sustenance, and criminal concerns associated with the rapid construction of those camps as well as how those living in them attempt to improve their situation by creating social institutions like churches, schools, and other community functions.<sup>152</sup> Additionally, Turtledove tells a story of the economic impacts the Los Angeles strike has on a small appliance business, specifically, the initial contraction of work and then the expansion as the suburbs again become inhabitable.<sup>153</sup> Finally, Turtledove narrates the difficulty in finding jobs for returning airmen and soldiers, including those returning with life-altering injuries.<sup>154</sup>

The *Hot War Trilogy* is typical of Turtledove's alternate history books and the genre writ large. The trilogy illustrates the years-long narrative using people and events from both 'normal' history and imaginative fiction. The five criteria from the rigorous methodology introduced in the first section provide a framework for an analysis of the counterfactuals in *The Hot War Trilogy*.

## Analysis

The US military's focus on first-order effects during planning is detrimental to understanding possible long-term impacts of decisions made during a conflict. Wargaming and Red Teaming are insufficient for examining planning scenarios. Turtledove's *Hot War Trilogy* presents a deeper, longer, and more complicated dive into a scenario that considers a greater range of factors over time than the initial consequences illuminated during typical military planning. The methodological rigor of plausibility, sufficiency, consistency or co-tenability, conjunction fallacy avoidance, and consideration of second-order counterfactuals offers a framework to analyze the counterfactuals in *The Hot War Trilogy*.

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<sup>152</sup> Turtledove, *Bombs Away*, 175-178, 233-234, 237; 379-381, 409-412; Turtledove, *Fallout*, 27-29, 78-81, 122.

<sup>153</sup> Turtledove, *Bombs Away*, 208-210, 262-267, 306-310, 363-366; Turtledove, *Fallout*, 34-37, 75-78, 126-129; 154-157, 200-203, 218-221, 284-287, 320-323; Turtledove, *Armistice*, 23-27, 94-97, 138-141, 158-162, 216-220.

<sup>154</sup> Turtledove, *Armistice*, 380-384, 401-405.

## Plausibility

The primary counterfactual from *The Hot War Trilogy*, the use of the atomic bomb against the Chinese during the Korean War, is consistent with data from military archives and taps into the ongoing sense of existential danger in the Korean peninsula, thereby providing an aura of accuracy.<sup>155</sup> Furthermore, the possibility of using the atomic bomb was captured in contemporaneous documents and subsequent memoirs, thus meeting Prendergast's and Ferguson's plausibility definition.

During an OTL press event at the end of November 1950, Truman admitted the atomic bomb had always been actively considered for use in Korea.<sup>156</sup> The commander of NATO troops in Europe at the time, General Maxwell D. Taylor, "expected a mushroom cloud to rise from the battlefield at any moment after the landing of our forces on the [Korean] peninsula."<sup>157</sup> In the opinion of General Matthew Ridgeway and many other US officers, limited war was an alien concept; they expected the US military would use any weapon, including the atomic bomb, to win any war.<sup>158</sup> In *Bombs Away*, Turtledove highlights Truman's decision to use the atomic bomb against Japan as a vital precedent to deciding to use them against China, writing "[Truman]'d already order the bomb used once, and ended a war with it. How could ordering it into action again be anything but easier?"<sup>159</sup> The possibility continued into the Eisenhower Administration in the OTL. Secretary of State John Foster Dulles had given Chinese leadership a warning that the

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<sup>155</sup> Weick, Sutcliffe, and Obstfeld, "Organizing and the Process of Sensemaking," 415.

<sup>156</sup> David Holloway, "Nuclear weapons and the escalation of the Cold War, 1945-1962" in *The Cambridge History of the Cold War. Origins*, edited by Odd Arne Westad and Melvin Leffler, 376-397 (Cambridge, UK: Cambridge University Press, 2011), 381; "The President's News Conference, November 30, 1950," Public Papers: Harry S. Truman 1945-1953.

<sup>157</sup> Maxwell D. Taylor, *Swords and Ploughshares: A Memoir* (New York City, NY: W. W. Norton & Company, Inc, 1972), 134.

<sup>158</sup> Matthew B. Ridgeway, *The War in Korea: How We Met the Challenge. How All-out Asian War was Averted. Why MacArthur Was Dismissed. Why Today's War Objectives Must Be Limited* (London, UK: Barrie & Rockliff, 1968), 228-229.

<sup>159</sup> Turtledove, *Bombs Away*, 11.



United States would use the atomic bomb against China “if rapid progress toward a negotiated settlement was not made.”<sup>160</sup> President Eisenhower also “declared” to the National Security Council in 1953, the United States should consider using tactical atomic weapons in Korea.

In the OTL, Truman’s decision to use the atomic bomb in Japan at the end of WWII was not easy, nor impulsive, but one made only after long and careful thought.<sup>161</sup> Historian Robert Ferrell emphasized three crucial aspects of the strategic context that contributed to this decision. First, the barbarism of the Japanese armed forces exhibited in Nanking, the sneak attack at Pearl Harbor, the Bataan death march, and in prisoner of war camps was unlike any other enemy America had faced.<sup>162</sup> Second, was the Japanese Army’s devotion to the code of Bushido: to fight on whatever the cost. An essay written by an observer on MacArthur’s staff, Karl T. Compton, included an interview of a Japanese Army officer who verified the Japanese knew of the inevitability of the US invasion of Japan. The officer claimed the Japanese would have kept fighting until all were killed, but would not have been defeated; i.e., the Japanese would not have surrendered. Compton argued that without the bomb, the war would have continued for many months.<sup>163</sup> Truman responded to the article acknowledging it a fair analysis.<sup>164</sup> And the third aspect that contributed to Truman’s decision was the cost of a US invasion of Japan.<sup>165</sup> In the same counterfactual essay, Compton argued General MacArthur’s staff anticipated 25,000 to

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<sup>160</sup> Roger Dingman, “Atomic Diplomacy during the Korean War,” *International Security* 13, No. 3 (Winter 1988-1989): 50-91, 50.

<sup>161</sup> Robert H. Ferrell, *Harry S. Truman and the Bomb* (Columbia, MO: High Plains Publishing Company, 1996), 88; the term ‘barbarism’ is deliberate, as it was used contemporaneously in US propaganda and subsequently by multiple historians in their descriptions of the Japanese way of war in the Second Sino-Japanese War and World War II; see Francis Pike, “The Development of a Death Cult in the 1930s Japan and the Decision to Drop the Atom Bomb,” *Asian Affairs* 47, Issue 1 (2016).

<sup>162</sup> Ferrell, *Harry S. Truman and the Bomb*, 2, 88-89.

<sup>163</sup> Karl T. Compton, “If the Atomic Bomb Had Not Been Used,” *Atlantic Monthly* (December 1946).

<sup>164</sup> Harry S. Truman, “Response to Karl T. Compton’s December 1946 article, ‘If the Atomic Bomb Had Not Been Used,’” *Atlantic Monthly* (February 1947).

<sup>165</sup> Ferrell, *Harry S. Truman and the Bomb*, 1-5.

50,000 American casualties and several times that number for the Japanese on the day of the invasion.<sup>166</sup> However, this number was based on a gross underestimation of Japanese forces, and did not include the exponential buildup of Japanese combat strength on Kyushu; the number of casualties could have been as high as 250,000 Americans if the staff had extrapolated the 35 percent rate of casualties on Okinawa to the US Army plan of 767,000 troops of the proposed invasion.<sup>167</sup>

After the atomic attacks on Hiroshima and Nagasaki, the Truman Administration consistently messaged its willingness to consider atomic weapons to protect American soldiers and win in any conflict. The Soviets and the Chinese were also aware of the risk of an American atomic response in the Korean peninsula. Historian David Holloway argued Stalin feared more the threat of the atomic bomb to put pressure on the Soviet Union rather than the bomb itself.<sup>168</sup> On the other hand, the Chinese assessed a US atomic response was possible; therefore, they attempted to ascertain US intentions, mitigate the risk, and minimize any potential consequences.<sup>169</sup> After testing American determination with a small three-week intervention south of the Yalu prior to the main offensive, the Chinese were reassured when US aircraft were forbidden to bomb into Chinese territory.<sup>170</sup>

A month after the North Koreans invaded, the US military deployed atomic-capable B-29s without the atomic bombs to Guam, both signaling American resolve and enhancing readiness. The United States then deployed atomic bombs to Guam in April 1951.<sup>171</sup> In the less public domain of the “declared,” the US military studied using atomic weapons in Korea and

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<sup>166</sup> Ibid., 91.

<sup>167</sup> Ibid., 5-6, 91.

<sup>168</sup> Holloway, “Nuclear weapons, 379-381.

<sup>169</sup> Morton H. Halperin, “The Limiting Process in the Korean War,” *Political Science Quarterly* 78, no. 1 (1963), 13-39, 29.

<sup>170</sup> Halperin, “The Limiting Process in the Korean War,” 29.

<sup>171</sup> Holloway, “Nuclear weapons,” 381.

Chinese and Soviet bases in Manchuria.<sup>172</sup> During a June 25, 1950 dinner between Truman and members of his cabinet, US Air Force Chief of Staff General Hoyt S. Vandenberg replied that it would take atomic bombs to eliminate Russian bases in the Far East.<sup>173</sup> Moreover, *National Security Council 30* asserted the United States must be ready to use all means available, including atomic weapons, for national security.<sup>174</sup>

*The Hot War Trilogy* meets the strictest plausibility constraint. Multiple senior leaders in the Truman administration, including the President himself, “declared” the possibility of an atomic response in the Korean peninsula. Both the Chinese and Soviet governments were aware of the possibility, “declaring” it during meetings, in their propaganda, and by military and civilian responses. Finally, US military actions also “declared” the potential escalation. Meeting the plausibility requirements ensures *The Hot War Trilogy* remains in the history domain to be used by military planners to expand their experience.

## Sufficiency

Sufficient historical details provide a known starting place from which to understand the contextual events and conditions that precede the counterfactual.<sup>175</sup> *The Hot War Trilogy* offers detailed information on contemporaneous political leaders’ considerations, military plans and tactics, units, and weapons systems in Korea and Europe, but lacks the necessary details for social, medical, and environmental analysis.

In the OTL, in November 1950, X Corps, composed of the US 3rd Division, the 1st Marine Division, the US 7th Division, and two South Korean divisions, were advancing north

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<sup>172</sup> Ibid.

<sup>173</sup> US Department of State, *Memorandum of Conversation, June 25, 1950*, 3-4.

<sup>174</sup> United Nations Security Council *Resolution 30: United States Policy on Atomic Warfare*, September 10, 1948, in *Foreign Relations of the US, Vol 1, Part 2, General; The United Nations* (Washington, DC: Government Printing Office, 1976), 624-626.

<sup>175</sup> Evans, *Altered Pasts*, 23.

toward the Yalu River along four separate avenues of approach in narrow mountain corridors.<sup>176</sup> The US Army and Marines were spread out with no support on their east or west flanks when the Chinese attacked.<sup>177</sup> The Chinese had taken advantage of the 80-mile gap between the 8th Army and X Corps to attack the left flank of X Corps and bypass the Americans and South Koreans to sever their lines of communication.<sup>178</sup> The US forces had to fight their way south as the Chinese surrounded them, holding the hills in-depth, in an attempt to cut off the American retreat.<sup>179</sup>

Despite heavy losses, the Americans persevered, and by December 21, 1950, successfully evacuated at the port of Hungnam. Historian T. R. Fehrenbach enumerated three reasons the Americans were able to evacuate. First, the Marines had knocked the Chinese off the high ground and prevented the Chinese from closing their encirclement. Second, airpower strafed, bombed, and napalmed the enemy and cleared the roadblocks. And third, the Chinese General Sung Shih-lun's decision to conduct a 14-day push from the Yalu across the icy mountains forced the Chinese to abandon most of their supply and heavy artillery; therefore, he was never able to bring his full manpower to bear against the Americans. At critical moments during the US retreat, the starving, freezing Chinese soldiers collapsed or made no determined effort to attack. Most importantly, the Chinese did not press their attack at Hungnam, à la Dunkirk, and the US forces then redeployed to South Korea.<sup>180</sup> In the ATL, the Chinese pressed the attack. Chosin was labeled the worst American defeat since Bataan in the OTL; in the ATL, it was worse.<sup>181</sup>

In *Bombs Away*, before the first atomic bomb, Turtledove describes several earlier battles to illustrate the American weapons in use, including 105mm artillery pieces, .30-caliber carbine

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<sup>176</sup> Fehrenbach *This Kind of War*, 237-8.

<sup>177</sup> *Ibid.*, 240.

<sup>178</sup> *Ibid.*, 240-249.

<sup>179</sup> *Ibid.*, 246-247.

<sup>180</sup> Fehrenbach, *This Kind of War*, 247-249.

<sup>181</sup> Turtledove, *Bombs Away*, 7-8; Robert Leckie, *Conflict: the History Of The Korean War, 1950-53* (New York City, NY: G. P. Putnam's Sons, 1962), 231.

rifles, MG42 and other Light Machine Guns, F-82 and F-86 fighters, and B-29 bombers.<sup>182</sup> He also illustrates the Russian and Chinese weapons, including Mosin-Nagant and AK-47 rifles, PPSH submachine guns, WWII American lend-lease trucks, T-34 and T-54 tanks, anti-panzer rounds, *Katyusha* multiple rocket launcher, anti-aircraft guns, La-11, MiG-9, and MiG-15 fighters, and Tu-4 bombers.<sup>183</sup>

Furthermore, Turtledove highlights Soviet and American plans and tactics in the event of failed diplomacy in Europe. In the ATL, after the United States drops the atomic bombs in Manchuria and the USSR responds with atomic bomb attacks in England, France, and Germany, the Soviets begin to invade Western Europe.<sup>184</sup> In the OTL, NATO understood the numerical inferiority of its treaty nations compared to the USSR, and, as early as October 1949, emphasized developing methods to compensate and had designed a concept to implement defense through ensuring “the ability to deliver atomic bomb promptly.”<sup>185</sup> Additionally, in the ATL, Turtledove illustrates the actual Soviet operational security measure of radio silence as well as using men from Ukraine and the pro-communist buffer states of Poland, Hungary, and Czechoslovakia to expand the Workers’ and Peasants’ Red Army.<sup>186</sup> Finally, in the ATL, Turtledove uses OTL assessments of Soviet military dispositions (see Figure 5), and corresponding possible invasion routes (see Figure 6).<sup>187</sup>

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<sup>182</sup> Turtledove, *Bombs Away*, 5,-6, 10, 42, 55.

<sup>183</sup> *Ibid.*, 6, 15, 22, 28, 43, 56, 69.

<sup>184</sup> *Ibid.*, 69.

<sup>185</sup> North Atlantic Treaty Organization, “The Strategic Concept for the Defense of the North Atlantic Area,” *Memorandum by the Standing Group to the North Atlantic Military Committee*, October 19, 1949, 5; North Atlantic Treaty Organization, “Strategic Guidance for North Atlantic Regional Planning,” *Report by the Standing Group to the North Atlantic Military Committee*, M.C. 14 March 3, 1950, 4.

<sup>186</sup> Turtledove, *Bombs Away*, 31, 51, 68-69; US Department of the Army, Field Manual 100-2-1, *The Soviet Army: Operations and Tactics* (Washington, DC: Government Printing Officer, 1984), 3-12.

<sup>187</sup> North Atlantic Treaty Organization, *Deployment of Soviet & European Satellite Line Divisions*, SG 126/2-Final, April 1951; North Atlantic Treaty Organization, *Possible Campaigns in Western Europe*, SG 161/3, 20 September 1953 (NATO Archives Online, 2016).

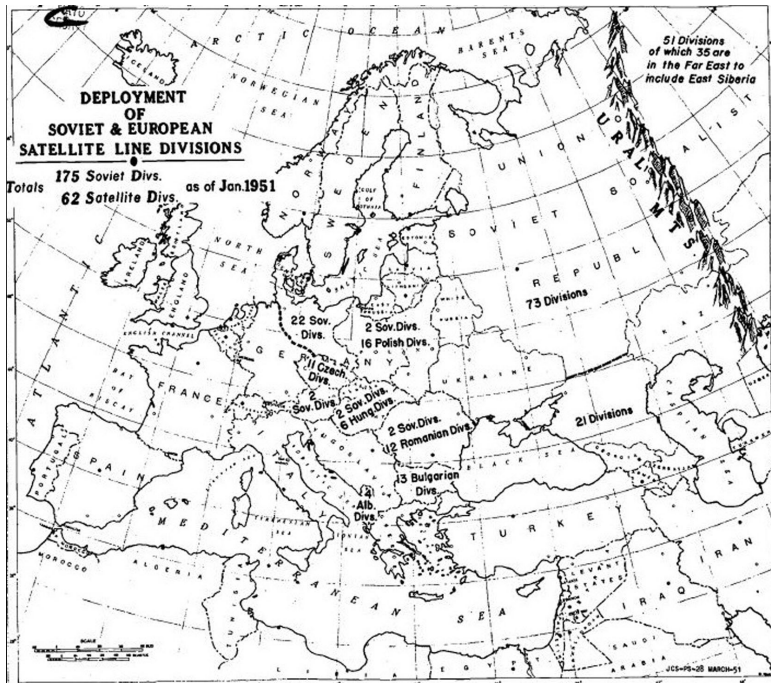


Figure 5. Deployment of Soviet & European Satellite Line Divisions. North Atlantic Treaty Organization, "Intelligence Guidance for SHAPE," *Note by the Secretaries to the Standing Group* SG 126/2 (Final), April 1951. (NATO Archives Online, 2016)

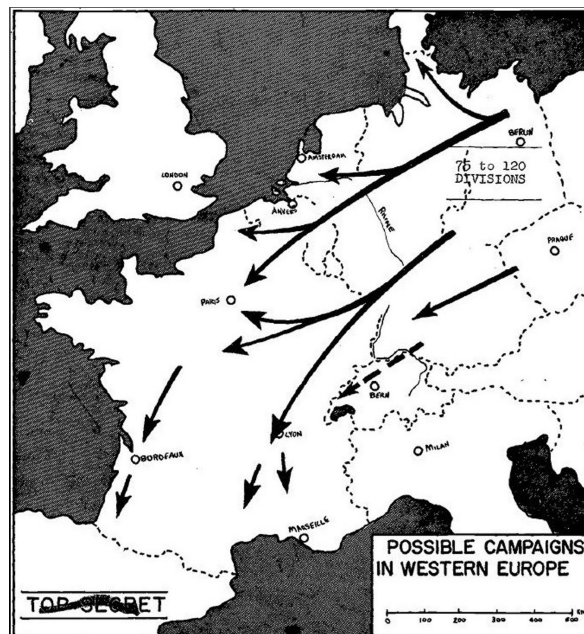


Figure 6. Possible Campaigns in Western Europe. North Atlantic Treaty Organization, "Estimate of the Relative Strength and Capabilities of NATO and Soviet Bloc Forces and Present and in the Immediate Future," *Note by the Secretaries to the Standing Group* SG 161/3, 20 September 1953 (NATO Archives Online, 2016)

The details provide sufficient information to analyze the counterfactual: Turtledove's counterfactual might have been factual if the interaction between the actors, environment, or conditions had differed. The Chinese might have been successful in cutting off the American retreat, which might have influenced Truman's decision to use the atomic bomb against the Chinese. The known or easily researched information of the contemporaneous political and military leadership decisions, plans, tactics, and equipment is sufficient to provide enough contextual and detailed data for creative and critical analysis of competing versions of potential futures.<sup>188</sup> However, while Turtledove identifies some of the medical, environmental, and social ramifications of the global atomic war, the trilogy lacks sufficient details for operational planners to analyze these broader effects.

### Consistency or Co-tenability

Given nuclear weapons have only been used once in 'normal' history, the third criterion of consistency or co-tenability seeks the academic rigor needed for the internal validity of the counterfactual. Historical, logical, and theoretical consistency ensures the argument holds together; e.g., actors and environments remain plausible, the antecedent and consequences remain logical, and any actions grounded in theoretical postulating remain faithful to the theory.<sup>189</sup> *The Hot War Trilogy* maintains a consistent narrative through its treatment of political leaders' concerns and reasoning, technological developments, and with nuclear war theory.

To ground the reader to the OTL, Turtledove uses an allusion literary device. An allusion is an indirect reference to something of significance. Allusions carry a risk in that the author assumes the reader is familiar with the referenced events, but they add context and depth to the story succinctly. In *Bombs Away*, President Harry S. Truman is reflecting on General Douglas A. MacArthur's past successes and failures, meant to illustrate Truman's current discontent with

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<sup>188</sup> Evans, *Altered Pasts*, 23.

<sup>189</sup> Lebow, *Forbidden Fruit*, 54-56.

MacArthur. Turtledove mitigates the risk by choosing well-known events from the past. MacArthur's catastrophic loss of the Philippines in World War II is a notorious example Turtledove uses to illustrate Truman's frame of mind. Additionally, MacArthur's brutal clearing out of the Bonus Army shantytown in Washington during the Depression is perhaps a lesser-known event that Turtledove uses to convey Truman's negative opinion of him.<sup>190</sup> Finally, Turtledove alludes to the fact that not only did MacArthur fail to anticipate Chinese interference, but he also convinced Truman of his erroneous assessment of the impossibility of Chinese interference.<sup>191</sup>

Turtledove foreshadows the point of departure to the ATL by describing a better relationship between Truman and MacArthur. Upon Truman's arrival in Hawaii in December 1950, MacArthur saluted instead of offering a handshake as he had at their first meeting on Wake Island in the OTL, thus beginning the step-by-step reversal of Truman's opinion of him during the ATL meeting.<sup>192</sup> Conversely, in the OTL, Truman had a turbulent relationship with MacArthur culminating in his firing of MacArthur after six instances of insubordination and continual disagreements over the handling of the Korean conflict.<sup>193</sup> Turtledove's vital changes to the OTL make the historical consistency of Truman and MacArthur in their environments tenuous. MacArthur's ego notoriously overshadowed his competence, a trait Truman's "Buck Stops Here" utilitarianism could not overcome.<sup>194</sup>

More difficult to assess is the logical and theoretical co-tenability of Turtledove's counterfactuals. Logical and theoretical consistency are linked in the atomic war scenario

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<sup>190</sup> Terence McArdle, "The veterans were desperate. Gen. MacArthur ordered U.S. troops to attack them," *The Washington Post*, July 28, 2017; Turtledove, *Bombs Away*, 8.

<sup>191</sup> Turtledove, *Bombs Away*, 7.

<sup>192</sup> Turtledove, *Bombs Away*, 11; David McCullough, *Truman* (New York City, NY: Simon & Schuster Paperbacks, 1992), 802; Miller, *Two Americans*, 232.

<sup>193</sup> Miller, *Two Americans*, 231-235.

<sup>194</sup> *Ibid.*, 234, 279-280, 288.



illustrated in *The Hot War Trilogy*. The internal logic of how states respond to atomic bombs cannot be analyzed outside a theoretical lens, given the lack of any historical examples. Military nuclear strategist Bernard Brodie concluded that the A-bomb changed the very nature of war; therefore, minimizing the value of historical precedent.<sup>195</sup> Despite the lack of historical precedence, the United States developed nuclear weapons strategy to manage the political and strategic behavior given that, with or without nuclear weapons, two great powers “are bound to be rivals, as each is anxious about its security.”<sup>196</sup>

By March 1946 in the OTL, the atomic air offensive was central to the US military strategy for a war against the USSR.<sup>197</sup> Truman was encouraged by his military advisers to use the bomb against the Chinese: in October 1950, General Hoyt Vandenberg, the Chief of Staff of the Air Force, told President Truman the United States would have to resort to atomic weapons if the Chinese attacked in Korea.<sup>198</sup> Furthermore, the Joint Chiefs of Staff approved an Emergency War Plan, which imagined war against the Soviet Union in several stages including USSR offensives in Western Europe, the Middle East, and the Far East; bombing Britain; attacking Allied lines of communications; and attempting to attack the United States by air.<sup>199</sup> Turtledove demonstrates logical and theoretical consistency in aligning his counterfactual and the corresponding atomic war with the OTL military strategy, doctrine, and plans.

However, Turtledove wishes away the OTL political context and Truman’s political decisions and strategy in the Korean peninsula. By 1947, the US Government was “sick of the Korean problem” – the continued deployment of 45,000 American military men to the US Army

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<sup>195</sup> Kaplan, *The Wizards of Armageddon*, 10, 25.

<sup>196</sup> Colin S. Gray, “Strategic Sense and Nuclear Weapons Today,” *Fortuna’s Corner* 425 (December 12, 2017).

<sup>197</sup> Holloway, “Nuclear Weapons,” 378.

<sup>198</sup> William Rapp, “Civil-Military Relations: The Role of Military Leaders in Strategy Making,” *Parameters* 45, no. 3 (2015).

<sup>199</sup> Holloway, “Nuclear Weapons,” 378.

Military Government in Korea and their inability to stabilize the peninsula – and the money spent on it wasn't making the problem go away.<sup>200</sup> The Truman Doctrine was an orderly containment of Communism abroad, but Truman's domestic supporters were indifferent to foreign policy, and the bulk of the American people still believed the WWII propaganda that illustrated the Russians as heroic brothers-in-arms with pure democratic motives.<sup>201</sup> Turtledove does not explore these ideas in his trilogy; rather, he relies on the Chinese success at Chosin in the ATL to sufficiently galvanize civilian and political support for an unlimited war in Asia to contain Communism.

### Conjunction Fallacy

The fourth criterion is conjunction fallacy avoidance, i.e., if a combination of counterfactuals is required to realize the alternate history, the probability of the alternate reality decreases.<sup>202</sup> Combining multiple counterfactuals works against the plausibility criterion and complicates the analysis of essential conditions, variables, and decisions. Turtledove recognizes that one change in the past may require other changes to make the primary counterfactual possible and therefore does a masterful job in sequencing *The Hot War Trilogy* counterfactuals to avoid the conjunction fallacy.<sup>203</sup>

Turtledove identifies the first enabling counterfactual by describing from the ATL perspective of Truman, writing, “if we'd been able to get our forces out through Hungnam, I wouldn't think of [atomic strikes in China] for a minute.”<sup>204</sup> In the ATL, Turtledove expresses Truman's OTL concern about a Soviet response to an American atomic bomb in Asia.<sup>205</sup> In

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<sup>200</sup> Fehrenbach, *This Kind of War*, 27.

<sup>201</sup> Ibid., 27-28.

<sup>202</sup> Lebow, *Forbidden Fruit*, 56.

<sup>203</sup> Ibid., 56.

<sup>204</sup> Turtledove, *Bombs Away*, 10.

<sup>205</sup> Turtledove, *Bombs Away*, 10; Halperin, “The Limiting Process in the Korean War,” 23.

grounding the reader in the OTL where Truman decides against using the atomic bomb, Turtledove highlights the single enabling counterfactual on which the entirety of the trilogy rests.

Turtledove hypothesizes that a more significant defeat of US forces at Chosin could have changed public opinion, political policy, and military strategy, which makes Truman's decision to use the atomic bomb plausible. The ATL Chinese success at Chosin limited US options for future operations, which provides Truman and MacArthur a common purpose needed to overcome their divergent perspectives of the handling of the Korean War. However, Turtledove again discounts Truman's concerns in the OTL. Because Truman was unwilling or unable "to conceive of the atomic bomb as anything other than an apocalyptic terror weapon," he believed "the American people would not tolerate their use for 'aggressive purposes.'"<sup>206</sup> Thus, in May 1948, he ordered the Joint Chiefs to develop a conventional plan for conflict with the USSR.<sup>207</sup> While a failure of the American withdrawal from Chosin might have changed the course of the war, Turtledove likely indulged in a conjunction fallacy by not analyzing Truman's concerns and policies in the OTL.

## Consideration of Second-Order Counterfactuals

Finally, the last criterion is a consideration of counterfactuals beyond the first-order, as a change in the past is almost certain to produce changes in addition to the expected consequent.<sup>208</sup> Because the consideration of all potential second-order counterfactuals is impossible and Turtledove is writing a book for enjoyment rather than military planning, he identifies only one likely change that results from his primary and enabling counterfactuals. Turtledove also uses a return-to-'normal'-history plot device to return to a state that resembles the earlier order.<sup>209</sup>

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<sup>206</sup> David Alan Rosenberg, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960," *International Security* 1, No 4 (Cambridge, MA: MIT Press, 1983): 11-12.

<sup>207</sup> *Ibid.*, 12-13.

<sup>208</sup> Lebow, *Forbidden Fruit*, 56-57.

<sup>209</sup> Gallagher, *Telling it Like it Wasn't*, 89.

Turtledove considers the most likely first-order effect of the ATL failure of withdrawal at Chosin to be Truman's decision to employ the atomic bomb against the Chinese. However, until at least 1954 in the OTL, senior officials in the Air Force and State Department were uncertain what conditions might justify the use of the atomic bomb.<sup>210</sup>

Turtledove considers the most likely second-order effect of Truman's use of atomic bombs in Manchuria to be the global atomic war between the USSR and the US. In October 1949 in the OTL, the Joint Chiefs of Staff designated the Soviets' will to wage war as the primary objective for atomic bomb attacks against 104 urban targets.<sup>211</sup> Given Stalin's power over the Soviet military, the United States would have militarily targeted him; moreover, Stalin would have known he'd be a target, as he equated himself with the Soviet state.<sup>212</sup> These developments lead to Truman's order to kill Stalin with an H-bomb in the ATL.<sup>213</sup> However, the continuation of Soviet technological development of air-to-air refueling changed the atomic bombing objective.<sup>214</sup> In 1950 in the OTL, amid the increased tensions over the Korean conflict, the primary US military objective transitioned to the destruction of the Soviet capability to deliver atomic bombs, signifying the recognition of concern over defending against an atomic- and long-range bomber-capable enemy.<sup>215</sup> A global atomic war coupled with a conventional war in Europe

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<sup>210</sup> Joint Chiefs of Staff gave Strategic Air Command, a US Air Force major command, primary responsibility for carrying out atomic strikes on the Soviet homeland; therefore, gave it responsibility to prepare its own annual war plans for review and approval; Rosenberg, "The Origins of Overkill," 10.

<sup>211</sup> Rosenberg, "The Origins of Overkill," 16.

<sup>212</sup> Kathryn Weathersby, "The Korean War Revisited," *The Wilson Quarterly* (1976-) 23, no 3 (1999): 91-95, 95; Hiroaki Kuromiya, "Stalin and His Era," *The Historical Journal* 30, No. 3 (2007): 711-724, 721-722; Vojtech Mastny, "Stalin and the Militarization of the Cold War," *International Security* 9, no. 3 (1984): 109-129, 114-115, 127.

<sup>213</sup> Turtledove, *Armistice*, 78-79.

<sup>214</sup> Turtledove, *Bombs Away*, 310-314, 431-432; Turtledove, *Fallout*, 166-168, 262-265, 345-346; Ugo Vicenzi, *Aerial Refueling: The First Century* (Morris, NC: Lulu.com, 2019), 46-47; Roger Beaumont, *Maskirovka: Soviet Camouflage, Concealment and Deception* (College Station, TX: Center for Strategic Technology, 1982), 18-19.

<sup>215</sup> Rosenberg, "The Origins of Overkill," 16-17.

was intensely analyzed after the iron curtain fell on Europe, confirming Turtledove's second-order counterfactual.<sup>216</sup>

Finally, alternate history authors use third-order counterfactuals as a plot device to conclude a story and return to 'normal' history, leaving the reader with a sense of familiar resolution.<sup>217</sup> The confluence of Turtledove's counterfactuals produces a third-order counterfactual that "return[s] history more or less to the course from which it was initially diverted" by the primary counterfactual.<sup>218</sup> The interaction of the sequence of Turtledove's second-order counterfactuals results in the USSR's acceptance of the peace terms offered by Truman. After witnessing the Soviet's resignation after the H-bomb, the Chinese and North Koreans also accept *a status quo antebellum* armistice. The end of *The Hot War Trilogy* is a 1950s-Europe where the USSR exerts control over its satellites, and a demilitarized zone at the 38<sup>th</sup> parallel separates two Koreas. By anticipating the end of what has changed by the counterfactual(s), the plot is resolved to return to 'normal' history.<sup>219</sup> The model to return to 'normal' works for both alternate history novels and planning. War is a temporary interruption of diplomacy. However, an operational planner wishing to use alternate history to expand his experience must recognize this deflective trajectory as a logical fallacy.<sup>220</sup>

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<sup>216</sup> Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (KS: University Press of Kansas, 2004), 229-230.

<sup>217</sup> Gallagher, *Telling It Like It Wasn't*, 89.

<sup>218</sup> Lebow, *Forbidden Fruit*, 57.

<sup>219</sup> Gallagher, *Telling it Like it Wasn't*, 89.

<sup>220</sup> Ibid.

## Recommendation

It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than a new system. For the initiator has the enmity of all who would profit by the preservation of the old institution and merely lukewarm defenders in those who gain by the new ones.

—Niccolò Machiavelli, *The Prince*

This monograph demonstrates the combination of the shortfalls of ‘normal’ history with the military’s stagnation in understanding evolving approaches to counterfactualism, which highlights a gap in the current military planning doctrine. Using ‘normal’ history to create military doctrine is problematic because ‘normal’ history is biased, selective, and impossible to prove because human decisions are based on internal cognizance. Rigorous counterfactualism can overcome some of the issues of ‘normal’ history by highlighting how something that happened might not have happened, or vice versa, thereby providing a better explanation of what did occur.<sup>221</sup> However, the US military’s use of counterfactuals has languished. Both military doctrine and professional military education inadequately address the counterfactual nature of war plans. The limited nature of wargaming and Red Teaming during planning hinders the analysis of the wide-ranging or long-term effects of military action.

The US military should consider changing its doctrine to recognize the counterfactual basis of planning. The forward-looking counterfactual empowers a better analysis of the unknown future. The explicit recognition that planning is based on counterfactuals opens the door for the military to learn from other disciplines’ development of causal analysis. Likewise, integration of counterfactualism into the US military’s professional military education would ensure a shared understanding of counterfactuals amongst Soldier, Sailor, Airman, and Marine operational planners. A future study of how to implement integration into the military’s educational system is required. Furthermore, the military should consider the proposed framework in this monograph

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<sup>221</sup> Prendergast, *Counterfactuals*, 12-13.

for analyzing counterfactuals, ensuring the lessons learned from other disciplines are leveraged. During planning, a rigorous methodology for counterfactuals offers a framework to understand an operational environment, identify and frame problems within that environment, and develop multiple approaches to resolve those problems better.<sup>222</sup>

Expanding one's experience beyond 'normal' history ought to be the goal of every military planner. Counterfactuals can be considered as competing versions of the possible truth.<sup>223</sup> The US military can leverage alternate history novels, as long as they meet the criteria in the proposed rigorous methodology, for planners' use to expand their experiences. A potential topic for a future monograph is the creation of an anthology of alternate history novels.

The US military ought to complement 'normal' history with alternate histories from which military officers can deduce theories and doctrine to better solve the nation's future strategic and operational problems. This, in turn, frees planners to focus on improving the practice of warfare to solve the nation's most complex problems. An examination of 'normal' history and a history that includes an alternate past offers a more comprehensive understanding of both the present and future.<sup>224</sup>

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<sup>222</sup> US Joint Staff, *JP-5 Joint Planning*, xxi.

<sup>223</sup> Gaddis, *The Landscape of History*, 10; Clausewitz, *On War*, 156.

<sup>224</sup> Gaddis, *The Landscape of History*, 3.

## Bibliography

- Arena, Michael. *Adaptive Space: How GM and Other Companies are Positively Disrupting Themselves and Transforming into Agile Organizations*. New York City, NY: McGraw-Hill Education, 2018.
- Baldwin, James. *Fifty Famous People: A Book of Short Stories*. Syracuse, NY: American Book Company, 1912. Accessed January 14, 2020. <https://archive.org/details/fiftyfamouspeopl00baldrich/page/54>.
- Beaumont, Roger. *Maskirovka: Soviet Camouflage, Concealment and Deception*. College Station, TX: Center for Strategic Technology, 1982. Accessed March 13, 2020. <https://apps.dtic.mil/dtic/tr/fulltext/u2/b971047.pdf>.
- Bradley, Omar N. "Substance of Statements Made at Wake Island Conference on 15 October 1950." *The Korean War and Its Origins* from the Harry S. Truman Administration File at the Harry S. Truman Library. Accessed January 1, 2020. <https://www.trumanlibrary.gov/library/research-files/substance-statements-made-wake-island-conference?documentid=NA&pagenumber=1>.
- Caffrey, Matthew B. Jr. *On Wargaming: How Wargames Have Shaped History and How They May Shape the Future*. Newport, RI: Naval War College Press, 2019. Accessed August 24, 2019. <https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=1043&context=newport-papers>.
- Citino, Robert M. *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare*. Lawrence, KS: University Press of Kansas, 2004.
- Clausewitz, Carl von. *On War*. ed. and trans. Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.
- Compton, Karl T. "If the Atomic Bomb Had Not Been Used." *Atlantic Monthly*. December 1946. Accessed February 18, 2020. <https://www.theatlantic.com/magazine/archive/1946/12/if-the-atomic-bomb-had-not-been-used/376238/>.
- Cowley, Robert. *What If? The World's Foremost Military Historians Imagine What Might Have Been: Essays*. New York City, NY: Berkley Books, 2000.
- . *What If II: Eminent Historians Imagine What Might Have Been: Essays*. New York City, NY: Berkley Books, 2000.
- Dingman, Roger. "Atomic Diplomacy during the Korean War." *International Security*. 13, No. 3 Winter 1988-1989. Accessed December 12, 2019. <https://www.jstor.org/stable/2538736>.
- Evans, Richard J. *Altered Pasts: Counterfactuals in History*. London, UK: Little, Brown, 2014.
- Fehrenbach, T. R. *This Kind of War*. Lincoln, NE: Potomac Books, 2008.



- Ferguson, Niall. *Virtual History: Alternatives and Counterfactuals*. London, UK: Penguin Books Ltd, 2011.
- Ferrell, Robert H. *Harry S. Truman and the Bomb*. Columbia, MO: High Plains Publishing Company, 1996.
- Gaddis, John Lewis. *The Landscape of History: How Historians Map the Past*. New York City, NY: Oxford University Press, 2002.
- Gallagher, Catherine. *Telling It Like It Wasn't: The Counterfactual Imagination in History and Fiction*. Chicago, IL: The University of Chicago Press, 2018.
- Glass, Andrew. "The Day in Politics: Truman declines to seek another term, March 29, 1952." *Politico* (March 29, 2019). Accessed March 27, 2020. <https://www.politico.com/story/2019/03/29/truman-declines-to-seek-another-term-march-29-1952-1238358>.
- Granieri, Ronald J. "Review: Telling it like It Isn't? Alternate History and International History." *The International History Review* 29, no 2 (2007): 338-348. Accessed July 15, 2019. <https://www.jstor.org/stable/40110788>.
- Gray, Colin S. "Strategic Sense and Nuclear Weapons Today." *Fortuna's Corner* 425, December 12, 2017. Accessed March 9, 2020. <https://fortunascorner.com/2017/12/12/colin-gray-thought-piece-nuclear-weapons/>.
- Hale, Edward Everett. *Hands Off*. Boston, MA: J. Stilman Smith and Co, 1895. Accessed March 1, 2020. <https://archive.org/details/handsoff00halegoog/page/n18/mode/2up>.
- Halperin, Morton H. "The Limiting Process in the Korean War." *Political Science Quarterly* 78, no. 1 (1963): 13-39. Accessed February 16, 2020. <https://www.jstor.org/stable/2146665?seq=1>.
- Holloway, David. "Nuclear weapons and the escalation of the Cold War, 1945-1962." In *The Cambridge History of the Cold War. Origins*. Edited by Odd Arne Westad and Melvin Leffler, 376-397. Cambridge, UK: Cambridge University Press, 2011.
- Ikle, Fred Charles. *Every War Must End*. New York City, NY: Columbia University Press, 2005.
- Kahneman, Daniel. *Thinking, Fast and Slow*. New York City, NY: Farrar, Straus and Giroux, 2011.
- Kaplan, Fred. *The Wizards of Armageddon*. Redwood City, CA: Stanford University Press, 1983.
- Kaye, Simon T. "Challenging Certainty: The Utility and History of Counterfactualism." *History and Theory* 49, no 1 (Middletown, CT: Wiley for Wesleyan University, February 2010): 38-57. Accessed July 15, 2019. <https://www.jstor.org/stable/25621451>.
- Koster, Raph. *Theory of Fun for Game Design*. Sebastopol, CA: O'Reilly Media, 2014.
- Kuromiya, Hiroaki. "Stalin and His Era." *The Historical Journal* 30, No. 3 (2007): 711-724. Accessed March 12, 2020. [www.jstor.org/stable/20175118](http://www.jstor.org/stable/20175118).

- Lebow, Richard Ned. *Forbidden Fruit: Counterfactuals and International Relations*. Princeton, NJ: Princeton University Press, 2010.
- Leckie, Robert. *Conflict: the History of the Korean War, 1950-53*. New York City, NY: G.P. Putnam's Sons, 1962. Accessed March 7, 2020. <https://archive.org/details/conflicthehisto013655mbp/page/n4/mode/2up>.
- MacMillan, Margaret. *Dangerous Games: The Uses and Abuses of History*. New York City, NY: Modern Library, 2010.
- Mastny, Vojtech. "Stalin and the Militarization of the Cold War." *International Security* 9, no. 3 (1984): 109-29. Accessed March 12, 2020. <https://www.jstor.org/stable/2538589>.
- McArdle, Terence. "The veterans were desperate. Gen. MacArthur ordered U.S. troops to attack them." *The Washington Post*. July 28, 2017. Accessed Jan 1, 2020. <https://www.washingtonpost.com/news/retropolis/wp/2017/07/28/the-veterans-were-desperate-gen-macarthur-ordered-u-s-troops-to-attack-them/>.
- McCullough, David. *Truman*. New York City, NY: Simon & Schuster Paperbacks, 1992.
- Miller, William Lee. *Two Americans*. New York City, NY: Alfred A. Knopf, 2012.
- Morgan, Stephen L. and Christopher Winship. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. New York City, NY: Cambridge University Press, 2015.
- National Security Council. NSC 30. "United States Policy on Atomic Warfare, September 10, 1948." in *Foreign Relations of the US, Vol 1, Part 2, General; The United Nations*. Washington, DC: Government Printing Office, 1976. Accessed March 12, 2020. <https://history.state.gov/historicaldocuments/frus1952-54v02p2/d37>.
- North Atlantic Treaty Organization. "Article 5." *The North Atlantic Treaty*. Washington, DC, 1949. Accessed January 18, 2020. [https://www.nato.int/nato\\_static\\_fl2014/assets/pdf/stock\\_publications/20120822\\_nato\\_treaty\\_en\\_light\\_2009.pdf](https://www.nato.int/nato_static_fl2014/assets/pdf/stock_publications/20120822_nato_treaty_en_light_2009.pdf).
- . "The Strategic Concept for the Defense of the North Atlantic Area." *Memorandum by the Standing Group to the North Atlantic Military Committee*. October 19, 1949. Accessed March 8, 2020. [https://archives.nato.int/uploads/r/null/1/0/103760/MC\\_0003\\_ENG\\_PDP.pdf](https://archives.nato.int/uploads/r/null/1/0/103760/MC_0003_ENG_PDP.pdf).
- . "Strategic Guidance for North Atlantic Regional Planning." *Report by the Standing Group to the North Atlantic Military Committee* MC 14, March 3, 1950. Accessed March 8, 2020. [https://archives.nato.int/uploads/r/null/1/0/103875/MC\\_0014\\_ENG\\_PDP.pdf](https://archives.nato.int/uploads/r/null/1/0/103875/MC_0014_ENG_PDP.pdf).
- . *Deployment of Soviet & European Satellite Line Divisions*. SG 126/2-Final, April 1951. Accessed March 8, 2020. [https://www.nato.int/nato\\_static\\_fl2014/assets/pictures/cw-dd-campaigns/20161206\\_1\\_europe.JPG](https://www.nato.int/nato_static_fl2014/assets/pictures/cw-dd-campaigns/20161206_1_europe.JPG).

- North Atlantic Treaty Organization. *Possible Campaigns in Western Europe*. SG 161/3. 20 September 1953. Accessed March 8, 2020. [https://www.nato.int/nato\\_static\\_fl2014/assets/pictures/cw-dd-campaigns/20161206\\_2\\_france.JPG](https://www.nato.int/nato_static_fl2014/assets/pictures/cw-dd-campaigns/20161206_2_france.JPG).
- Pascal, Blaise. *Pascal's Pensées*. New York City, NY: E.P. Dutton & Co., Inc, 1958. Accessed January 14, 2020. <https://www.gutenberg.org/files/18269/18269-h/18269-h.htm>.
- Pike, Francis. "The Development of a Death Cult in the 1930s Japan and the Decision to Drop the Atom Bomb." *Asian Affairs* 47, Issue 1 (2016). Accessed March 27, 2020. <https://www.tandfonline.com/doi/full/10.1080/03068374.2015.1128682>
- Prendergast, Christopher. *Counterfactuals: Paths of the Might Have Been*. London, UK: Bloomsbury Academic, 2019.
- "The President's News Conference, November 30, 1950," Public Papers: Harry S. Truman 1945-1953. Accessed February 18, 2020. [trumanlibrary.gov/library/public-papers/295/presidents-news-conference](http://trumanlibrary.gov/library/public-papers/295/presidents-news-conference).
- Rapp, William. "Civil-Military Relations: The Role of Military Leaders in Strategy Making." in *Parameters*. 45, no. 3. 2015. Accessed March 13, 2020. [https://cgsc.blackboard.com/bbcswebdav/pid-968880-dt-content-rid-17701559\\_1/courses/SAMS\\_AMSP\\_2020/Rapp%20on%20policy%20and%20strategy%281%29.pdf](https://cgsc.blackboard.com/bbcswebdav/pid-968880-dt-content-rid-17701559_1/courses/SAMS_AMSP_2020/Rapp%20on%20policy%20and%20strategy%281%29.pdf)
- Ray, John. *A Collection of English Proverbs*. Cambridge, UK: University of Cambridge, 1678. Accessed January 14, 2020. <https://quod.lib.umich.edu/e/eebo/A58161.0001.001?rgn=main;view=fulltext>.
- Ridgway, Matthew B. *The War in Korea: How We Met the Challenge. How All-out Asian War was Averted. Why MacArthur Was Dismissed. Why Today's War Objectives Must Be Limited*. London, UK: Barrie & Rockliff, 1968.
- Rosenberg, David Alan. "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960." *International Security* 7, no. 4 (Cambridge, MA: MIT Press, 1983): 3-71. Accessed March 10, 2020. <https://www.jstor.org/stable/2626731>.
- Shy, John. "Jomini." Essay. In *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, edited by Peter Paret, 143–85. Princeton, NJ: Princeton University Press, 1986.
- Stewart, Richard W. *The Korean War: The Chinese Intervention*. Washington, DC: US Army Center of Military History, 2003. Accessed January 11, 2020. <https://history.army.mil/brochures/kw-chinter/chinter.htm>.
- Taylor, Maxwell D. *Swords and Ploughshares: A Memoir*. New York City, NY: W. W. Norton & Company, Inc, 1972.

- Trevithick, Joseph. "The U.S. Army Once Created a Whole Alternate History For Its War Games." *War Is Boring* (blog). July 23, 2014. Accessed July 15, 2019. <https://warisboring.com/the-u-s-army-once-created-a-whole-alternate-history-for-its-war-games/>.
- Truman, Harry S. "Response to Karl T. Compton's December 1946 article, 'If the Atomic Bomb Had Not Been Used,'" *Atlantic Monthly*. February 1947. Accessed February 18, 2020. <https://www.theatlantic.com/magazine/archive/1947/02/president-truman-to-dr-compton/305432/>.
- Turtledove, Harry. *Bombs Away*. New York City, NY: Del Rey, 2015.
- . *Fallout*. New York City, NY: Del Rey, 2016.
- . *Armistice*. New York City, NY: Del Rey, 2017.
- United Nations Security Council. *Resolution 83: Complaint of aggression upon the Republic of Korea*. June 27, 1950. Accessed January 11, 2020. <http://unscr.com/en/resolutions/83>.
- US Department of the Army. Field Manual (FM) 6-0. *Commander and Staff Organization and Operations*. Washington, DC: Government Printing Office, 2014.
- . *The Red Team Handbook: The Army's Guide to making Better Decisions*. Fort Leavenworth, KS: University of Foreign Military and Cultural Studies, 2019. Accessed 15 July 2019. [https://usacac.army.mil/sites/default/files/documents/ufmcs/The\\_Red\\_Team\\_Handbook.pdf](https://usacac.army.mil/sites/default/files/documents/ufmcs/The_Red_Team_Handbook.pdf).
- US Department of Defense. US Joint Staff. Joint Publication 1-0. *Doctrine for the Armed Forces of the United States*. Washington, DC: Government Printing Office, 2017.
- . US Joint Staff. Joint Publication 5-0. *Joint Planning*. Washington, DC: Government Printing Office, 2017.
- US Department of State. *Memorandum of Conversation*. June 25, 1950. Accessed February 18, 2020. <https://www.trumanlibrary.gov/library/research-files/memorandum-conversation-0?documentid=2&pagenumber=4>.
- . Office of the Historian. Foreign Service Institute. "Atomic Diplomacy." *Milestones: 1945-1952*. Washington, DC: Government Publication Office. Accessed March 9, 2020. <https://history.state.gov/milestones/1945-1952/atomic>.
- Vicenzi, Ugo. *Aerial Refueling: The First Century*. Morris, NC: Lulu.com, 2019.
- Weathersby, Kathryn. "The Korean War Revisited." *The Wilson Quarterly* (1976-) 23, no 3 (1999): 91-95. Accessed March 12, 2020. [www.jstor.org/stable/40259929](http://www.jstor.org/stable/40259929).
- Weick, Karl E. Kathleen M. Sutcliffe, and David Obstfeld. "Organizing and the Process of Sensemaking." *Organization Science*. 16, July-August 2005: 409-21. Accessed March 12, 2020. <https://doi.org/10.1287/orsc.1050.0133>.