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The General's Intuition

Overconfidence, Pattern-Matching, and the Inchon Landing Decision

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Abstract:

Can we trust the operational intuitions of generals? The proponents of the overconfidence model, one of the most influential perspectives in the psychology of judgment, commonly offer a skeptical answer. Generals' operational intuitions are likely to be hampered by overconfidence and negatively affect military effectiveness. However, the successful operational outcome of General Douglas MacArthur's decision to land at Inchon (June–September 1950) seemingly contradicts the model. We seek to complement and refine the overconfidence model by examining the Inchon landing decision through the analytical lens of the recognition-primed decision model. This model typically envisions that under specific circumstances - notably an experienced decision-maker, an adequate environment regularity and an opportunity to learn - generals are able to make quick and satisfactory decisions. We show that such a configuration was present in the Inchon landing case and helps explain both the decision process and its successful outcome.

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Keywords: Inchon landing, Korean War, MacArthur (General Douglas), Overconfidence, Recognition-Primed Decision Model

Introduction: Generalship and Cognition

Can we trust the operational intuitions of generals?¹ The proponents of the overconfidence model, one of the most influential perspectives in the psychology of judgment, commonly offer a skeptical answer. They acknowledge skill and expertise but present human cognitive performance as often flawed. As Dominic Johnson and Dominic Tierney put it, “overconfidence can lead decision-makers to overestimate the probability of victory and the likely spoils of war, provoking wars that could otherwise be avoided and risking battlefield defeat against superior opponents.” (Johnson & Tierney, 2011, pp. 8–9) Copious evidence associates overconfidence to disastrous strategic decisions during the 1914 July crisis, throughout the Vietnam War and in the process leading to the Iraq War (Johnson, 2004; Johnson et al., 2006. See also: Altman, 2015, Kahneman & Renshon, 2007; Renshon, 2009; Yetiv, 2013). Generals’ operational intuitions are likely to be hampered by overconfidence and negatively affect military effectiveness.

However, the outcome of General of the Army Douglas MacArthur’s decision to land at Inchon (June–September 1950) seemingly contradicts the overconfidence model. MacArthur was the epitome of the overconfident military leader, always optimistic about his own ability to lead and succeed since he was a cadet (James, 1970, 1975, 1985). Moreover, at the beginning of the Korean War he was remembered at the Joint Chiefs of Staff for his unjustified optimism about defending the Philippines in 1941 and other confident predictions that proved less accurate than expected, notably regarding the re-conquest of Luzon during the 1944-45 Philippines campaign (James, 1993, p. 165). During the Inchon landing decision process, he repeatedly behaved in ways that closely resemble the ideal-typical pattern of the overconfidence model, a point to which we will return below. Yet, the Inchon landing was remarkably successful and soon became a classic example of the high-risk-high-payoff outflanking maneuver (Luttwak, 2001, pp. 116-117, 119). While the strategic consequences

of the Inchon-Seoul campaign, notably the Chinese intervention one month later, were mixed, even its critics recognize its “obvious operational brilliance” (Millett, 2010, p. 240). It led to the recapture of Seoul, the U.S. Eighth Army breaking out of the Pusan Perimeter, and the rapid retreat and collapse of the Korean People’s Army as an organized force (Collins, 2014, p. 262).

In this article, we examine the Inchon landing decision as a deviant case for the overconfidence model. We seek to complement and refine this model by identifying the conditions under which generals’ intuitions can be trusted. To do so, we bring in the recognition-primed decision model which claims that under specific circumstances - notably experience, an adequate environment regularity and an opportunity to learn - individuals are able to make quick and satisfactory decisions (Klein, 1999). By extension, the expert intuition of generals, rooted in a unique capacity for pattern matching and mental simulation—very similar to what Carl von Clausewitz called ‘*coup d’oeil*’—is an indispensable source of operational effectiveness. We argue that these conditions were present in the Inchon landing case and help explain both General MacArthur’s decision process and its successful outcome.

In the first section, we present the overconfidence and the recognition-primed decision models and specify our research design and case selection. In the second section we apply the two models to the Inchon landing decision. A concluding section summarizes the evidence for and against each model and suggests promising directions for further research on similar command decisions.

I / Approaching Intuitive Expertise in Command Decisions

§ 1. Bringing Cognitive Psychology Back In

We build upon and expand the work of scholars who have incorporated psychological insights in military studies. Ben-Shalom and Fox, for example, have shown the overall relevance of military psychology for the armed forces (Ben-Shalom & Fox, 2009. For an overview: Laurence & Mathews, 2012). Studies at the individual level have looked at issues such as soldiers' excitement motivation and the impact of work-family conflict on personal well-being (Brænder, 2016; Carvalho & Chambel, 2017). At the group level, Ben-Shalom, Lehrer, and Ben-Ari (2005) and Ben-Shalom and Benbenisty (2016), have examined the role of cohesion and coping styles on combat motivation. Hedlund (2016) demonstrated how different leadership styles and aspects of support can impede or enhance team learning in military exercises. Likewise, Kirkland, Bartone, and Marlowe (1993) showed how soldiers' psychological readiness was strongly associated with commanders who placed a high priority on morale (see also: Banks & Dhami, 2014).

The nexus between cognitive psychology and command decisions is less explored however. While there have been studies that looked at the impact of civil-military relations and decisions to use force (e.g. Ali, 2014; Schofield, 2000; Winger, 2016), far less have examined theater-level battlefield commanders and their operational decisions. The present study aims to fill this gap. How commanders actually make battlefield decisions is an essential, yet understudied, dimension of military effectiveness. The distinctive contribution of this article is to use fresh insights about human reasoning and decision-making to examine core issues of interest to both the scholarly community in military studies and the military profession, such as command decisions, military leadership, and strategic choices in war. Over the course of three decades, a cognitive revolution, rooted in cognitive psychology but

expanding in neuroscience and behavioral economics, has profoundly altered what we know about human reasoning and decision-making (Hafner-Burton, Hughes & Victor, 2013). Students of war have noted the core finding that people are far from perfectly rational often with a string of citations, but with a few exceptions, these perspectives have received little attention in strategic and military studies (Freedman, 2013, pp. 589–606; Payne, 2015). Our analysis builds upon this rapidly evolving field that has tremendous potential for renewing the study of command in war (Van Creveld, 1985; Keegan, 1987; Kagan, 2006; Ricks, 2012). We now turn to a presentation of the overconfidence and the recognition-primed decision models followed by our research design.

§ 2. The Overconfidence Model

The overconfidence model belongs to the heuristics and biases research tradition in cognitive psychology, initiated by Daniel Kahneman and Amos Tversky, which generally “favors a skeptical attitude toward expertise and expert judgment” (Kahneman, 2011, pp. 199–221; Kahneman & Klein, 2009, p. 518).² Positive illusions, the most robust and widely replicated phenomena in the psychology of judgment, lie at the heart of overconfidence (Kahneman, 2011, p. 518; Windschitl & O’Rourke Stuart, 2015). Research into human cognition traces positive illusions to specific traits common among ordinary people, notably the overestimation of oneself compared to others, the illusion of control over events, and over-optimistic expectations of the future (Taylor & Brown, 1988, p. 194). These traits are known to lead to over-confidence, believing you are better than you are in reality, and they are exacerbated among power holders (Fast, Sivanathan, Mayer, & Galinsky, 2012).

Cognitive psychology findings about overconfidence obtained using controlled experiments have showed time and again to be valid outside of the laboratory among professionals involved in legal, medical, managerial and political decisions (Hafner-Burton,

Hughes & Victor, 2013). Moreover, in addition to psychology experiments generally looking at the differences between control and treatment groups, overconfidence has also been repeatedly tested using evidence generated by particular individuals involved in war and foreign policy decisions, such as World War I, Vietnam, and Iraq (Altman, 2015; Johnson, 2004; Johnson et al., 2006; Kahneman & Renshon, 2007; Renshon, 2009; Yetiv, 2013).

Dominic Johnson's seminal work on overconfidence and the causes of war captures the core dimensions of the overconfidence model applied to strategic command decisions (Johnson, 2004; Johnson & Tierney, 2011).³ The central component of the model is that overconfidence increases the probability that Generals adopt flawed operational plans. The initial plan that they select tends to accentuate the positive and skew subsequent analyses toward over-optimism. Becoming partisan of the selected operational plan, they either neglect information altogether or seek information that supports the choice already made (Johnson & Tierney, 2011, p. 15). Generals, especially when they are senior and experienced, are likely to rely on analogies or salient examples from their own experience or from their interpretation of military history that may turn out to be misleading (Khong, 1992). They are also vulnerable to self-serving evaluations: they tend to overestimate their own attributes, such as leadership ability or intellect, as well as the capabilities of the force under their command and underestimate the attributes and capabilities of their adversary. Finally, generals tend to be more optimistic about the likely outcome of their chosen course of action and exhibit an overall more upbeat mood. The consequences for their command performance are detrimental: generals are likely to choose excessively risky, ultimately flawed, courses of action.

§ 3. The Recognition-Primed Decision Model

In contrast to the overconfidence model, the recognition-primed decision model belongs to the naturalistic decision-making research tradition which offers “a generally encouraging picture of expert performance” (Kahneman & Klein, 2009, p. 516; Klein, 1999, 2003, 2008, 2009; Klein, Calderwood, & Clinton-Cirocco, 2010; Lipshitz, Klein, Orasanu, & Salas, 2001, pp. 331–352).⁴ Originally sponsored by the U.S. Army Research Institute for the Behavioral and Social Sciences in the mid-1980s, this model has been used to analyze a wide range of military decisions and helped introduce intuitive decision-making into U.S. Army doctrine (Klein, 2008, p. 458; Ross, Klein, Thunholm, Schmitt & Baxter, 2004; Serfaty, MacMillan, Entin, & Entin, 1997. See also from a similar perspective: Duggan, 2005). We build upon Gary Klein’s model to examine command decisions at the operational level of war.

The recognition-primed decision model (RPD) is a descriptive model of how people faced with complex and stressful situations make quick, effective decisions. While the model has been tested in laboratory experiments, proponents of recognition-primed decision examine real-world situations and favor interviews with proficient decision-makers, field observations and realistically simulated environments. The central component of the model is that experienced decision-makers are generally able to quickly identify a satisfactory course of action. They do so because they recognize the situation at hand as a typical instance of a familiar prototype, such as a typical garage fire or search-and-rescue job, and proceed to take action (Klein, 1999, p. 24). Once they know that the situation is of ‘that’ particular type, they usually also identify the typical way to react to it. However, decision-makers may face a situation that is ambiguous, unfamiliar, or that has been initially misinterpreted (Phillips, Klein, & Sieck, 2004, p. 305). This is the second variation of the model: decision-makers need to diagnose the situation through story building. Once an accurate assessment of the

situation has been generated, the course of action becomes obvious. Finally, in some cases, decision-makers seek to evaluate the projected course of action suggested by the recognition match. This is the third variation of the model: decision makers use a mental simulation to imagine how the course of action would play out within the context of the current situation. The recognition-primed decision model has three main boundary conditions. First, recognition-based decisions are made by experts, who are understood as individuals who have achieved exceptional skill in one particular domain and are recognized as such by their peers (Klein, 1999, pp. 147–175; Phillips et al., 2004, p. 299). Second, the model is more likely to hold when decision-makers have a reasonable experience to draw on. Third, the model is relevant in situations of high stakes in which decision-makers are under time pressure and face uncertainty, unstable conditions, and ill-defined goals. While the RPD model ideal-typically envisions success of the decision making process, it recognizes that mental simulations can fail. Decision-makers can become too confident in the mental simulations that they construct. Gary Klein, also acknowledges that when the situation is too complex, i.e. when too many factors interact with each other, decision-makers may have trouble constructing mental simulations in the first place. In short, the RPD model recognizes that poor decisions exist and generally considers that they are due to factors such as a lack of experience.

Applied to the Inchon landing decision, the recognition-primed decision model draws our attention to three central characteristics. First, General MacArthur would rely on his World War II experience of amphibious operations conducted under his command to make a rapid decision and he would find his first option to be satisfactory. Second, his quick pattern recognition would allow him to determine what intelligence was genuinely relevant and avoid information overload. Third, he would use relevant analogies to facilitate problem-solving and suggest options.

§ 4. Deviant Case Study and Singular Causal Analysis: Research Design

Our analytic goal in this paper is not to establish covariance but to develop a singular causal analysis and we adopt a model-theoretic approach to scientific inference (Jackson, 2011, pp. 146-155; Clarke & Primo, 2012, pp. 52-77). We use the overconfidence and recognition-primed decision models in combination to help comprehend what happened in a particular case: General MacArthur's decision to land at Inchon and its immediate operational consequences. These two models are descriptive, not prescriptive. They do not seek to prescribe methods for making optimal decisions but are concerned with the bounded ways in which decisions are actually made (Klein, 1999, p. 104).⁵ Through process tracing, we follow the distinct empirical "trails" suggested by the two models and assess the degree to which they prove useful, i.e. reveals intriguing and relevant things about that particular decision (George & Bennett, 2005; Vennesson & Wiesner, 2014).

We select General MacArthur's Inchon landing decision for three reasons. First, the case deviates from the causal pattern expected by the overconfidence model. Overconfidence seemingly played a significant role in the decision making process and yet, contrary to what the overconfidence model ideal-typically envisions, the outcome of the operation was successful.⁶ The purpose of our deviant case study is to help establish scope conditions for the overconfidence model by combining it with the recognition-primed decision model in order to show why the case of the Inchon landing decision does not exhibit the expected outcome (George & Bennett, 2005, pp. 215–216; Gerring, 2008, pp. 8–9. See also: Gerring, 2006; 2007; Sil & Katzenstein, 2010).

Second, while Gary Klein (2003, p. 63) briefly mentions the Inchon landing as an instance that shows that intuitive decisions work, at first sight it does not appear as an easy case for the recognition-primed decision model. The decision-making process took two and a

half months, far longer than the typical recognitional decision that can take several days or be as short as a minute. Most importantly, national security expert Barry Watts has argued that the cognitive processes identified by the model simply do not extend to the challenges of operational art (Watts, 2008, pp. 33-42). Rooted in the study of firefighters' decisions, the model is fundamentally about do-or-die, high stress tactical situations involving, for example, medical-response teams, tank platoon leaders, commanders of Aegis cruisers, or intensive-care nurses. By contrast, designing operations at the theater level seemingly requires other skills such as framing conceptually a problem, assessing the strengths and weaknesses on both sides with an eye toward identifying exploitable asymmetries, and comparing options. A greater reliance on explicit reasoning and conscious oversight of intuition is therefore required which, according to Watts, is not well captured by the model (Watts, 2008). Moreover, General MacArthur repeatedly had to justify his choices to the Joint Chiefs of Staff as higher authorities looked for evidence that alternatives were considered. The decision process was also rife with conflicts among different actors and organizations holding different priorities that had to be somewhat accommodated and reconciled. Gary Klein acknowledges that when such justifications and conflicts are a significant part of the process, decision-makers are less likely to rely on the recognition-primed strategy (Klein, 1999, pp. 95-96). In short, the Inchon landing appears initially as a hard case for the recognition-primed decision model. Third, case-based research on strategic command decision-processes is data-demanding and there is a rich, accessible, documentary record as well as a vast and diverse historiography on the Inchon landing (for a useful overview, see: Pearlman, 2014). Choosing a more recent operation is generally not an option as the kind of fine-grained record necessary to assess models of judgement and decision is simply not available or too partial.

It is important to note that before embarking on the research, we did not know exactly when and how General MacArthur made his Inchon landing decision. We were, of course,

broadly familiar with the operation and its aftermath but not with the timing and specific details of the decision making process. In fact, these fine grain aspects of the Inchon landing decision are generally not very well known outside of a fairly limited circle of specialists. We initially looked for several – as many as three – distinct decision points. Only slowly did we realize that MacArthur made his decision early on and that there was only one decision point, as the recognition-primed decision model ideal-typically envisions. It is through the application of the recognition-primed decision model to the case, when we used it to select and organize the empirical material into a coherent story, that we *discovered* that the degree of similarity between the model and the case proved useful to adequately explain the observed outcome.

II / Overconfidence, Pattern Matching and the Inchon Landing Decision

§ 1. Deciding and Planning the Amphibious Landing at Inchon

On the 25th of June 1950, the Korean People's Army (KPA) launched a surprise attack on South Korea (Millett, 2010. See also, Matray & Boose, Eds., 2014).⁷ The coast-to-coast coordinated advance of the KPA combined forces, including tanks and heavy artillery, faced a relatively unprepared and ill-equipped Republic of Korea (ROK) army. Despite a series of costly rearguard action and U.S. air support, American and South Korean forces were continuously pushed back down the Korean peninsula. By September, the United Nations (UN) Command was confined to a small perimeter around the city of Pusan in southeast Korea. The decision making of the Inchon landing can be divided into three phases: the initial conception, planning for, and ultimate cancellation of operation *Bluehearts* (June 29–July 10), the planning for different options and the choice of operation *Chromite* (July 11–August 12) and the final plans and preparations (August 13–September 15) (Appleman, 1961, pp. 488-502; Schnabel, 1972, pp. 139–154; Heinl, 1979, pp. 14–64; James, 1993, pp. 157–178;

Millett, 2010, pp. 239–256. For a useful overview of the historiography of the Inchon landing: Pearlman, 2014).

While the exact moment of the decision is unknown, General MacArthur and his staff probably formulated the initial idea of an amphibious assault at Inchon over the course of one to three days, between June 29, the day he first visited the battle-front and was directly exposed to the rapidly evolving operations, and July 1 or 2 (July 3 at the latest) (Boose, 2008, pp. 118-119; Heintz, 1979). The planning of operation *Bluehearts* initially scheduled on July 22 started immediately, but on July 10 MacArthur decided to cancel it. The U.S. and Korean forces had failed to halt the enemy and the 1st Cavalry Division had to be committed in the central front to slow the KPA drive south, which made it impossible to implement the landing. While his initial plan was cancelled, General MacArthur's resolve for an amphibious operation at Inchon remained intact. From July 11 until August 12, detailed plans were drawn up for an amphibious envelopment in September with a primary emphasis on Inchon as the assault site, but with alternate plans prepared as well. On August 12, he issued Operation Plan 100-B (code named *Chromite*) setting the target date of September 15 and defining the strategic concept that would be put into effect one month later without substantive change (Schnabel, 1972, p. 146).

Finally, from August 13 until September 15, the final planning and preparation was characterized by a full discussion of major objections to the plans which culminated in a thorough examination of whether to land at all, where, and when during the full-scale briefing on August 23 at MacArthur's Headquarters in Tokyo. The Joint Chiefs of Staff (JCS) notified him on August 28 that they approved his plans and on August 30 he issued his operations orders. On September 7, reacting to North Korean gains along the Pusan Perimeter, the JCS called for a new estimate and a reconsideration of the operation. Following MacArthur's

vigorous reply, the JCS acquiesced, obtained President Truman's approval, and on September 8, gave him the final green light for the landing that took place as planned on September 15.

§ 2. The Inchon landing success: a puzzle for the overconfidence model

At first sight, the Inchon landing decision is a most likely case for the overconfidence model. The initial plan selected by General MacArthur was the riskiest, it accentuated the positive and skewed subsequent analyses toward optimism despite strong dissenting views. Supporters and skeptics alike noted his overconfident judgments throughout the planning process. For example, his Chief of Staff and later X Corps commander General Almond, a staunch supporter, pointed out, "From the beginning, General MacArthur discarded every contrary proposal to the invasion at Inchon. He was supremely confident of success." (quoted in Karig, Cagle, & Manson, 1952, p. 166. On the gate-keeping role of General Almond, see: Lynch, 2014, pp. 286-288). His idea of Inchon as landing site faced a barrage of serious reservations from expert planners, notably about navigating the potentially mined narrow port channel at the height of North Asia typhoon season, coping with the severe tidal variation (average rise and fall was 29 feet and tides could go as high as 36 feet), landing in the middle of a built up area, draining men and materiel from the dangerously pressed Eighth Army in the Pusan Perimeter, and about the linkup between the landing force and the Eighth Army that, in the Nakdong area, would be too far away from the landing site (James, 1993, p. 165). MacArthur's self-confidence led him to assume that the landing force would be able to avoid or easily overcome these potential hurdles. Following the August 23 full briefing on the landing, he acknowledged the Navy planners' objections but responded to their specific concerns with a broad expression of confidence. He casually noted that the technical issues raised were not insuperable and simply added, "The Navy has never let me down in the past, and it will not let me down this time" (quoted in: Heinl, 1979, p. 42).

General MacArthur also overestimated his own side's attributes and capabilities and underestimated the attributes and capabilities of the KPA and its leadership. For example, he was adamant that General Walker's troops in the Pusan Perimeter would hold. In reality, however, reports from the Perimeter were grim and suggested that the Inchon plan would increase the danger of the UN forces being thrown out of Korea. General MacArthur also overestimated his allies, notably the South Korean civilian volunteers. On August 9, he ordered the implementation of the Korean Augmentation to the U.S. Army (KATUSA) program with the ambitious target of 30,000 to 40,000 South Korean men to be apportioned at the rate of 8,300 men per division (Kim, 2014, pp. 290–291). The rapid and large flow of KATUSA soldiers was directed to the 7th Division in preparation for the Inchon landing. While these soldiers proved to be valuable later in the war, in the early months their lack of training, language barriers, and cultural differences created serious challenges, especially in combat situations, and there were notably high desertion rates. MacArthur was also certain that the North Koreans and the Chinese would not anticipate an attack at Inchon and that the port city would be undefended. However, during the August 23 final conference, Navy planners pointedly noted that it would be overoptimistic to hope for a strategic surprise at Inchon since the enemy was also aware that only a few days in each autumn month offered a tidal range sufficient to float the landing craft and supply ships over the mud flats of the harbor (Montross & Canzona, 1955, p. 45). In fact, the Chinese had anticipated the possibility of a U.S. amphibious attack on Korea and had identified Inchon as the landing site (Jian, 1994, pp. 147–149; Zhang, 1995, p. 72).

Finally, General MacArthur was ambitious in his assessment of what the amphibious assault would achieve. Landing successfully, he argued, would “shorten the war, save unnumbered casualties, and possibly obviate a winter campaign” (Cagle & Manson, 1957, p. 77). In his eyes, the Inchon operation would not just temporarily repulse the invaders, but

would destroy them. The “ultimate aim of his enveloping movement would be to ‘compose and unite Korea’” (quoted in Meilinger, 1989, p. 165). He also thought that the operation would take a short time of about two or three weeks (Masuda, 2012, p. 258). On August 22, he assured General Smith that the landing would be “decisive” and that the war would end in a month after the assault (Schnabel, 1972, p. 148). He “insisted that the North Koreans had committed all of their troops against the Pusan Perimeter” and was sure that the Marines would meet no heavy opposition at Inchon (Schnabel, 1972, p. 148).

Under these circumstances, the overconfidence model would ideal-typically expect a damaging outcome, and yet the Inchon landing proved to be a spectacular operational success. Proponents of the overconfidence model could, of course, claim that General MacArthur was simply lucky. The Chairman of the Joint Chiefs of Staff General Omar Bradley thought so as he described the victory at the time as a “military miracle”, and called it in his memoirs “the luckiest military operation in history” (Bradley, 1983, p. 556) This surprisingly swift and major victory could be explained by any number of coincidental factors unrelated to the quality of the decision making process at the command level, such as the lack of timely response of North Korean forces, the change of path of Typhoon Kezia away from the attacking fleet a few days before the landing, or the remarkable competence of the planners and forces on the ground. Proponents of the overconfidence model could also point out that General MacArthur’s success proved transient. Only a few weeks later he felt equally confident to order his forces to launch a bold offensive towards the Yalu River but this time faced a major defeat when Chinese troops counterattacked. As Daniel Kahneman (2011) points out, hindsight and the outcome bias:

(...) bring undeserved rewards to irresponsible risk seekers, such as a general or an entrepreneur who took a crazy gamble and won. Leaders who have been lucky are never punished for having taken too much risk. Instead, they are believed to

have had the flair and foresight to anticipate success, and the sensible people who doubted them are seen in hindsight as mediocre, timid, and weak. (p. 204)

We agree that the quality of a decision should be assessed by whether the process was sound, not only by whether its outcome was good or bad. We also acknowledge that in any war decision what Carl von Clausewitz called the ‘play of chance and probability’ is likely to play a role. In the Inchon landing decision, however, we suggest that specific mechanisms were at work that help explain both key aspects of the decision making process as well as the outcome.

§ 3. Experience, Environment Regularity and Operational Intuition: the Recognition-Primed Decision Model and the Inchon Landing Decision

Our analytic narrative based on the recognition-primed decision model is organized as follows. We first show that General MacArthur made a rapid decision, found the first option he selected to be satisfactory and relied on mental simulations. We then trace back this recognition-based decision to three key conditions identified by the model: experience, regularity in the task-domain and opportunity for lesson learning. We finally discuss the difference between his expertise and the (relative) novices, the ways in which he avoided information overload and his use of the Battle for Quebec analogy.

Rapid decision, satisfactory first option and mental simulations

As the recognition-primed decision model expects, General MacArthur made his initial Inchon landing decision quickly, between two to three days after he personally assessed the situation on the ground for the first time after the beginning of the North Korean offensive (Boose, 2008, pp. 118–120). Throughout those few days, there is no indication that he consciously compared options, although Kunsan located further south was considered as a

landing site at the July 4 briefing. His initial plan was to land at Inchon on July 22, only 18 days later. Moreover, once he identified the landing at Inchon as his first option, he considered that option as satisfactory throughout the entire planning process.

General MacArthur used a mental simulation to assess the course of action he had chosen, anticipating that the advance of the enemy would extend its supply line and make it vulnerable.

He felt that the enemy had neglected his rear, and was hanging on the end of a rope which would fall if cut at Inchon. He felt the enemy had neglected to cover the vital portions of his communications, that his great weakness were his exposed life lines, his lack of any defense in reserve, and the absence of any power of recuperation. (General Almond, quoted in: Karig et al., 1952, p. 66)

In his July 7 message to the Joint Chiefs of Staff, MacArthur explained that once the enemy advance was halted, “it will be my purpose fully to exploit our air and sea control and, by amphibious maneuver, strike behind his mass of ground forces” (quoted in Schnabel & Watson, 1998, p. 75). Mental simulations helped him anticipate both the potential outcome of the landing as well as the continuation of the course of action around the Pusan Perimeter. He saw the landing as an opportunity to wrest the initiative from the enemy to strike a “decisive blow” (quoted in Schnabel & Watson, 1998, p. 89). He pictured a new situation in which:

The envelopment from the north will instantly relieve the pressure on the south perimeter... The seizure of the heart of the enemy distributing system in the Seoul area will completely dislocate the logistical supply of his forces now operating in South Korea and therefore will ultimately result in their disintegration. This indeed is the primary purpose of the movement. Caught between our northern and southern forces, both of which are completely self-sustaining because of our absolute air and naval supremacy, the enemy cannot fail

to be ultimately shattered through disruption of his logistical support and our combined combat activities. (quoted in Appleman, 1961, p. 495)

Such mental simulations helped him specify the initial state (stalemate) and the terminal state (North Korean forces shattered by the disruption of their logistical support and the combat pressure of UN forces) and identify three main causal factors: the surprised caused by the landing in a reputedly difficult location, X Corps seizing control of the Inchon area, and General Walker's Eighth Army pushing out of the Pusan Perimeter. He also addressed a potential landing at Kunsan, 100 miles south of Inchon, favored by General J. Lawton Collins, Chief of Staff of the Army and Admiral Forrest Sherman, the Chief of Naval Operations. He acknowledged that it would potentially be easier, but thought its results would be "ineffective and indecisive" (Heinl, 1979, p. 41). A landing in Kunsan, he maintained, would be unable to sever the enemy's supply line and destroy his army while a frontal attack out of the perimeter "would cost a hundred thousand casualties" (Heinl, 1979, p. 41). If there were no landing at Inchon, he argued, a bitter winter campaign would become necessary (Appleman, 1961, p. 493).

Experience, environment regularity and learning

General MacArthur was the kind of experienced decision-maker who, according to the model, is more likely to use intuition successfully. In addition to his broad and diverse experience of war acquired during an exceptionally fast and brilliant career, at age 70 he was considered among his peer military leaders as a "proven, fighting practitioner of war at all levels of command" (Heinl, 1979, p. 11; James, 1993, p. 41).⁸ As his biographer, historian Clayton James (1993), notes, "It was not unusual for high-ranking officers of that era, whether favorably or unfavorably disposed toward him personally, to describe him as "brilliant" or "a strategic genius." (pp. 30, 41)

More specifically, General MacArthur's skilled intuition about amphibious assaults developed from 1942 until 1945 when he was Supreme Commander Southwest Pacific Area, encompassing Australia, the Netherlands East Indies, the Philippines, New Guinea, and the northwestern Solomon Islands (James, 1975). He oversaw the launch of fifty-six amphibious assaults, both opposed and unopposed, all successful and he understood their inner workings well (James, 1975; 1993, p. 35). During that time, his task environment regarding amphibious operations was sufficiently structured according to understandable principles and regularities. The specific geographical and operational characteristics of the Southwest Pacific theater—distinct from the Mediterranean, the European, as well as the Central Pacific theaters—regularly provided him valid cues about the possibility of launching successful surprise landings against undefended or lightly held areas (James, 1975, pp. 375-402; Boose, 2008, pp. 54–56). The feedback he received was both rapid and fairly unequivocal in the form of victories and swift progress and he had ample opportunities to learn throughout the war.

In 1950, General MacArthur's experience of amphibious warfare was still fresh and, since the basic landing technologies had remained unchanged, it could still generate useful predictive cues. Moreover, this pattern of experiences was not merely stored in his own memory; he also translated it into institutional practices. The first U.S. post-World War II amphibious exercise took place within his command in 1946, and, in 1949, he initiated an ambitious amphibious joint training program that included regimental combat team-level landing exercises to be conducted by July 1950, which would culminate in a division-size landing exercise (Boose, 2008, pp. 67, 81–83). As he pointed out, amphibious training had “unusual significance and importance in the Far East Command since the nature of troop dispositions and geography of the theater are such that a continuous requirement exists for the training of troops in over-water movement” (quoted in Boose, 2008, p. 82). During the planning of the Inchon landing, General MacArthur referred to this pattern of previous

amphibious operations. On July 10, he explained to Marine Corps General Shepherd that launching an amphibious assault to cut supply lines in the enemy's rear reminded him of the ship-to-shore landings on Japanese-held islands during World War II in the Pacific (Montross & Canzona, 1955, p. 10). His reliance on this pattern of amphibious operations is also corroborated by the fact that Inchon was not the only amphibious assault he had in mind. Just like in the Southwest Pacific Area where the forces under his command waged, at times, several operations simultaneously, he envisioned a parallel landing and a double envelopment with one landing at Inchon in the west and another at Wonsan in the east (Boose, 2008, p. 155).

Detecting a pattern: the expert-novice difference

General MacArthur recognized the prospect of an amphibious landing at Inchon as a typical instance of a general prototype of operational situations that he had repeatedly experienced throughout his command in the Southwest Pacific. The lightly defended rear of an overextended enemy force was vulnerable to an amphibious landing designed to cut its line of communication. The necessity of flanking movements along the coast in shallow and constricted waters characterized both the Southwest Pacific theater and the vicinity of Inchon. Moreover, he became used to a particular type of planning for these numerous, fast-paced amphibious operations in which it was routine to organize and pull together the forces hastily, at times for simultaneous operations (Boose, 2008, p. 55). For example, during the New Guinea campaign, he was driven by his objective to move as rapidly as possible, and his operational flexibility and risk-taking originated in this perceived need for speed (Taaffe, 2001, pp. 159–165). Finally, the expert-novice comparison also illustrates an important insight of the recognition-primed decision model. There was a noticeable difference in abilities between General MacArthur's capacity to detect patterns and typicality and Naval

and Marine planners who, while experts in their specific technical domains (such as meteorology or tide patterns), were novices in the command of a corps or theater forces and had difficulties forming the same situation awareness at the operational level of war. While alarmed by the risk, these officers were quite impressed by the boldness of MacArthur's sensemaking. They realized that:

At a time when he could send only a battalion-size force to the aid of the shattered ROK army, his mind had soared over obstacles and deficiencies to the concept of an amphibious operation designed to end the war at a stroke. It was an idea that fired the imagination. (Montross & Canzona, 1955, p. 6)

In short, as expected by the model, expert decision-makers have the capacity to see things that novices cannot detect (Klein, 1999, pp. 147–148).

Avoiding information overload

The recognition-primed decision model also helps explain how General MacArthur handled intelligence. In the model, the most common problem with information is too much rather than too little (Klein, 2003, pp. 248-269). More than the absence of data or a biased data selection as in the overconfidence model, the inadequate framing of data is usually the main source of uncertainty. For Gary Klein, proficient decision-makers are generally able to quickly determine what information is genuinely relevant and avoid information overload (Klein, 1999, p. 154). As soon as Inchon was selected as the preferred landing site on July 2 or 3, General MacArthur directed his main commanders to intensify visual and photographic reconnaissance of Inchon city “with particular regard to weapons emplacements in the harbor area” and “specific interest” in the gun positions that controlled the channel entrance to the harbor (Knight, 2006, p. 148). In addition, he emphasized his interest in any information regarding enemy concentration of forces in the “Inchon-Kimpo-Seoul area” (Knight, 2006, p.

148). He also sought additional information by relying on a clandestine joint special operation, the deployment of Lieutenant Eugene Clark and South Korean officers to the Flying Fish Channel in Inchon Harbor, to liaise with the South Korean resistance and gather important intelligence on the defenses of the harbor and the port city and monitor potential reinforcements. On August 10, Major General Charles Willoughby, MacArthur's Chief of Intelligence, put into place a Theater Strategic Reconnaissance Plan designed to monitor all key ground and air avenues of approach from the Manchurian border and throughout the Korean peninsula, as well as the key sea lanes between Japan and the Soviet Union, Japan and Korea, and around the main west coast ports of Korea (Knight 2006, pp. 163, 167–168). In short, as expected by the RPD model, once General MacArthur recognized the situation, he also knew the relevant cues that needed to be monitored. For such a “relational maneuver” - in which the aim is not to destroy physically the enemy but to incapacitate through a systemic disruption (Luttwak, 2001, p. 115) -, an accurate identification of enemy weakness in the area of operation was crucial. His focused and thorough intelligence gathering helped clarify the situation further.

Useful analogical reasoning

Finally, in accordance with the mechanisms highlighted by the recognition-primed model, General MacArthur used an analogy. In the recognition-primed decision model, experienced decision-makers' turn to analogies for guidance when confronted with novel problems usually works smoothly (Klein, 1999, p. 197. For a more skeptical view, see: Khong, 1992). If they can find a plausible analogy with which they feel comfortable, they can use it to good effect because it embodies the full set of factors involved even the ones they, and others, cannot yet identify (Klein, 1999, p. 204). For Gary Klein (1999), this is similar to

an informal experiment: “using a prior case with a known outcome and a semi-known set of causes to make predictions about a new case” (p. 204).

At a critical juncture in the decision-making process, General MacArthur referred to the 1759 battle of Quebec and particularly what he understood as Major General James Wolfe’s decision, against the advice of his brigadier generals, to land at the Anse du Foulon, a little cove on the north shore of the St. Lawrence river bordered by high cliffs and dominated by an artillery battery. While the records of MacArthur’s August 23 speech differ, they all agree that he explicitly used that analogy. One of these records presents his account as follows:

The very arguments you have made as to the impracticabilities involved will tend to ensure for me the element of surprise. For the enemy commander will reason that no one would be so brash as to make such an attempt. Surprise is the most vital element for success in war. As an example, the Marquis de Montcalm believed in 1759 that it was impossible for an armed force to scale the precipitous river banks south of the then walled city of Quebec, and therefore concentrated his formidable defenses along the more vulnerable banks north of the city. But General James Wolfe and a small force did indeed come up the St. Lawrence River and scale those heights. On the Plains of Abraham, Wolfe won a stunning victory that was made possible almost entirely by surprise. Thus he captured Quebec and in effect ended the French and Indian War. Like Montcalm, the North Koreans would regard an Inchon landing as impossible. Like Wolfe, I could take them by surprise. (quoted in Duffy & Carpenter, 1997, p. 175)

After the landing, he told his friend journalist Bascom Timmons:

I imagine that Wolfe thought to himself, if his brigadiers and his admiral believed his plan unfeasible, then General Montcalm must have reasoned that Wolfe would

not try it. And if able American officers think Inchon impractical, doubtless the Communists do, too. (quoted in: Timmons, 1950, p. 15)

General MacArthur was knowledgeable about military history (James, 1970, pp. 130–134). He could have learned about the Battle of Quebec from the work of renowned nineteenth century historian Francis Parkman who wrote extensively about the battles for North America and specifically about the generalship of Wolfe and Montcalm. The inventory of his pre-World War II library, destroyed during the Battle for Manila, shows that he owned the 13 volumes of Parkman's works and his post-1945 library includes Parkman's *The Conspiracy of Pontiac and the Indian War* which has a section on the Battle of Quebec.⁹ This analogy reflected the full set of causal factors, even the ones he could not yet identify—such as the North Koreans' assessment of the plausibility of the landing—and, most importantly, the outcome he envisioned for this operation: a decisive victory that wins the war. By relying on it, MacArthur went beyond the information available and allowed the default value of the analogy substitute for missing information. While the analogy was only partially successful, as the Inchon landing did not win the Korean War, it helped him to clarify his thinking and convince the planners and the Joint Chiefs of Staff that it was a sound decision from an operational standpoint.

Conclusion

In the analysis of General MacArthur's decision to land at Inchon the overconfidence model proves useful but incomplete. Our within-case analysis guided by the recognition-primed decision model highlights that his operational intuition could be trusted under specific conditions: he was an experienced theater commander who oversaw numerous amphibious landings during World War II in the Southwest Pacific Area, the environment in which these amphibious landings took place was sufficiently valid to provide relevant cues, and he had an

adequate opportunity to learn and practice the skill. In such a context, the recognition-primed decision model generally considers that the decision-maker's ability to identify favorable options improves and, we contend, this was indeed the case for the Inchon landing decision. We do not claim that these factors amount to a sort of magic formula for operational success. The behavior and (mis)perceptions predicted by the overconfidence model had a continuing influence on General MacArthur and a full explanation of the outcome of the Inchon landing would also require a careful examination of decision-making on the North Korean side for which a comparable empirical record is largely missing.

While both models display some explanatory power, they do not shed light on the same aspects of the decision-making process and the effects of their mechanisms are sometimes counterintuitive. The overconfidence model does not provide much help in explaining specifically how the chosen course of action was arrived at. However, it certainly points to important characteristics of MacArthur's (mis)perceptions and behavior. Our case study shows, however, that the effects of overconfidence are not necessarily, or exclusively, negative. In the planning for Inchon, General MacArthur's displays of extreme confidence increased his persuasiveness and facilitated collective action. He was able to win over many of his naysayers and skeptics both in the theater and in Washington and this was crucial notably to build up his force, which he could not do alone. The overconfidence model also helps to highlight some limits of the recognition-primed decision model. While MacArthur had been initially successful with the Inchon landing, he became even more confident in his assessments of the situation in Korea and his judgments were less questioned by his own staff or by the Joint Chiefs of Staff which led to gross miscalculations in November 1950 when Chinese troops intervened and inflicted a severe defeat to U.S. forces.

The recognition-primed decision model proves useful to analyze how General MacArthur arrived at his selected course of action. He recognized a pattern - amphibious

operations against lightly defended coast to turn an adversary - and swiftly chose a satisfactory response. The speed at which he arrived at his decision highlights one of the model's contributions: the significance of expert intuition and quick decision-making in warfare. This insight resonates with strategic wisdom: time is a precious resource to avoid operational losses and allow one to maximize opportunities. The model also acknowledges the contingency of war decisions. If the Inchon landing had been contemplated by General Bradley or General Collins, for example, the experience of amphibious landings that they would have tapped on would have been drastically different from General MacArthur. Both had been involved in the European theater in World War II and had been privy to the discussions leading to the disastrous Anzio landing and they were also well aware of the costs of the Normandy landing. It is unlikely that they would have considered an amphibious operation at Inchon at all. Finally, the ability of these models, especially here the recognition-primed decision model, to link important empirical and theoretical issues suggests that we tap a rich vein of inquiry of central relevance to scholars and practitioners alike. We cannot sensibly assess the impact of Generals on military effectiveness until we understand how they form their judgments and make their decisions.

References

- Ali, Z. (2014). Contradiction of concordance theory: Failure to understand military intervention in Pakistan. *Armed Forces & Society*, 40(3), 544-567.
- Altman, D. (2015). The strategist's curse: A theory of false optimism as a cause of war. *Security Studies*, 24(2), 284-315.
- Appleman, R. E. (1961). *South to the Nakdong, north to the Yalu (June – November 1950)*. Washington, DC: Center of Military History, United States Army.
- Banks, A. P., & Dhami, M. K. (2014). Normative and Descriptive Models of Military Decisions to Deploy Precision Strike Capabilities. *Military Psychology*, 26(1), 33-43.
- Ben-Shalom, U., & Benbenisty, Y. (2016). Coping styles and combat motivation during operations: An IDF case study. *Armed Forces & Society*, 42(4), 655-674.
- Ben-Shalom, U., & Fox, S. (2009). Military psychology in the Israel Defense Forces: A perspective of continuity and change. *Armed Forces & Society*, 36(1), 103-119.
- Ben-Shalom, U., Lehrer, Z., & Ben-Ari, E. (2005). Cohesion during military operations: A field study on combat units in the Al-Aqsa Intifada. *Armed Forces & Society*, 32(1), 63-79.
- Brænder, M. (2016). Adrenalin junkies: Why soldiers return from war wanting more. *Armed Forces & Society*, 42(1), 3-25.
- Boose, D. W., Jr. (2008). *Over the beach. US Army amphibious operations in the Korean War*. Fort Leavenworth, Kansas: Combat Studies Institute Press, U.S. Army Combined Arms Center.
- Bradley, O. N. (with Blair C.) (1983). *A General's life*. New York: Simon & Schuster.
- Cagle, M. W., & Manson, F. A. (1957). *The sea war in Korea*. Annapolis: United States Naval Institute.
- Carvalho, V. S., & Chambel, M. J. (2017). Work-family conflict and enrichment mediates the relationship between job characteristics and well-being at work with Portuguese Marine Corps. *Armed Forces & Society*, doi: 10.1177/0095327X17698121
- Clarke, K. A. & Primo, D. M. (2012). *A model discipline: political science and the logic of representation*. Oxford: Oxford University Press.

- Collier, D., Brady, H.E., & Seawright, J. (2010). Sources of leverage in causal inference: Toward an alternative view of methodology. In: H.E. Brady & D. Collier (Eds.), *Rethinking social inquiry: Diverse tools, shared standards* (2nd ed.). Lanham: Rowman & Littlefield.
- Collins, R. M. (2014). Korean People's Army. In J. I. Matray & D. W. Boose Jr. (Eds.), *The Ashgate research companion to the Korean War* (pp. 255–267). Farnham: Ashgate.
- Duffy, B. K., & Carpenter, R. H. (1997). *Douglas MacArthur: Warrior as wordsmith*. Westport, Connecticut: Greenwood Press.
- Duggan, W. (2005). *Coup d'oeil: strategic intuition in army planning*. Carlisle, PA: Strategic Studies Institute, U.S. Army War College.
- Fast, N., Sivanathan, N., Mayer, N., & Galinsky, A. (2012). Power and overconfident decision-making. *Organizational Behavior and Human Decision Processes*, 117, 249-260. doi:10.1016/j.obhdp.2011.11.009
- Freedman, L. (2013). *Strategy: A history*. Oxford: Oxford University Press.
- George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Harvard: MIT Press.
- Gerring, J. (2006). Single-outcome studies. A methodological primer. *International Sociology*, 21(5), 707-734.
- Gerring, J. (2007). Is there a (viable) crucial-case method? *Comparative Political Studies*, 40(3), 231-253.
- Gerring, J. (2008). Case selection for case-study analysis: Qualitative and quantitative techniques. In J. M. Box-Steffensmeier, H. E. Brady, & D. Collier (Eds.), *The Oxford handbook of political methodology* (pp. 645-684). Oxford: Oxford University Press.
- Gilovich, T., Griffin, D., & Kahneman, D. (Eds.) (2002). *Heuristics and biases: The psychology of intuitive judgment*. Cambridge: Cambridge University Press.
- Hafner-Burton, E. M., Hughes, D. A., & Victor, D. G. (2013). The cognitive revolution and the political psychology of elite decision making. *Perspectives on Politics*, 11(2), 368-386.

- Hedlund, E. (2016). Team learning and leadership in multinational military staff exercises. *Armed Forces & Society*, doi: 10.1177/0095327X16667088
- Heinl, R. D., Jr. (1979 - 1st ed. 1968). *Victory at high tide: The Inchon-Seoul campaign* (3rd ed.). Annapolis, Maryland: The Nautical & Aviation Publishing Company of America.
- Jackson, P.T. (2011). *The conduct of inquiry in international relations. Philosophy of science and its implications for the study of world politics*. New York: Routledge.
- James, D. C. (1970). *The Years of MacArthur, Volume 1, 1880-1941*. New York: Houghton Mifflin.
- James, D. C. (1975). *The Years of MacArthur, Volume 2, 1941-1945*. New York: Houghton Mifflin.
- James, D. C. (1985). *The Years of MacArthur, Volume 3: Triumph and Disaster, 1945-1964*. New York: Houghton Mifflin.
- James, D. C., with Wells, A. S. (1993). *Refighting the last war: Command and crisis in Korea, 1950-1953*. New York: The Free Press.
- Jian, C. (1994). *China's road to the Korean War: The making of the Sino-American confrontation*. New York: Colombia University Press.
- Johnson, D. D. P. (2004). *Overconfidence and war: The havoc and glory of positive illusions*. Cambridge, Massachusetts: Harvard University Press.
- Johnson, D., & Tierney, D. (2011). The rubicon theory of war. How the path to conflict reaches the point of no return. *International Security*, 36(1), 7-40.
- Johnson, D. D. P., McDermott, R., Barrett, E. S., Cowden, J., Wrangham, R., McIntyre, M. H., & Rosen, S. P. (2006). Overconfidence in wargames: Experimental evidence on expectations, aggression, gender, and testosterone. *Proceedings of the Royal Society of London (B)*, 273(1600), 2513-2520.
- Kagan, K. (2006). *The eye of command*. Ann Arbor: The University of Michigan Press.
- Kahneman, D. (2011). *Thinking fast and slow*. New York: Farrar, Straus and Giroux, LLC.
- Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist*, 64(6), 515-526. doi: 10.1037/a0016755

- Kahneman, D., & Renshon, J. (2007, January-February). Why hawks win. *Foreign Policy*, 158, 34-38.
- Karig, W., Cagle, M. W., & Manson, F. A. (1952). *Battle report: The war in Korea*. New York: Rinehart and Company, Inc.
- Keegan, J. (1987). *The mask of command*. New York: Viking.
- Kim, J. (2014). United Nations Command and Korean augmentation. In J. I. Matray & D. W. Boose Jr. (Eds.), *The Ashgate research companion to the Korean War* (pp. 283-296). Farnham: Ashgate.
- Kirkland, F. R., Bartone, P. T., & Marlowe, D. H. (1993). Commanders' priorities and psychological readiness. *Armed Forces & Society*, 19(4), 579-598.
- Khong Y. F. (1992). *Analogies at war. Korea, Munich, Dien Bien Phu, and the Vietnam decisions of 1965*. Princeton, N.J.: Princeton University Press.
- Klein, G. (1999). *Sources of power: How people make decisions*. Cambridge, Massachusetts: The MIT Press.
- Klein, G. (2003). *Intuition at work: Why developing your gut instincts will make you better at what you do*. New York: Currency-Doubleday.
- Klein, G. (2008). Naturalistic decision making. *Human Factors*, 50(3), 456-460.
- Klein, G. (2009). *Streetlights and shadows: Searching for the keys to adaptive decision making*. Cambridge, Massachusetts: The MIT Press.
- Klein, G., Calderwood, R., & Clinton-Cirocco, A. (2010). Rapid decision making on the fire ground: The original study plus a postscript. *Journal of Cognitive Engineering and Decision Making*, 4(3), 186-209. doi:10.1518/155534310X12844000801203
- Knight, P. G. (2006). *"MacArthur's eyes": Reassessing military intelligence operations in the forgotten war, June 1950-April 1951* (Doctoral dissertation). Retrieved from https://etd.ohiolink.edu/!etd.send_file?accession=osu1148503207&disposition=inline
- Laurence, J. H., & Matthews, M. D. (Eds.) (2012). *The Oxford handbook of military psychology*. Oxford: Oxford University Press.

- Lipshitz, R., Klein, G., Orasanu, J., & Salas, E. (2001). Taking stock of naturalistic decision making. *Journal of Behavioral Decision Making*, 14(5), 331-352. doi: 10.1002/bdm.381
- Luttwak, E. N. (2001 - 1st ed. 1987). *Strategy: the logic of war and peace*. Cambridge, Mass.: The Belknap Press of Harvard University Press.
- Lynch, M. E. (2014). *"Sic' em Ned": Edward M. Almond and his army, 1916-1953*. (Doctoral dissertation, Temple University). Retrieved from ProQuest database.
- Masuda, H. (2012). *MacArthur in Asia: The General and his staff in the Philippines, Japan and Korea*. Ithaca, New York: Cornell University Press.
- Matray, J. I., & Boose D. W., Jr. (Eds.) (2014). *The Ashgate research companion to the Korean War*. Farnham: Ashgate.
- Meilinger, P. S. (1989). *Hoyt S. Vandenberg: The life of a general*. Bloomington: Indiana University Press.
- Millett, A. (2010). *The war for Korea, 1950-1951: They came from the north*. Lawrence, Kansas: Kansas University Press.
- Montross, L., & Canzona, N. A. (1955). *U.S. marine operations in Korea 1950-1953 volume II: The Inchon-Seoul operation*. Washington, DC: Historical Branch, G-3, Headquarters U.S. Marine Corps.
- Payne, K. (2015). *The psychology of strategy: Exploring rationality in the Vietnam War*. London: Hurst & Company.
- Pearlman, M. (2014). The Inchon landing. In J. I. Matray & D. W. Boose Jr. (Eds.), *The Ashgate research companion to the Korean War* (pp. 333-344). Farnham: Ashgate.
- Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: A case for training intuitive decision skills. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment and decision making* (pp. 297-315). Oxford, United Kingdom: Blackwell.
- Renshon, J. (2009). Assessing capabilities in international politics: Biased overestimation and the case of the imaginary 'missile gap'. *Journal of Strategic Studies*, 32(1), 115-147.

- Ricks, T. E. (2012). *The generals: American military command from World War II to today*. New York: Penguin Press.
- Ross, K. G., Klein, G. A., Thunholm, P, Schmitt J. F., & Baxter, H. C. (2004). The recognition-primed decision model. *Military Review* (July-August), 6-10.
- Schnabel, J. F. (1972). *United States Army in the Korean War, policy and direction: The first year*. Washington, DC: Center of Military History, United States Army.
- Schnabel, J. F., & Watson, R. J. (1998). *The Joint Chiefs of Staff and national policy: Volume III 1950-1951, The Korean War part one*. Washington, DC: Office of Joint History, Office of the Chairman of the Joint Chiefs of Staff.
- Schofield, J. (2000). Militarised decision-making for war in Pakistan: 1947-1971. *Armed Forces & Society*, 27(1), 131-148.
- Serfaty, D., MacMillan, J., Entin, E. E., & Entin, E. B. (1997). The decision-making expertise of battle commanders. In C. E. Zsombok & G. Klein (Eds.), *Naturalistic decision making* (pp. 233-246). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Sil, R. & Katzenstein, P. J. (2010). *Analytic eclecticism in the study of world politics*. Basingstoke: Palgrave Macmillan.
- Simon, H. A. (1992). What is an “explanation” of behavior? *Psychological Science*, 3(3), 150-161. doi: 10.1111/j.1467-9280.1992.tb00017.x
- Taaffe, S. R. (2001). Douglas MacArthur and the 1944 New Guinea offensive. In W. M. Leary (Ed.), *MacArthur and the American century: A reader* (pp. 159-165). Lincoln: University of Nebraska Press.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193-210.
- Timmons, B. M. (1950, December 16). MacArthur’s greatest battle. *Collier’s*, 125 25, 13-15, 64-66.
- Van Creveld, M. (1985). *Command in war*. Cambridge, Mass.: Harvard University Press.
- Vego, M. (2015). On operational leadership. *Joint Forces Quarterly*, 77, 60-69.

- Vennesson, P., & Wiesner I. (2014). Process tracing in case studies. In J. Soeters, P. M. Shields, & S. Rietjens (Eds.), *Routledge handbook of research methods in military studies* (pp. 92–103). New York: Routledge.
- Watts, B. D. (2008). *U.S. combat training, operational art, and strategic competence. Problems and opportunities*. Washington, D.C.: Center for Strategic and Budgetary Assessments.
- Windschitl, P. D., & O'Rourke Stuart, J. (2015). Optimism biases: Types and causes. In G. Keren & G. Wu (Eds.), *The Wiley Blackwell handbook of judgment and decision making* (pp. 431-456). Oxford: Blackwell.
- Winger, G. (2016). Prospect theory and civil-military conflict: The case of the 1976 Korean Axe Murder Incident. *Armed Forces & Society*, doi: 10.1177/0095327X16670693
- Yetiv, S. A. (2013). *National security through a cockeyed lens: How cognitive bias impacts U.S. foreign policy*. Baltimore: Johns Hopkins University Press.
- Zhang, S. G. (1995). *Mao's military romanticism: China and the Korean War, 1950-1953*. Lawrence, Kansas: University Press of Kansas.
- Zsombok, C. E. & Klein G. A. (1997). *Naturalistic decision making*. New York: L. Erlbaum Associates.

Notes

1. Borrowing from Herbert Simon, we succinctly define intuition as recognition. "The situation has provided a cue: this cue has given the expert access to information stored in memory, and the information provides the answer. Intuition is nothing more and nothing less than recognition." (Simon, 1992, p. 155). This definition is shared by the proponents of both the overconfidence and the recognition-primed decision models that we examine here (Kahneman & Klein, 2009, p. 520). By operational level of command we refer to those commanders and their staffs who exercise authority that ranges from an army corps (and its naval/air equivalents) to the theater forces and multi-service theater commands. Operational level commanders conduct campaigns and/or major operations (Vego, 2015).

- ². The central idea of the heuristics and biases research tradition is that people use simplifying, generally efficient, rules (heuristics) to form judgments and make decisions. However, these rules can lead to systematic deviations from logic, probability or rational choice theory (cognitive biases) (Gilovich, Griffin, & Kahneman, 2002).

3. In his more recent (as yet unpublished) work, Dominic Johnson explores the conditions under which overconfidence might be functional.

- ⁴. The naturalistic decision making research tradition studies how people make decisions and perform cognitively complex tasks in demanding, real-world situations, i.e. in natural, not laboratory settings (Zsombok & Klein, 1997).

- ⁵. We do not address in this paper the question of where do cognitive processes come from. This is certainly a large and important question but best left for another paper. Cognitive psychologists generally recognize that many factors including education, socio-professional background, training, organizational cultures and other factors contribute to generate or amplify particular ways to process information. The analytical value of focusing on cognitive processes is that decades of empirical research have shown that they can be an autonomous force not easily reducible to the many factors constituting them.

- ⁶. While selecting on the dependent variable can lead to biases in inferences when probabilistic associations are of interest, this is not so for a within case analysis which focuses on causal-process observations and "does not depend on examining relationships among variables across cases" (Collier, Mahoney, & Seawright, 2010, pp. 96, 92-97).

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7. Our analytical narrative is exclusively developed from the standpoint of 1950 U.S. Army, Air Force, Navy and Marine Corps doctrine as well as the specific practices under General MacArthur at the time. We carefully avoid any anachronistic reference to current doctrines, standard operating procedures or personalities that would distort the analysis.

  8. As a five-star "General of the Army", MacArthur was the highest ranked Army officer at the time. Five-star flag rank is the highest rank awarded within the U.S. military establishment in modern times. There were four five-star fleet admirals and five five-star Generals of the Army named during World War II and the years immediately after.

  9. We thank James Zobel, archivist at the MacArthur Memorial, for this information on General MacArthur's library.