Converting Tactical Action into Strategic Success by Resolving Principal-Agent Problems

A Monograph

by

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historical case, this study increases understanding of the casual mechanisms that resolve principal-agent						
problems, enabling conventional forces to translate tactical actions into strategic success. Deductively testing						
prescribed incentive approaches, incentive application techniques, and evaluating attitudes toward risk throughout the conflict, this study argues that successful strategies resolving principal-agent problems expand						
beyond recommended dichotomous solutions. The study's findings support the conclusion that the application						
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Abstract

Converting Tactical Action into Strategic Success by Resolving Principal-Agent Problems, by MAJ Kyle C. Ferguson, 50 pages.

Advancing US interests within modern conflict requires the United States military to operate alongside and support partnered forces with differing motivations, goals, and attitudes toward risk. Consequently, US military leaders must overcome the challenges of influencing partnered forces to act within US interests, without dissolving the cooperative relationship. Agency theory explains these challenges through principal-agent problems and describes a framework toward resolving their disruptive effects within partnered relationships. Recent research illustrates agency theory's relevance within counterinsurgency, but its application within dynamic large-scale combat remains untested. Utilizing the 1973 Arab-Israeli War as a historical case, this study increases understanding of the casual mechanisms that resolve principal-agent problems, enabling conventional forces to translate tactical actions into strategic success. Deductively testing prescribed incentive approaches, incentive application techniques, and evaluating attitudes toward risk throughout the conflict, this study argues that successful strategies resolving principal-agent problems expand beyond recommended dichotomous solutions. The study's findings support the conclusion that the application of incentives across a spectrum of techniques not only increases the probability of desirable outcomes, but ensures the longevity of a compatible partnered relationship.

Contents

Acknowledgements	v
Abbreviations	vi
Figures	vii
Tables	viii
Introduction	
Understanding Principal-Agent Problems	3
Why principals need agents Principal-agent problems	5
Solutions to principal-agent problems	
Limitations within contemporary research	
The way forward	11
Research Methodology	13
Analyzing agency strategies within the 1973 Arab-Israeli war	
The framework of agency strategies within Arab-Israeli conflicts	16
Overview of the 1973 Arab-Israeli War	
Agency strategies prior to conflict: Behavior vs Outcome incentives	
Summary	
US strategy prior to conflict	
Soviet strategy prior to conflict	
Agency strategies during conflict: Reframing the incentive strategy	
Summary	
US strategy during conflict	
Soviet strategy during conflict	
Agency strategies to end conflict: Promoting suitable substitutes for military victory	
Summary	
US strategy terminating conflict	
Soviet strategy terminating conflict	
Conclusions and Recommendations	
Limitations and Potential Objections	
Implications and Recommendations	
Final Thoughts	
Bibliography	

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Abbreviations

LSCO Large-Scale Combat Operations

- UN United Nations
- UNRES United Nations Resolution
- UNSEC United Nations Security Council

Figures

Figure 1. Principal-Agent problems and effects	5
Figure 2. Effectiveness of behavioral incentives	8
Figure 3. Effectiveness of outcome incentives	8
Figure 4. Limits of behavioral and outcome incentives	9
Figure 5. Incentive application techniques 1	0
Figure 6. Incentive Techniques within the 1973 Arab-Israeli War 4	43
Figure 7. Agency Strategies with the 1973 Arab-Israeli War	14

Tables

Table 1. Definition of agency strategy elements	12
Table 2. Agency strategies prior to conflict	24
Table 3. Agency strategies during conflict	30
Table 4. Agency strategies terminating conflict	37

Introduction

The 1973 Arab-Israeli War erupted as the crescendo to decades of a smoldering animosity between Arabs and Israelis, formed by clashing ideologies and grievances of past military conflicts. The effects of this conflict expanded beyond a simple regional confrontation. Instead, the conflict placed complex demands upon international relationships. Egyptian and Israeli leadership understood that translating tactical actions into strategic political success required material and diplomatic support from the two world superpowers, the United States and the Soviet Union. Acknowledging this demand for support, the superpowers also held strong desires to ensure Israeli or Egyptian actions benefited US or Soviet regional interests, creating principal-agent problems.

Principal-agent problems describe the variance between the patron's and client's motivations, goals, and attitudes toward risk.¹ This variance generates a puzzle between influencing a client state to act within a patron state's interest without dissolving the cooperative relationship. Agency theory helps explain the difficulties of motivating one party (the agent) to act toward accomplishing the interests of another party (the principal).² This research addresses the patron-client puzzle by asking the question: *Why do some strategies to resolve principal-agent problems promote strategic success within a large-scale combat environment, while others contribute toward failure*?

Current research provides three answers to the question, focusing on incentive typology, degrees of oversight, and behavioral controls. Fundamentally, the efficiency of an incentive to generate measurable outcomes or promote desirable agent behavior categorizes incentives as

¹ Kathleen M. Eisenhardt, "Agency Theory: An Assessment and Review," *Academy of Management Review* 14, no. 1 (January 1989): 59, accessed 8 January 2019, https://www.jstor.org/stable/258191.

² Walter C. Ladwig, *The Forgotten Front: Patron-Client Relationships in Counterinsurgency* (Cambridge: Cambridge University Press, 2017), 5.

either an outcome-based or behavioral approach.³ Next, an agent's motivations and tendencies to act outside a principal's interests contribute to a strategy supporting an agent's autonomy or restricting an agent's actions.⁴ Lastly, the method of incentive implementation shapes an agent's behavior. A principal may promote desirable agent behavior through persuasions of reciprocity (inducement) or through more coercive transactional techniques (conditionality).⁵

Despite these inductive conclusions, this body of research leaves some important gaps toward explaining causal mechanisms of successful agency strategies. The tendency to dichotomize incentive approaches and techniques oversimply solutions for principal-agent problems, limiting relevant applications for complex real-world situations. Moreover, the limited incorporation and understanding of how risk averse or acceptant preferences develop and change over time within a principal-agent relationship weaken prescribed solutions. While scholarly work demonstrates agency theory's plausibility within protracted irregular conflict, the theory's utility toward resolving principal-agent problems within dynamic large-scale combat environments remains untested.

This study increases the understanding of the causal mechanisms that resolve principalagent problems. First, this research deductively tests prescribed incentive approaches and implementation techniques toward resolving principal-agent problems. Next, this study builds upon agency theory principles by evaluating how risk preference dynamics contribute toward an incentive strategy's development and execution. Finally, this study increases the testing rigor on agency theory predictions, incorporating adversarial actions within a dynamic and complex largescale combat environment to challenge the efficacy of prescribed solutions.

This rigorous evaluation of agency theory deductions produced critical insights. The

³ Eisenhardt, "Agency Theory: An Assessment and Review," 71.

⁴ Peter Feaver, *Armed Servants: Agency, Oversight, and Civil-Military Relations* (Cambridge: Harvard University Press, 2003), 75.

⁵ Ladwig, *The Forgotten Front*, 72.

complexity of real-world situations requires incentives to expand beyond dichotomous prescriptions. Furthermore, applying incentives across of spectrum of techniques not only increases the probability of desirable outcomes, but ensures the longevity of a compatible principal-agent relationship. This frames the project's thesis, arguing that successful strategies to resolve principal-agent problems incorporate a variety if incentive approaches across a spectrum of implementation techniques.

The following sections build support for this argument. The first section establishes the foundational framework of why principals need agents, the problem(s) created within this relationship, and potential solutions described within recent research. The next layer tests the validity of these solutions within the context of US-Israeli and Soviet-Egyptian patron-client relationships during the 1973 Arab-Israeli War. The causal mechanisms resolving principal-agent problems within these relationships progress from the initiation to the termination of the conflict. The study concludes with the implications of the research findings, highlighting agency theory's relevance toward understanding the greater context of war.

Understanding Principal-Agent Problems

The ability to analyze and identify the causal mechanisms of successful agency strategies requires an understanding of the types of problems, solutions, and limitations incorporated within the strategy. This section builds that understanding. The first layer describes why principals need agents and the problems created across the relationship. The next layer articulates solutions to these problems, grouped into three themes: incentive typology, agent oversight, and incentive application techniques. The last layer discusses limitations to prescribed solutions and the relevance of this work to fill those shortfalls.

Why principals need agents

Agency theory addresses the challenges of motivating one party (the agent) to act on behalf and accomplish the goals of another party (the principal).⁶ The principal seeks to acquire an agent to reduce the time, labor, or cost required to complete the task if the principal acted alone. This need originates from an acknowledgment that the agent, identified as an individual, organization, or nation, retains an expertise, specialized skill, access, or another critical factor, toward conducting an action or task that the principal could not otherwise perform effectively.⁷ The relevance of this concept resonates within strategic guidance from the US Department of Defense, focusing on increasing niche capabilities, expanding options, and lowering the security burden placed on the US military by promoting military partnerships.⁸ Moreover, senior military leaders emphasize that the US military's requirement to reinforce and integrate efforts of partnered forces remains a fundamental part of military campaign design.⁹ Assuming future conflict requires the US military to operate alongside multiple partners, the US military must engage an adversary while also stimulating military partnerships across the spectrum of conflict.¹⁰ However, the limited US military awareness of the problems disrupting partnered relationships make conflicts more costly than initially perceived.¹¹ Agency theory helps to fill this gap in understanding by examining the problems created when motivating a partnered force amid an environment of uncertainty.

⁷ Ibid., 26.

⁸ Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, DC: Department of Defense, 2018), 8, accessed 8 January 2019, https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf.

⁹ Lt. Gen. H.R. McMaster, "Continuity and Change the Army Operating Concept and Clear Thinking About Future War," *Military Review* 95, no. 2 (2015): 7.

¹⁰ Ibid., 14; Joseph L. Votel and Eero R. Keravuori, "The By-With-Through Operational Approach," *Joint Force Quarterly*, no. 89 (Quarter 2018): 45–46. Votel indicates that contemporary warfare requires large scale conventional forces to foster military partnerships from the ministerial to tactical levels of war.

¹¹ Votel and Keravuori, "The By-With-Through Operational Approach," 46.

⁶ Ladwig, *The Forgotten Front*, 5.

Principal-agent problems

Agency theory categorizes the uncertainty within a principal-agent relationship as principal-agent problems. These problems represent conflicts across shared information, risk preference, interests, and time, producing undesirable effects within the relationship, displayed in Figure 1. All these problems develop and endure due to an unequal allocation of information across the principal-agent relationship, described as information asymmetry.



Figure 1. Principal-Agent problems and effects. Created by author.

Information asymmetry explains the tendency of the principal and the agent to obtain information not accessible to the other. Agency theory describes the effects of this hidden information as adverse selection. Adverse selection surfaces because the principal lacks the ability to verify the skills and abilities of the agent before and throughout the relationship. This effect increases the difficulty for the principal to select and retain useful agents.¹² However, hidden information represents only one variable of the information asymmetry problem. Hidden action represents the other half of the equation, contributing to the development of the next principal-agent problem, conflicting risk preferences.

¹² Eisenhardt, "Agency Theory: An Assessment and Review," 61; Feaver, *Armed Servants*, 71. Feaver also highlights that the principal also struggles to detect an agent's conscious effort to withhold information that could create an unflattering perception of the agent.

Conflicting risk preferences affect the principal-agent relationship through the concept of the moral hazard. The moral hazard manifests in two distinct forms of agent behaviors, responsibility avoidance and reckless overconfidence. The following two examples help clarify these behaviors. Responsibility avoidance represents an employee wanting to earn as much money as possible for the least amount of effort. Therefore, the employee attempts to avoid exerting effort while creating a perception of productivity toward the employer.¹³ Likewise, reckless overconfidence represents an individual driving less cautiously while operating a rental car, because the rental insurance reduces the consequence anxiety for damaging the vehicle.¹⁴ Overall, the moral hazard promotes the principal and agent to favor and tolerate different actions.¹⁵ This conflict in risk preference increases the effects of the last two principal-agent problems, conflicting interests and time horizons.

Conflicting interests and time horizons reside within all principal-agent relationships. Some principal-agent interests fundamentally diverge as the principal wants an agent to perform the most work for the lowest cost; while the agent wants more money for less work. However, other principal-agent relationships value the same goal, but disagree on how to apply resources.¹⁶ Alexander George best describes this occurrence as value complexity, "where the presence of multiple, competing values and interests are embedded in a single issue."¹⁷ Additionally, principal-agent contrasting perceptions of time further complicate these issues, giving rise toward a time horizon dilemma where short term actions may not correlate to desired long term

¹³ Feaver, Armed Servants, 55.

¹⁴ Justin Pritchard, "Moral Hazard: Definition and Examples," accessed 1 February 2020, https://www.thebalance.com/moral-hazard-what-it-is-and-how-it-works-315515.

¹⁵ Eisenhardt, "Agency Theory: An Assessment and Review," 58–59; Amos C. Fox, "Time, Power, and Principal-Agent Problems Why the U.S. Army Is Ill-Suited for Proxy Warfare Hotspots," *Military Review*, 99 no. 2 (2019): 35.

¹⁶ Feaver, Armed Servants, 59.

¹⁷ Alexander L. George, *Presidential Decision Making in Foreign Policy: The Effective Use of Information and Advice*, Westview Special Studies in International Relations (Boulder: Westview Press, 1980), 26.

objectives for either the principal or the agent.¹⁸ Agency theory describes the cumulative effects of all these problems as agency losses, increasing the understanding of the costs associated with delegating action to another party.¹⁹

Solutions to principal-agent problems

Current research provides three mechanisms to mitigate agency losses: incentive typology, agent oversight, and application techniques. Agency theory describes incentives through an economic model of a contract. The contract resolves the effects of principal-agent problems by focusing on promoting either a desirable outcome or favorable agent behavior.²⁰ Analyzing business organizations, researchers measured two variables to classify two categories of incentives: outcome-based or behavioral. These variables represented the principal's ability to monitor the agent (the principal's span of control) and the principal's ability to directly measure the desired outcome (outcome uncertainty).²¹ As a result, behavioral incentives, commonly representing an employee's salary, proved most effective at reducing principal-agent problems amid outcome uncertainty but decreased in effectiveness across situations with high degrees of value complexity,²² displayed in Figure 2. This finding indicates that an employee's salary provides a strong incentive to arrive at work on time, but does not reduce the employee's inclination to waste time during the work day pursuing personal interests.

¹⁸ Ladwig, *The Forgotten Front*, 34–36.

¹⁹ Ibid., 27, 47.

²⁰ Eisenhardt, "Agency Theory: An Assessment and Review," 58.

²¹ Ibid., 58–61.

²² Ibid., 61–62.



Figure 2. Effectiveness of behavioral incentives. Created by author. Conversely, outcome-based incentives, commonly representing employee commissions, successfully align an employee's interests with the employer across a clearly defined outcome. However, they fail to promote desirable behavior amidst an environment of ambiguity and chance, displayed in Figure 3. A common example represents a real-estate agent receiving a commission for selling a house, both the owner and agent benefit from a high selling price. However, in a business involving product development in with high failure rates and competitive markets, this incentive will not encourage developers to focus their time and effort on producing quality products.²³ Applying each incentive category against both value complexity and uncertainty variables, the effectiveness to resolve principal-agent problems plateau without the application of agent oversight techniques, indicated in Figure 4.²⁴



Figure 3. Effectiveness of outcome incentives. Created by author.

²³ Eisenhardt, "Agency Theory: An Assessment and Review," 70.

²⁴ Ibid., 58–61.



Figure 4. Limits of behavioral and outcome incentives. Created by author.

As these incentives fail or inadequately resolve the effects of agency losses, principals turn to agent oversight procedures to close the gap. These procedures range from increasing or decreasing agent autonomy throughout the transaction, to more intrusive actions. These actions manifest as internal inspections, budgeting audits, employment of a third party to evaluate the agent, or establishing robust screening criteria for future agent applicants.²⁵ These oversight processes create a construction of insurance, reducing the principal's aversions to risk. However, implementing agent monitoring methods demands a greater investment of time and money for the principal, requiring a careful balance between risk and reward for increasing agent oversight.²⁶ These solutions work well within economic or organizational contexts. Yet, these solutions do not translate completely across diplomatic or military international relationships.

Within international relations, the principal (patron state) does not hire the agent (client state).²⁷ However, these foreign policy relationships aim at reducing the cost of securing national interest through the policy actions of other sovereign governments regardless of the motivations of each government and whether or not they completely align.²⁸ Therefore, scholars took the concepts of incentive typology and agent oversight to study the best techniques of applying

²⁵ Feaver, Armed Servants, 75.

²⁶ Eisenhardt, "Agency Theory: An Assessment and Review," 65.

²⁷ Ladwig, *The Forgotten Front*, 28.

²⁸ Ibid., 28-29.

incentive strategies to a client state within counterinsurgency and irregular warfare conflicts.²⁹

Utilizing counterinsurgency and irregular warfare conflict case studies, researchers primarily focused on resolving principal-agent problems producing moral hazard and value complexity effects between patron and client state governments. This analysis produced two techniques of applying incentives toward a client. First, the patron state uses a form of inducement, unilaterally administrating an incentive to solicit reciprocal cooperation.³⁰ Alternatively, the patron employs a conditionality technique, a coercive transaction, tying an incentive to a specific action of the client state's government.³¹



Figure 5. Incentive application techniques. Created by author.

This research concluded that these application techniques increased the effectiveness of behavioral incentives designed to promote a specific governmental policy, compared to outcomebased incentives focused on reducing violent disturbances.³² Furthermore, the conditionality technique retained a greater probability to promote favorable client behavior over the inducement

³¹ Ibid., 71–72.

²⁹ Ladwig, *The Forgotten Front*, vii; Eli Berman, David A. Lake, and Julia Macdonald, eds., *Proxy Wars: Suppressing Violence through Local Agents* (Ithaca: Cornell University Press, 2019), v. The cases studies analyzed are comprised of US counterinsurgency conflicts across the Philippines insurrection, actions in Iraq and Afghanistan, South American counter drug conflicts, and other counterterrorism conflicts within the Middle East not directly involving the United States.

³⁰ Ladwig, *The Forgotten Front*, 72.

³² Ibid., 299; Berman, Lake, and Macdonald, *Proxy Wars*, 14–20.

technique.³³ These solutions, explained through incentive typology, agent oversight, and application methodologies, increase understanding toward the puzzle of influencing a client state (agent) to act toward the patron's (principal) interests. However, several important gaps remain concerning the causal mechanisms of successful agency strategies.

Limitations within contemporary research

The limitations of previously identified solutions primarily emerge from the proclivity of contemporary research to apply a dichotomous, this or that, approach to resolving principal-agent problems. This conveys a false sense of security for a practitioner, creating an assumption that the principal need only to select the right type of incentive to resolve principal-agent problems. Additionally, limited research applies efforts to improve the understanding of how principal-agent risk preferences contribute toward selecting a prescribed solution.³⁴ Lastly, agency theory's application within counterinsurgency and irregular conflicts strengthens the convictions of prescribed solutions, but at the cost of framing successful strategies to a consistent application of a single technique.³⁵ These limitations potentially reduce the utility of agency theory solutions toward resolving principal-agent problems within the inherently complex and dynamic reality of large-scale combat. This project concentrates its contributions to close these knowledge gaps.

The way forward

The wealth of principal-agent problems along with the dynamic large-scale combat environment associated with the 1973 Arab-Israeli War creates an excellent laboratory to test prescribed solutions. Applying the elements of agency theory defined in Table 1, this study analyzes how principal-agent risk preferences contribute and evolve agency strategies throughout the conflict, increasing the understanding of the causal mechanisms that resolve principal-agent

³³ Ladwig, *The Forgotten Front*, 299.

³⁴ Eisenhardt, "Agency Theory: An Assessment and Review," 71.

³⁵ Ladwig, *The Forgotten Front*, 296–299.

problems. Lastly, these findings improve the depth of military knowledge toward alliances,

partners, and proxies, contributing to further doctrinal development of the US military's By,

With, Through operational approach.³⁶

Element	Variable	Definition	
	Acceptant	A state where the principal or agent favors higher degrees uncertainty for the chance of a greater payoff toward their interest.	
Risk preference	Neutral	A state where the principal or agent is insensitive to risk, focusing only on potential gain.	
	Averse	A state where the principal or agent is less willing to accept loss amid uncertainty.	
Incentive strategy	Behavioral	The alignment of an agent's actions to the principal's inter-	
	Outcome	The coalignment of principal-agent interest through mutual beneficial results.	
Technique	Inducement	The unilateral provision of incentives intended to solicit reciprocal cooperation.	
	Conditionality	A type of coercion that ties an incentive to specific action of the agent or client state government, using a transactional "this for that" approach.	

Table 1. Definition of agency strategy elements.

Table created by author.

Summarizing this section's key points, principals delegate tasks to agents, reducing the effort needed to complete the task. However, this generates problems within the relationship over shared information, risk, competing interests, and perceptions of time. These problems, left unaddressed, increase the cost of accomplishing the task for the principal. Several solutions attempt to reduce the effects of these problems, choosing a specific type of incentive, increasing agent oversight, and utilizing various incentive application methodologies. However, these solutions risk over simplifying the causal mechanisms of successful agency strategies. The following section uses the 1973 Arab-Israeli War to test these predictions within a complex and

³⁶ Votel and Keravuori, "The By-With-Through Operational Approach," 46; Amos C. Fox, "Conflict and the Need for a Theory of Proxy Warfare," *Journal of Strategic Security* 12, no. 1 (2019): 44– 48, accessed 28 October 2019, https://scholarcommons.usf.edu/jss/vol12/iss1/3.

dynamic large-scale combat environment.

Research Methodology

This study performs an in-depth analysis of the United States and Soviet Union patronclient strategies throughout the 1973 Arab-Israeli conflict. Through the methodology of process tracing, this study aims to establish empirical evidence of the casual factors that resolve principalagent problems, before, during, and at the termination of large-scale conflict. Process tracing supports this objective by developing explicit causal mechanisms to test the validity of agency theory's deductive conclusions of inducement and conditionality incentive strategies identified through comparative scholarly research.³⁷

Briefly, the process tracing method aims to establish an explanatory causal link between a variable(s) to an observable outcome.³⁸ The method's simple focus contributes to the power of its utility. Process tracing generates the data to construct causal mechanisms of established theory, but retains the ability to identify weaknesses or additional variables potentially overlooked during a theory's construction.³⁹ Moreover, process tracing provides a common ground between historical and political science explanatory objectives, maintaining a collaborative effect with traditional controlled comparison and congruent case study design methodologies.⁴⁰ Despite the strengths of the process tracing technique, the method has limitations within the framework of this study design. The scope of this research tests agency theory applications exclusively within the 1973 Arab-Israeli conflict, limiting the general application of its findings to other conflicts.

³⁷ Ladwig, *The Forgotten Front*, vii; Berman, Lake, and Macdonald, *Proxy Wars*, v; David E. M. Sappington, "Incentives in Principal-Agent Relationships," *Journal of Economic Perspectives* 5, no. 2 (Spring 1991): 44–66.

³⁸ John Gerring, "What Is a Case Study and What Is It Good For?," *American Political Science Review* 98, no. 2 (May 2004): 348.

³⁹ Alexander L. George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge: Belfer Center for Science and International Affairs John F. Kennedy School of Government Harvard University, 2004), 141–158.

⁴⁰ Ibid., 158.

Additionally, this narrow focus may generate competing perceptions of the data, increasing the ambiguity to the overall utility of agency theory.⁴¹ However, this study's ability to increase the internal validity of agency theory's causal mechanisms, resolving principal-agent problems, outweighs its limited application across various forms of regional conflict.

The focused research design increases the efficacy of mapping causal mechanisms for successful resolution of principal-agent problems. Correspondingly, this study deliberately scales its research to evaluate US-Israeli and Soviet-Egyptian patron-client relationships within the context of the 1973 Arab-Israeli War. A limited analysis of the previous Arab-Israeli conflicts, encompassing the 1956 Suez Crisis, 1967 Six-Day War, and the 1970 War of Attrition, establishes a framework of US and Soviet incentive strategies, predominant national interests, and implicit rules of conflict intervention accepted across the global superpowers and their Middle East regional clients. This framework enhances observations of how these strategies and perceptions of risk within the patron-client relationships changed throughout the course of the 1973 conflict. The dynamics of the Soviet-Syrian patron-client relationship and internal client-client relationships of Egypt, Syria, and Jordan provide additional considerations toward the overall Soviet incentive strategy, but separate evaluations of patron-client and client-client incentive strategies for these actors exceed the limits of this study.

The inherent complexity between patron-client, rival patron-client, and client-client relationships within the 1973 Arab-Israeli conflict facilitates a robust laboratory to deductively evaluate established agency theory techniques aimed at reducing principal-agent problems. The wealth of observable principal-gent problems increases the power to pragmatically test the efficiency of prescribed incentive typologies and implementation techniques. Lastly, this research expands agency theory practicality into the arena of large-scale high intensity conflict between nation states with near parity military capability, whereas published research confines agency

⁴¹ George and Bennett, *Case Studies and Theory Development in the Social Science*, 157.

theory's application to irregular and low intensity conflicts.⁴²

Modern application of agency theory within irregular warfare increased understanding of the complex interactions between internal and external actors. Since agency theory maintains a multilayered economic, organizational, and foreign policy foundation, it processes a detailed framework capable of handling the complex 1973 Arab-Israeli conflict without stressing the theory beyond its scope.⁴³ This study deductively tests the behavioral incentive constructs prescribed within agency theory, evaluating its efficacy to generate a shared perception of risk across principal-agent relationships within a large-scale combat environment. Positive results from this study increases confidence and relevance of agency theory, generating operational flexibility through the promotion favorable conditions throughout the initiation, execution, and termination of the conflict. Conversely, recognized shortfalls provide valuable insight to focus future research efforts for reevaluation of the theory.

Information analyzed through this study centers on a broad selection of personal memoirs and biographies of leaders of state and military chiefs of staff across superpower and regional nations. These sources are supplemented with works from academic scholars, foreign area officers, and diplomats recognized as experts within US, Soviet, and Middle Eastern spheres of influence. All sources are limited to English translations.

In summary, the 1973 Arab-Israeli conflict provides the framework to deductively test the utility of agency theory within a complex large-scale combat environment. The process tracing methodology serves to empirically evaluate patron-client strategies in their effectiveness to reduce divergent perceptions of risk within principal-agent relationships. Ultimately, this study aims to increase a detailed understanding of why some strategies to resolve principal-agent

⁴² Ladwig, *The Forgotten Front*, vii; Berman, Lake, and Macdonald, *Proxy Wars*, v; Fox, "Time, Power, and Principal-Agent Problems Why the U.S. Army Is Ill-Suited for Proxy Warfare Hotspots," 30–41.

⁴³ George and Bennett, *Case Studies and Theory Development in the Social Sciences*, 90.

problems support operational flexibility while others promote its degradation.

Analyzing agency strategies within the 1973 Arab-Israeli War

This analysis begins with a brief articulation of the historical requirement for agency within the Middle East, the enduring principal-agent problems, lessons learned from previous Arab-Israel conflicts, and how these factors shaped the initial risk perceptions and rules for military intervention within the region. After building this foundational understanding, the next section tests US and Soviet agency strategies across the initiation, execution, and termination phases of conflict. Within each conflict time period, this research describes what the patron wants, the incentive strategies employed, and the level of success at resolving principal-agent problems to achieve the patron's goals. The final section discusses conclusions and implications of the research results.

The framework of agency strategies within Arab-Israeli conflicts

The United States and Soviet Union recognized the Middle East as a key region to maintain influence, primarily due to its rich supply of energy resources and access to both African and Asian trade markets. As a result, each superpower focused on developing client relationships with regional governments, acting as vital agents to promote favorable conditions toward their national interests. The United States used Israel to maintain a balance power within the region, leveraging its military capability to act as a catalyst for increasing dysfunction and animosity within Soviet-Arab patron-client relationships.⁴⁴ Israel also served as an access point toward influencing domestic policies among a large pro-Israel US population.⁴⁵ All these efforts attempted to focus Israeli actions toward promoting US influence and the fulfillment of US

⁴⁴ William L. Cleveland, *A History of the Modern Middle East*, 3rd ed. (Boulder: Westview Press, 2004), 334; Yaacov Bar-Siman-Tov, *Israel, the Superpowers, and the War in the Middle East* (New York: Praeger, 1987), 88.

⁴⁵ John J. Mearsheimer and Stephen M. Walt, *The Israel Lobby and U.S. Foreign Policy* (New York: Farrar, Straus and Giroux, 2007), 51–58.

communist containment policy within the region. Similarly, the Soviet Union pursued agency relationships among Arab nations, primarily Egypt and Syria, to expand efforts of anti-imperialist movements across the region. These relationships ensured access to military infrastructure, served as quality control for weapon development programs, and acted as leverage points to disrupt oil markets, strengthening Soviet economic capacity within Western Europe.⁴⁶

The effectiveness of these relationships resided on the superpower's ability to consistently resolve enduring principal-agent problems, manifesting from conflicts of interests and divergent perceptions of risk. Although the United States and Israel shared capitalist democratic governments, their foreign policy diverged across critical objectives. Domestic turmoil from Vietnam transitioned US foreign policy toward retaining a balance of power between its clients and competitors, assisting with economic aid and military equipment, but requiring partnered nations to fight their own conflicts.⁴⁷ This shift in US foreign policy advanced an agreement of Détente with the Soviet Union to reduce the economic strain of armament competition and the threat of nuclear escalation, but without completely sacrificing US international influence. Most importantly, the US perceived that stability in the Middle East required a comprehensive approach, shaping relationships with not only Israel but with other Arab Nations, focusing on Saudi Arabia, Iran, and Jordan, due to these nations' regional power and influence over global oil economic markets.⁴⁸

While US interest centered on retaining favorable regional influence, Israeli interests focused on a fundamental right to coexistence and to secure its territory, population, and Jewish migrants from Europe. These interests expanded outward toward increasing regional autonomy

⁴⁶ Foy D. Kohler, Léon Gouré, and Mose L. Harvey, *The Soviet Union and the October 1973 Middle East War: The Implications for Detente Monographs in International Affairs* (University of Miami: Center for Advanced International Studies, 1974), 21–23.

⁴⁷ George C. Herring, *From Colony to Superpower: U.S. Foreign Relations since 1776*, The Oxford history of the United States (New York: Oxford University Press, 2008), 785.

⁴⁸ Ibid., 785–800.

and obtaining recognition as a bulwark against communist expansion by the US and Western Europe.⁴⁹ A deep-seated realist perspective shaped Israeli self-reliance policies, generating nuanced negotiations with its US patron and regional adversaries over disputed territory occupied by Israel at the termination of the 1967 Six-Day War.

Perturbed territorial negotiations produced an increasingly negative animosity toward Israel by one of its regional adversaries, Egypt. Egyptian concerns fixated on regaining access to the Suez Canal to re-establish an important artery for the Egyptian economy, facilitating Egypt's ideals toward a more progressive stature within the region.⁵⁰ This aim aligned with its domestic desire to regain credibility lost during the Egyptian military's decisive defeat in the Six-Day War. Ultimately, these interests converged toward ending the "no peace, no war" stalemate imposed on its population through current United Nation resolution negotiations, stipulated by a powerful desire to limit superpower hegemony across the Arab world.⁵¹

Despite Egyptian domestic policy for regional autonomy, its catastrophic defeat in the Six-Day War, President Nasser's anti-western policies, and its need for international sanction to end the Arab-Israeli negotiation stalemate, opened the door for Soviet patronage. The Soviet Union perceived the Arab-Israeli conflict as more than a territorial dispute, but rather as a catalyst supporting its global anti-imperialist struggle.⁵² Gaining access into the Middle East through the anti-western leaning Arab states of Egypt, Syria, and Iraq, improved Soviet correlation of forces.⁵³ The Soviet correlation of forces concept evaluated relative strength between two adversaries using economic, military, political, and international factors to ultimately weaken the

⁴⁹ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 187.

⁵⁰ London Sunday Times, *The Yom Kippur War* (Garden City: Doubleday, 1974), 44.

⁵¹ Saad Shazly, *The Crossing of the Suez* (San Francisco: American Mideast Research, 2003), 101,176.

⁵² Kohler et al., *The Soviet Union and the October 1973 Middle East War*, 21.

⁵³ Kohler et al., *The Soviet Union and the October 1973 Middle East War*, 21–22.

power and influence of the opponent.⁵⁴ This realist leaning international relationship methodology framed Soviet policy toward increasing its military influence while weakening their primary opponent, the United States.

Furthermore, the establishment of Egyptian and Syrian clients acted as platforms to pressure more progressive oil producing Arab nations, Iran and Saudi Arabia, fulfilling Soviet objectives toward disrupting western oil markets. All these actions fit Soviet strategies to strengthen its economic leverage within Western Europe and open access to African and Asian markets.⁵⁵ Altogether, the Soviet Union had an entirely different perspective concerning the Détente relationship with the United States. The Soviets perceived peaceful coexistence under Détente not as a commitment to peace at any price.⁵⁶ Instead, the policy supported political objectives toward an enduring struggle between western imperialism and the peoples' liberation.⁵⁷

This alternate view of Détente compared to its US counterparts, originated from the Soviet Union's overall risk perception toward its peer competitor and rival clients in the region. The Soviet Union observed the United States as increasingly constrained, domestically and abroad, by the oil and economic politics of the recent energy crisis.⁵⁸ These effects also contributed to rising political isolation of Israel from West European states. Since natural resources safeguarded the Soviet Union from Arab oil politics, the Soviet Union perceived a strengthening of its correlation of forces and regional influence compared to an increasingly neutral US-Israeli regional policy. Although the Soviet Union had to balance Détente actions with

⁵⁴ Ibid., 21-22; Michael J. Dean, "The Soviet Concept of The Correlation of Forces," *Strategic Studies Center Stanford Research Institute* (May 1976): iv-v, accessed 23 March 2020, https://pdfs.semanticscholar.org/eecf/94535e3b1f4da0756484f062227dd045ab68.pdf.

⁵⁵ Kohler et al., *The Soviet Union and the October 1973 Middle East War*, 22.

⁵⁶ Ibid., 19.

⁵⁷ John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of American National Security Policy during the Cold War* (New York: Oxford University Press, 2005), 316.

⁵⁸ Kohler et al., *The Soviet Union and the October 1973 Middle East War*, 25–28.

supporting Arab client ideology, Soviet retainment of a bi-lateral influence within the Arab-Israeli conflict justified any actions that may potentially lead to a short-term alienation of its clients.⁵⁹ Subsequently, Soviet policy toward Egyptian and Arab clients rested on limited goals, maintaining a balance between Israeli-Arab military capability, but never fully supporting the absolute destruction of Israeli sovereignty.

Reducing the potential upset of the Arab-Israeli military balance of power also resonated in US risk calculus. US policy focused on providing Israel with the military capacity to defend itself, but without promoting Israeli nuclear development or the capacity to seize and hold an Arab capital. As a result of numerous treaties and arms reduction agreements, the US perceived Soviet influence within the Middle East as on the decline.⁶⁰ US government officials claimed that Soviet options within the region remained limited due to an unwillingness to create a confrontation with the US and the recent expulsion of Soviet advisors from Egypt under President Sadat.⁶¹ Fundamental US risk perception characteristics followed an intense desire to reduce the threat of nuclear escalation and direct US military involvement within a possible conflict. This risk calculus generated two paradoxical theses from the Nixon administration. The first centered on the idea that protracting the Arab-Israeli resolution process would pressure the Arab states to denounce their Soviet patron, solidifying a dominate US diplomatic role within the region.⁶² The second claimed that denying Israel's ability to decisively defeat its Arab rivals would generate more benevolent Israeli concessions, formulating a more robust peace agreement.⁶³

Although US officials never overtly conveyed these ideas to its Israeli client, Israel maintained the perception that pressures from superpowers prevented the Israeli military from

⁵⁹ Kohler et al., *The Soviet Union and the October 1973 Middle East War*, 34.

⁶⁰ Mearsheimer and Walt, *The Israel Lobby and U.S. Foreign Policy*, 52–56; Kohler et al., *The Soviet Union and the October 1973 Middle East War*, 5.

⁶¹ Kohler et al., The Soviet Union and the October 1973 Middle East War, 5.

⁶² Henry Kissinger, Years of Upheaval (Boston: Little, Brown & Company, 1982), 222.

⁶³ Kissinger, Years of Upheaval, 468–469.

delivering the decisive blow needed to finalize the conflict.⁶⁴ Resolved to its self-reliant attitude, Israel understood patron support could not substitute victory, but remained a necessary supplement.⁶⁵ Lessons from previous conflicts imparted that self-restraint toward Arab threats granted operational flexibility from the US and West European nations, but after commencement of military action, operational goals must be achieved quickly to reduce the available time for a Soviet reaction. Economic aid, military equipment acquisition, and Jewish European immigration remained exclusively reliant on support from the US and Western Europe, shaping the risk calculus of Israeli regional policy and military options.⁶⁶

Comparable to Israel's need for international support, Egyptian President Anwar Sadat fully recognized Egyptian success required the support from not only Arab nations but the international community. This required Sadat to translate his limited military objectives into acceptable actions toward the ideological enmity of Israeli sovereignty held by other Arab nations.⁶⁷ Ultimately, these requirements necessitated the Egyptian military to maintain the capacity of protracting the conflict to exploit delayed effects across European economies.⁶⁸

These examples of value complexity and divergent risk perceptions shaped the patterns of behavior across the Arab-Israeli conflicts prior to the 1973 War. The global superpowers recognized the region as an area of controlled competition, emphasizing client economic and military aid incentives toward the pursuit of strengthening influence to the detriment of their rival.⁶⁹ Inherent to this competition, the superpowers accepted implicit rules based off mutual tolerance thresholds to prevent wanton armed escalation. These thresholds, viewed as the

⁶⁸ Alvin Z. Rubinstein, *Red Star on the Nile* (Princeton: Princeton University Press, 1977), 264.

⁶⁴ Bar-Siman-Tov, *Israel, the Superpowers, and the War in the Middle East*, 25–26, 144–145, 184–185.

⁶⁵ Ibid., 143–145.

⁶⁶ Ibid., 187.

⁶⁷ London Sunday Times, *The Yom Kippur War*, 77–90.

⁶⁹ Milton Leitenberg, Gabriel Sheffer, and Cornell University, eds., *Great Power Intervention in the Middle East*, Pergamon policy studies on international politics (New York: Pergamon Press, 1979), 21.

complete destruction of a regional actor's military or occupation of its national capital, signified political red lines for legitimate military intervention. As a result, the superpowers focused behavioral incentives toward either manipulating their clients' decision for armed conflict or preventing their client or rival from exploiting operational victory.⁷⁰ Clients applied these redlines as windows of flexibility, advancing their military and political position before constraints materialized.

Overview of the 1973 Arab-Israeli War

The conflict erupted as Egyptian President Anwar Sadat's pursuit to break the United Nation Security Resolution 242 negotiation stalemate between Israel and the bordering Arab states.⁷¹ The resolution stipulated that Israel withdraw from all territories occupied after the 1967 war and required all belligerents to formally recognize the sovereignty and territorial integrity of all nation states within the region.⁷² However, the ambiguous language within the resolution and the unwillingness of the world superpowers to pressure their Arab or Israeli clients to uphold the agreement, encouraged Egypt and Syria to settle the dispute through war.⁷³

Egyptian and Syrian forces attacked in the afternoon of October 6 1973, achieving tactical surprise over Israeli Defense forces. The following rapid advance and destruction of Israeli air and armored forces shocked the international community. However, the misalignment of Egyptian and Syrian strategic and operational objectives allowed Israel to recover, first on the Syrian front, then break through the Egyptian bridgehead across the Suez Canal and encircle the Egyptian 3rd Army.⁷⁴ The initial losses sustained by the Israeli military and the speed of their counter attack stimulated competitive brinkmanship between the United States and Soviet Union.

⁷⁰ Ibid., 38–40.

⁷¹ London Sunday Times, *The Yom Kippur War*, 16–17.

⁷² Ibid., 16-17.

⁷³ Ibid., 25.

⁷⁴ Peter Calvocoressi, *World Politics since 1945* (New York: Pearson Longman, 2009), 347.

Each superpower escalated the conflict through military aid and threats of conventional military intervention. On October 27, 1973, Egypt and Israel recognized a formal ceasefire agreement and finalized peace negotiations in January 1974.⁷⁵

Agency strategies prior to conflict: Behavior vs Outcome incentives

Summary

Prior to the conflict, the United States maintained a risk averse preference, evident from high degrees of value complexity and outcome uncertainty with its Israeli client. As a result, the United States employed behavioral incentives to contain Israeli military actions. The United States applied conditionality techniques to enforce behavioral incentives, conveying to Israel that continued US military and economic aid remained contingent on Israeli military restraint within the region. Since these incentives resonated with Israeli perceptions that strategic success across regional conflict required the support of the United States, this strategy produced a high level of success.

The Soviet Union maintained a risk neutral preference, acknowledging that Arab-Israeli tensions benefited Soviet regional interests. As a result, the Soviet Union employed outcomebased incentives promoting a limited Arab-Israeli conflict. A mixture of conditional and inducement techniques promoted Egyptian motivations to regain lost territory while curbing Egyptian military capability to escalate a conflict beyond those limited objectives. This strategy only yielded moderate success. Egypt focused on limited operational objectives but the heavy outcome-based strategy failed to reduce Egypt's inclinations toward moral hazard actions, opening secret negotiations with the United States.

⁷⁵ Ibid., 348; Cleveland, A History of the Modern Middle East, 376–377.

	United States		Soviet Union	
Element	Variable	Effect	Variable	Effect
Risk Preference	Averse	High value complexity and outcome uncertainty	Neutral	Regional tensions support Soviet interests
Incentive	Behavioral	Reduce moral hazard of pre-emptive strike	Outcome	Limited Arab/Israeli conflict
Technique(s)	Conditionality	Military & economic aid y for Israeli restraint	Conditionality Inducement	Oversight of missiles and repair parts Policy support to limited conflict
 Level of Success	High	Israeli restrained amid indications of conflict	Moderate	War surpasses expectations Egyptian moral hazards plague the relationship

Table 2. Agency strategies prior to conflict.

Table created by author.

US strategy prior to conflict

Prior to the initiation of the 1973 Arab-Israeli War, US foreign policy held a strong risk averse preference toward its agency relationship with Israel. This risk preference originated from an uncertainty of Israel's ability to promote US interests within the protracted Arab-Israeli settlement negotiations. US regional interests also grew in complexity. US policy wanted to decrease anti-American animosity among Arab nations without alienating its Israeli client, promote Israeli military strength without encouraging aggressive behavior, and reduce Soviet regional influence. An Arab-Israeli settlement that failed to generate any of these conditions, increased the risk of the US falling into an obligation trap on behalf of its client, promoting unachievable settlement terms. As a result, the US advocated for an increase in direct Arab-Israeli dialogue but abstained from prescribing detailed settlement conditions or deadlines.⁷⁶ US diplomats justified this course of action from a perception that Egypt retained limited near-term

⁷⁶ Kissinger, Years of Upheaval, 222.

military options and upcoming Israeli parliamentary elections provided an opportunity to promote future US peace initiatives.⁷⁷ This generated a perception of a distinct US time horizon advantage toward achieving its interests within the Arab-Israeli settlement deadlock. However, retaining this advantage required an incentive strategy that reduced US agency losses to Israeli moral hazard actions, inciting future Middle Eastern conflict.

The US implemented a conditional incentive strategy, encouraging peaceful behavior on behalf of Israel. These incentives communicated that Israel would continue to receive US economic and military aid in exchange for exercising restraint toward preemptive military actions.⁷⁸ This strategy aimed at producing a synergistic effect toward US interests in the Middle East. First, it attempted to cement an Israeli perception that the right for defensible borders required consistent behavior toward peaceful restraint. Next, continuous Israeli military restraint would portray Israel as a peaceful nation within the international community and help shape Arab perceptions that the US retained the ability to decrease Arab-Israeli tensions. Ultimately, these efforts would create a more beneficial US diplomatic environment to pressure its Arab rivals toward denouncing their Soviet patron and accept a more moderate stance within the region.⁷⁹

This incentive strategy successfully contained Israeli actions within the risk preferences of the US, but failed to generate desired conditions beyond its relationship with Israel. This behavioral incentive success reinforced an Israeli popular belief that military restraint produced US support within previous conflicts. These incentives also affirmed an Israeli theory that strategic success within Middle Eastern conflict required adamant patron support.⁸⁰ Israeli's persistent communications to US leadership of restraining from a preemptive strike amid multiple

⁷⁷ Kissinger, Years of Upheaval, 222–223.

⁷⁸ Ibid., 477; Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 188.

⁷⁹ Kissinger, Years of Upheaval, 196.

⁸⁰ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 195.

indications of an impending Arab attack further substantiates this claim.⁸¹ Consequently, the United States' desire to increase its own strategic options within the region made Israeli defensive actions increasingly dependent toward the US, constraining Israeli operational flexibility.⁸² These conditions helped augment Soviet outcome-based incentives within its Egyptian client relationship.

Soviet strategy prior to conflict

Soviet outcome-based incentives developed from a more neutral risk preference prior to the initiation of the 1973 Arab-Israeli War. This preference supported a perception that persistent Arab-Israeli tensions generated favorable conditions for Soviet regional interests, expanding military sales, promoting Western European-Israeli animosity, and solidifying the Soviet Union's position as a key mediator within the Middle East.⁸³ Instead of consistently supporting Egypt's goal of ending the Arab-Israeli negotiation stalemate, Soviet policy focused on increasing Arab dependence on Soviet military and diplomatic aid. Unlike the US behavioral strategy, the Soviet incentive strategy focused on developing an outcome suitable for both Soviet and Egyptian interests. This outcome reflected a growing Soviet Politburo assumption that limited Arab-Israeli conflict harnessed Egypt's competing interests toward the benefit of Soviet regional objectives.⁸⁴

Promoting an outcome that converged Soviet and Egyptian interests toward limited conflict required the Soviet Union to mix both inducement and conditional incentive techniques. These techniques aimed at appeasing immediate Egyptian concerns of military modernization and the denouncement of the current UN sanctioned Arab-Israeli settlement process; limiting Egypt's capacity to escalate a conflict into a direct US-Soviet confrontation. Encouraging limited

⁸¹ Kissinger, Years of Upheaval, 451.

⁸² Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 192.

⁸³ Alexander L. George, *Managing U.S.-Soviet Rivalry: Problems of Crisis Prevention*, Westview Special Studies in International Relations (Boulder: Westview Press, 1983), 95.

⁸⁴ Rubinstein, *Red Star on the Nile*, 262.

Egyptian offensive capacity, Soviet military aid programs supplied the most modern equipment with advisory training programs for Egyptian troops, but constrained the availability of repair parts.⁸⁵ The Soviets also unilaterally increased its own deterrence capacity toward Israeli military actions directed at Egypt, positioning bombers in Iraq and establishing Scud missile batteries in Egypt.⁸⁶ While Scud missile batteries enhanced Egyptian offensive military aims by increasing Egyptian capability to strike deep into Israeli territory, the Soviet Union retained direct oversight of their employment.⁸⁷ Lastly, Soviet media broadcasts, UN delegations, and Politburo policy publicly supported Arab legitimacy to liberate Israeli occupied territory and acknowledged Egypt's right toward "other" means to regain lost territory.⁸⁸ Using this diverse incentive strategy, the Soviets intended to maintain a relative advantage over the US within the region.⁸⁹

This advantage hinged on the strategy's ability to reduce Soviet agency losses relative to the US-Israeli relationship. The pre-conflict mixture of conditional and inducement incentives highlights Soviet attempts to reduce adverse selection effects and lower the obligation costs toward supporting its Egyptian client. Soviet military aid incentives produced a more capable and risk acceptant Egyptian client. This promoted an outcome that sufficiently challenged the US-Israeli status quo with minimal direct Soviet military intervention. Furthermore, the Soviet Union's overabundant use of vague inducement incentives for limited conflict, encouraged the development of a collaborative competition with the United States. Solidifying this outcome would reduce the threat of the Soviet Union pressuring Egypt more than the US pressured Israel.⁹⁰ Ultimately, this relative advantage would give the Soviet Union the flexibility to fully

⁸⁵ Kohler et al., The Soviet Union and the October 1973 Middle East War, 40.

⁸⁶ Ibid., 37; Jon D. Glassman, *Arms for the Arabs: The Soviet Union and War in the Middle East* (Baltimore: Johns Hopkins University Press, 1975), 136–137.

⁸⁷ Glassman, Arms for the Arabs, 138.

⁸⁸ Rubinstein, Red Star on the Nile, 179.

⁸⁹ George, *Managing U.S.-Soviet Rivalry*, 95.

⁹⁰ George, Managing U.S.-Soviet Rivalry, 95–99.
support the narrative that détente benefited Arab interests toward achieving a comprehensive settlement over Israel.⁹¹

Despite Soviet efforts to develop a relative advantage, this incentive strategy only had moderate success at producing the desired Soviet outcomes. The Soviet strategy successfully oriented Egyptian actions toward limited conflict. However, the lack of behavioral constraints restricted Egypt solely to monetary concessions. This enabled Egypt to obtain all the resources needed to produce a war that vastly surpassed all Soviet leadership expectations.⁹² Lastly, the Soviet Union's heavy outcome-based incentive strategy failed to align Soviet-Egyptians interests toward supporting collaborative competition with the United States. Instead, the strategy alienated its Egyptian client, promoting Egypt's interest to induce direct superpower competition within the conflict and open direct negotiations with the United States.⁹³ These Egyptian moral hazard effects would continue to obstruct the Soviet-Egyptian relationship throughout the course of the war.

Agency strategies during conflict: Reframing the incentive strategy

Summary

At the beginning of the conflict, the United States retained its risk averse preference. Believing another decisive Israeli military victory would destroy a nascent US-Egyptian diplomatic relationship, the United States augmented its behavioral approach with outcome-based incentives. Applying both inducement and conditional techniques, these outcome incentives aspired to develop a military stalemate between Israel and Egypt, persuading Israel to accept

⁹¹ Kohler et al., The Soviet Union and the October 1973 Middle East War, 29–54.

⁹² Rubinstein, Red Star on the Nile, 238,262.

⁹³ Shazly, *The Crossing of the Suez*, 176; Muḥammad Ḥasanayn Haykal, *The Road to Ramadan* (New York: Quadrangle/New York Times Book Co, 1975), 204–206; Craig Daigle, *The Limits of Détente: The United States, the Soviet Union, and the Arab-Israeli Conflict, 1969-1973* (New Haven: Yale University Press, 2012), 298.

greater peace concessions. This strategy generated moderate success, but heavy Israeli losses on the Egyptian front and escalatory Soviet military aid airlifts increased moral hazard effects within the US-Israeli relationship. Consequently, the US risk preference shifted from averse to acceptant, stimulating additional conditional outcome incentives to dramatically improve the Israeli military situation. This adjusted strategy yielded moderate success, quelling Israeli threats to expand the conflict into the US domestic arena.

Alternatively, Soviet neutral risk preference trended more averse. Unwilling to overtly pressure its Arab clients to limit military objectives, the Soviet Union remained cognizant that a loss of Arab initiative increased the requirement for direct Soviet involvement. Consequently, the Soviets retained an outcome-based incentive approach throughout the conflict. Applying diplomatic and military aid inducement techniques, the Soviets attempted to persuade Egypt toward accepting ceasefire conditions favorable for both Syria and the Soviet Union. However, this strategy yielded limited success. Soviet incentives failed to reduce information asymmetry effects, increasing confusion and pressuring Egypt to execute a reckless second offensive further into the Sinai Peninsula.

			Inited States	Soviet Union	
	Element	Variable	Effect	Variable	Effect
First 96 hours	Risk Preference	Averse	Israeli victory = more risk than reward	Neutral (trending averse)	Minimize overt pressure for clients to limit military objectives
	Incentive	Behavioral augmented with outcome	Promote Israeli peace concessions Contain Israeli initiative to Syrian Front	Outcome	Retain collective territorial advantage for Arab clients
	Technique(s)	Inducement	Delays UNSEC and provides intelligence on Syrian Front	Inducement	Public support for Arab cause/Israel the aggressor
		Conditionality	Expedite military aid if Israel provides the aircraft		Provides minor military aid
	Level of Success	Moderate	Israeli advances on Syrian front but blackmails US for further support (moral hazard)	Low	Information asymmetry enhanced the fog of war between Soviets and Arab clients
Beyond 96 hours	Risk Preference	Trending acceptant	Result of client's losses and threats to escalate conflict and expansion of Soviet aid to Arabs	Trending averse	Loss of Arab initiative promotes likelihood of direct Soviet involvement
	Incentive	Outcome	Improve Israeli military situation	Outcome	No change
	Technique(s)	Conditionality	Israel given 48 hours for further offensives	Inducement	Massive military aid airlift operations
	Level of Success	Moderate	Resolved moral hazard (Israeli escalation threat) Signaled US resolve to adversaries	Low	Information asymmetry and time horizon dilemma desynchronized Arab operations, contributing to a reckless Egyptian offensive

Table 3. Agency strategies during conflict.

Table created by author.

US strategy during conflict

During the first 96 hours of conflict, the United States maintained risk averse tendencies within its Israeli client relationship. Information asymmetry along with a degree of hubris over Israel's superior military capability contributed toward this proclivity. After the initial Arab onslaught, both Israeli and Egyptian leadership communicated intentions to the United States. Israel adamantly assured the United States that Israeli Defense Forces would quickly regain the initiative. Meanwhile, Egypt directly conveyed to the United States that Egypt had no desire to expand the Suez bridgehead further east.⁹⁴ This information provided no direct resolution toward complex pre-war US strategic interests, reaffirming that the United States stood to lose more than gain from a decisive Israeli military victory. This generated a consensus amongst the Nixon administration that encouraging Israel to accept greater concessions due to a military stalemate gave the United States more favorable diplomatic options.⁹⁵

Advancing a military stalemate result, the United States augmented its behavioral incentive strategy with additional outcome-based incentives, supporting limited Israeli military actions. Immediately, the US supported an Israeli offensive against Syria, but attempted to contain Israeli operational initiative to the Syrian front. This support manifested as two inducement outcome incentives along with a conditional behavior incentive. The US unilaterally gave Israeli military leadership all the current US intelligence of the situation on the Golan Heights and delayed United Nations Security Council deliberations for 72 hours in support of a northern offensive.⁹⁶ However, the US would only expedite and not increase military aid shipments under the conditions that Israel provided the transportation aircraft and limited the advance of military operations to the pre-war territorial boundaries.⁹⁷

⁹⁴ Kissinger, Years of Upheaval, 468-469, 471, 481-482.

⁹⁵ Ibid., 468-469.

⁹⁶ Ibid., 478; Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 197.

⁹⁷ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 204, 206.

Implementing this updated incentive strategy, the United States anticipated that giving Israel enough operational flexibility to improve the military situation on the ground would provide adequate behavioral pressure toward accepting greater settlement concessions without overtly alienating Israel against US interests.⁹⁸ Moreover, this measured US response reduced future Israeli moral hazard actions, preventing an Israeli perception that in extremis, the US would immediately jump to Israel's rescue.⁹⁹ This strategy also complemented the United States' greater regional and strategic interests.

Notably, these incentives took deliberate action to prevent the UN from establishing a negative precedent of internationally ratifying surprise attacks.¹⁰⁰ Additionally, the strategy intended to signal a reluctance toward expanding the conflict, reducing the risk of direct US-Soviet confrontation and alleviate anxiety amongst moderate Arab nations.¹⁰¹ The initial implementation of these incentives produced positive effects, harmonizing well with Israeli desires to limited Soviet involvement and prevent ceasefire conditions that favored Arab military objectives.¹⁰² Analogous to all strategies, the adversary retains a vote toward its overall effectiveness.

After the initial 96 hours of conflict, Egyptian efforts inflicted massive losses on Israeli armored forces and aircraft. These battlefield effects, along with Soviet efforts to expand the conflict through massive airlift resupply operations and public encouragement for a united Arab commitment toward Egyptian and Syrian efforts, changed the risk preference across the US-Israeli relationship. Israeli leadership willingly accepted the risk to gamble against the current US behavioral incentives. They issued threatening statements to the US administration of expanding

⁹⁸ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 203.

⁹⁹ Kissinger, Years of Upheaval, 478.

¹⁰⁰ Ibid., 471.

¹⁰¹ Ibid., 486.

¹⁰² Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 212–213.

the conflict into the US domestic arena and escalating Israeli military actions toward the employment of Israel's limited nuclear arsenal.¹⁰³ These client threats and adversarial actions made the Nixon administration more inclined to accept the risk of shifting toward an outcome-based incentive strategy focused on dramatically changing the Israeli military situation on the ground.¹⁰⁴

This adjusted US strategy implemented an additional conditional incentive, employing massive US airlift resupply operations under the auspice that Israel had 48 hours to improve the situation on the ground before UN Security Council deliberations.¹⁰⁵ Although these munitions did not have a direct effect on the battlefield, the US resupply effort provided a huge psychological boost for Israeli leadership, eliminating any concern of exceeding munition stockpiles.¹⁰⁶ Lastly, the effort signaled to the Soviets and their Arab clients that the United States remained completely committed toward its Israeli client.¹⁰⁷

Soviet strategy during conflict

As the United States adjusted its behavioral strategy to a more outcome-based incentive framework, the Soviet Union refrained from adjusting its outcome-based incentives during conflict. A partial explanation of this reluctance toward Arab behavioral incentives originates from a widely held Soviet bias that any Arab-Israeli conflict inevitably required some form of Soviet intervention to prevent a catastrophic Arab defeat.¹⁰⁸ As a result, the dramatic success of the Arab onslaught genuinely surprised Soviet leadership.¹⁰⁹ This success caused the Soviet

¹⁰³ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 207.

¹⁰⁴ Kissinger, Years of Upheaval, 520; Yehuda Avner, The Prime Ministers: An Intimate Narrative of Israeli Leadership (New Milford: Toby Press, 2010), 228–231, 242–247.

¹⁰⁵ Kissinger, Years of Upheaval, 518.

¹⁰⁶ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 213.

¹⁰⁷ Kissinger, Years of Upheaval, 520.

¹⁰⁸ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 196.

¹⁰⁹ Ibid., 196; Daigle, The Limits of Détente, 300.

Union's risk preference to shift from a previously neutral toward a more adverse stance.¹¹⁰ Soviet leadership worried that pressuring its clients to limit their military objectives would create a perception that the Soviet Union no longer fully supported anti-imperial movements.¹¹¹ However, Soviet leadership desired to retain a collective Arab territorial gain, believing this would create the most advantageous bargaining position. Consequently, the Soviet Union continued inducement outcome-based incentives, promoting continued Arab military operations, but preserving a collaborative perception toward the Soviet-US détente relationship.¹¹²

These incentives first manifested as intricate Soviet information operations, attempting to portray Israel as a wanton aggressor that deliberately initiated the conflict and resorted to attacking Arab civilians instead of military targets.¹¹³ Intending to display resolve in isolating Israel on the international stage, the Soviets hoped these actions would increase Egyptian willingness to pursue a ceasefire before Syrian forces culminated.¹¹⁴ Soviet leadership then moved toward encouraging additional Arab nations to join the effort through military action or expansion of oil embargo activities upon Western nations.¹¹⁵ Finally, Soviet airlift resupply activities began to trickle into the region within the first 24 hours of conflict, escalating to unprecedented levels within 96 hours.¹¹⁶ All these inducement incentives, from the Soviet perspective, would entice Egypt to support a comprehensive settlement under the most advantageous conditions for both Egypt and Syria.

These conditions never completely materialized. Instead, Soviet incentives during the

¹¹⁰ Rubinstein, Red Star on the Nile, 262.

¹¹¹ Glassman, Arms for the Arabs, 147, 172.

¹¹² Rubinstein, Red Star on the Nile, 268.

¹¹³ Glassman, Arms for the Arabs, 149; Rubinstein, Red Star on the Nile, 261; Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 192.

¹¹⁴ Glassman, Arms for the Arabs, 144.

¹¹⁵ Rubinstein, Red Star on the Nile, 267.

¹¹⁶ Glassman, Arms for the Arabs, 130–131; Kissinger, Years of Upheaval, 497.

conflict increased animosity within the Soviet-Egyptian relationship, promoting the overall operational desynchronization of the Arab campaign. Information asymmetries and time horizon dilemmas between the Soviet Union and its Arab clients contributed to this overall result. At the onset of conflict, Syrian communications with Soviet leadership expressed inclinations for a quick cease fire to retain the most liberated territory.¹¹⁷ This fit well with Soviet interests for a cumulative territorial settlement, but Egypt valued time not territory. Egypt intended to bleed Israeli forces, but also needed to protract the conflict long enough to influence the oil embargo commitment amongst oil producing Arab nations.¹¹⁸ These information asymmetry effects created an irreconcilable time horizon dilemma between the Soviet Union and Egypt. Soviet continuous allusions for expedient ceasefire negotiations, while attempting to balance airlift operations between two clients, emboldened President Sadat's claims of Soviet-Syria favoritism.¹¹⁹ Ultimately, Soviet outcome incentives indirectly pressured Egypt to extend beyond its operational reach, executing a reckless offensive deep into the Sinai Peninsula.¹²⁰

Agency strategies to end conflict: Promoting suitable substitutes for military victory

Summary

Once the Israeli military regained lost territory, the United States transitioned back toward an averse risk preference. This preference shaped the United States' desire to balance Israeli operational advantage, while minimizing a pretext for increased Soviet regional influence. Consequently, US interest diverged from the Israeli desire to decisively destroy the Egyptian armored forces. Attempting to restore common US-Israeli interests of promoting ceasefire

¹¹⁷ Haykal, The Road to Ramadan, 209; Rubinstein, Red Star on the Nile, 264.

¹¹⁸ Rubinstein, Red Star on the Nile, 264; Haykal, The Road to Ramadan, 220.

¹¹⁹ Anwar Sadat, *In Search of Identity: An Autobiography* (New York: Harper & Row, 1978), 252-253, 255, 259.

¹²⁰ Haykal, *The Road to Ramadan*, 219–220; Shazly, *The Crossing of the Suez*, 244–245, 305, 317–319.

negotiations, the United States employed both behavioral and outcome incentives, using a range of inducement and conditionality techniques. Although Israel did not immediately adhere to the ceasefire, the US agency strategy achieved a high degree of success, preserving the honor of Israeli leadership by leaving the military in a position of strength.

Conversely, the Soviet outcome strategy to retain Soviet prestige as the Arab hero produced limited success. Applying inducement techniques, the Soviets hoped to reciprocate an Egyptian acknowledgement of the critical role the Soviet Union held within regional negotiations. However, the Soviet unwillingness to embark upon a direct conflict with the US and the application of nuanced conditional behavior incentives alienated the Soviets from its Egyptian client.

	United States			Soviet Union	
	Element	Variable	Effect	Variable	Effect
Ceasefire Development	Risk Preference	Averse	US interests/Israeli military objectives diverge	Averse	No appetite for Soviet/US conflict
	Incentive	Behavioral	Israel consolidates gains, facilitating peace negotiations	Outcome with behavioral (mild)	Limit Israeli gains, promote Soviets as Arab hero
	Technique(s)	Inducement	Economic aid package	Inducement	Disrupted US/Israel ceasefire messaging
			Permits deviation to ceasefire deadline		Permits Egyptian SCUD attack
		Conditionality	Accepting UNSEC framework grants 48 hours for military operations	Conditionality	Further military aid requires upfront payment
	Level of Success	Low	Israeli value complexity outweighs US behavioral constraints	Low	Egyptian narrative: fighting both US & Israel alone, Soviets just mercenaries
	Risk Preference	Averse	Pretext for direct Soviet military involvement equals US redline	Averse	No change
	Incentive	Outcome	Israeli military advantage maintained without Soviet intervention	Outcome	No change
Ceasefire Enforcement	Technique(s)	Conditionality	Israel retains encirclement if UN food/water convoys are granted access to Egyptian troops	Inducement	Threatens unilateral intervention to break Egyptian Army encirclement
	Level of Success	High	Narrative of honorable de-escalation supports US/Israeli interests	Low	Soviet support unrecognized
					Soviets sidelined during post-conflict negotiations

Table 4. Agency strategies terminating conflict.

Table created by author.

US strategy terminating conflict

After Israeli offensives regained lost territory and advanced beyond the pre-conflict borders, the desired outcome aligning US-Israeli interests materialized. Beyond this point, US interests began to increase in complexity and diverge from Israeli military objectives, evoking a return toward a US risk averse preference. US leadership desired a quick resolution to hostilities that promoted key elements, preserving Israeli national security, reducing oil embargo hardships toward Western European allies, and maintaining a legitimate framework for continued peaceful negotiations without excessive Soviet influence.¹²¹ Based on the perceived exhaustion of Israeli military forces and national leadership, the United States assumed an emphasis for a quick ceasefire supported Israeli interests.¹²² Consequently, the United States applied mild behavior incentives toward Israel, intending to provide Israel enough flexibility to retain operational initiative without promoting an Arab outcry for Soviet intervention.¹²³

These behavioral incentives contained a mix of conditional and inducement techniques, a developing pattern within US incentive strategy. Before entering ceasefire proposal deliberations, US policy retained the 48-hour Israeli operational time window prior to cease fire implementation under the auspice that subsequent Arab-Israeli negotiations maintained the pre-conflict UN Security Council Resolution 242 framework. Two inducement incentives attempted to increase Israeli inclination toward these conditions, guaranteeing a large US economic aid package and consultation of proposal parameters before finalization.¹²⁴ Lastly, US Secretary of State Henry Kissinger insinuated an acceptance for slight Israeli deviations of the ceasefire deadline,

¹²¹ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 215.

¹²² Ibid., 218.

¹²³ Ibid., 226.

¹²⁴ Ibid., 217–218.

compensating for a delayed transmission of the final ceasefire agreement.¹²⁵ These incentives attempted to acknowledge Israeli interests without encouraging the humiliation of the current Egyptian regime, facilitating future US-led peace negotiations.¹²⁶

Although these incentives intended to support peace negotiations, their actual effect promoted continued hostilities, bringing the United States to the brink of Soviet armed conflict. Israeli moral hazard actions and adversarial reactions explain this dilemma. US behavioral incentives lacked the strength to compensate for increasingly divergent US-Israeli interests. The United States suffered a reduction in Israeli trust by failing to consult Israeli leadership during the ceasefire negotiations.¹²⁷ This temporary lack of trust fueled Israeli domestic fears of isolation and increased internal Israeli tensions over offering peace concessions without perpetuating signs of weakness.¹²⁸ Consequently, Israel continued military operations, arguing that delivering a decisive blow to the enemy outweighed the cost of disobeying US imposed ceasefire constraints.¹²⁹ The post-ceasefire Israeli encirclement of the Egyptian 3rd Army caused an Egyptian public outcry for direct US-Soviet enforcement of the ceasefire arrangement. A Soviet threat of unilateral intervention immediately supported Egypt's demands.¹³⁰ These adversarial actions influenced the United States to elevate its military alert status to dissuade any potential Soviet military actions within the region. However, the United States refrained from threatening to stop military aid or publicly coercing Israel to cease military action.¹³¹ Instead, the United States implemented one last outcome incentive, allowing the encirclement of Egyptian Army if

¹²⁵ Kissinger, Years of Upheaval, 569.

¹²⁶ Ibid., 526.

¹²⁷ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 220; Kissinger, Years of Upheaval, 557.

¹²⁸ Kissinger, Years of Upheaval, 608.

¹²⁹ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 226–227.

¹³⁰ Sadat, In Search of Identity, 269; Kissinger, Years of Upheaval, 579.

¹³¹ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 233.

Israel granted access to UN sanctioned food and water resupply convoys. Israel's failure to meet these conditions would result in the United States publicly dissociating itself from Israel, followed by a motion for UN ceasefire enforcement.¹³² This effort successfully achieved two effects. First, it ensured the survival of the Egyptian 3rd Army, encouraging Egypt to pull away from the Soviet Union. Second, allowing Israel to retain a dominant military position facilitated Israeli concessions, supporting a political narrative that Israel yielded to its friend, not the enemy.¹³³

Soviet strategy terminating conflict

Like the US, Soviet interests increased in complexity as Israeli offensives began to disintegrate Arab positions. Soviet leadership adamantly detested Israel, but this animosity alone did not justify an acceptable forum to directly confront the United States.¹³⁴ Continuing to facilitate an outcome of relative advantage, the Soviet Union advocated for ceasefire conditions that would limit Israeli tactical gains and further promote prestige upon Soviet diplomacy and military equipment.¹³⁵ As operational initiative transitioned to Israel, the Soviet Union implemented its first mixture of behavioral and outcome incentives within the relative advantage framework.

Soviet behavioral incentives employed vague conditional elements, keeping with the established Soviet reluctance toward aggressively pressuring its Egyptian client. Soviet policy continued to publicly support the Arab cause, but discretely encouraged Egypt to consolidate its position and begin diplomatic negotiations. The most overt Soviet conditional incentive stressed

¹³² Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 234; Abraham Rabinovich, *The Yom Kippur War: The Epic Encounter That Transformed the Middle East* (New York: Schocken Books, 2017), 543–544.

¹³³ Kissinger, Years of Upheaval, 610; Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 234; Rabinovich, The Yom Kippur War, 545.

¹³⁴ Daigle, *The Limits of Détente*, 325.

¹³⁵ Rubinstein, Red Star on the Nile, 284–287.

for Egypt to provide an upfront payment for further military aid.¹³⁶

Mildly pressuring Egypt toward negotiated concessions complemented the Soviet outcome-based inducement incentives. Soviet leadership influenced a direct US-Soviet ceasefire proposal, leveraging détente to halt the Israeli military advance under the framework of reestablishing the pre-war boundaries.¹³⁷ Additionally, the Soviet Union delayed transmission of the ceasefire deadline to Israel, sanctioned an Egyptian Scud missile attack on the Israeli Suez bridgehead, and threatened unilateral intervention for Israeli ceasefire adherence failures.¹³⁸ All of these incentives intended to affirm the Soviet Union as a diplomatic shield for Egypt and the Arab cause, guaranteeing Soviet prestige in the region.¹³⁹

Despite the Soviet attempts to promote a relative advantage during conflict termination, the incentive strategy produced the opposite condition. The unexpected US nuclear alert and continued US airlift operations strengthened President Sadat's narrative that Egypt was no longer fighting Israel but also the United States. This allowed Sadat to retain an honorable perception for terminating the conflict amongst the Egyptian domestic population without officially recognizing Soviet support.¹⁴⁰ Soviet attempts to discretely pressure Egypt toward negotiations through arms payments pushed Sadat to look for alternate military aid post conflict.¹⁴¹ This also exacerbated Sadat's animosity toward the Soviet Union, describing the Soviets as mercenaries only supporting their own interest.¹⁴² Ultimately, this enabled Sadat to sideline the Soviets in the post-conflict negotiations, claiming that the Soviets can give you arms but the United States can give you

¹³⁶ Rubinstein, Red Star on the Nile, 273; Haykal, The Road to Ramadan, 245–246.

¹³⁷ Daigle, *The Limits of Détente*, 314.

¹³⁸ Kissinger, Years of Upheaval, 557, 583; Glassman, Arms for the Arabs, 137; Rabinovich, The Yom Kippur War, 513; Haykal, The Road to Ramadan, 254.

¹³⁹ Rubinstein, Red Star on the Nile, 284–287; Daigle, The Limits of Détente, 320.

¹⁴⁰ Cleveland, A History of the Modern Middle East, 337; Rabinovich, The Yom Kippur War, 548; Sadat, In Search of Identity, 263; Alvin Z. Rubinstein, Red Star on the Nile, 289.

¹⁴¹ Rubinstein, *Red Star on the Nile*, 272.

¹⁴² Ibid., 289.

territory.143

Conclusions and Recommendations

Understanding the causal mechanisms that resolve principal-agent problems remain a challenge for practitioners attempting to incentivize an individual, organization, partnered military, or government toward mutually desirable conditions. Although contemporary research highlights plausible techniques at solving principal-agent problems within protracted irregular conflicts, limited research has tested its relevance within dynamic large-scale combat environments. This study approached this challenge by analyzing how US-Israeli and Soviet-Egyptian patron-client risk preferences initially shaped incentive strategies, categorized incentive implementation techniques, and factored in the strategies' overall effectiveness throughout the progression of the 1973 Arab-Israeli War.

Foundational agency theory principles prescribe two incentive categories to resolve principal-agent problems, implementing either an outcome or behavioral based incentive or contract. However, the technique's success hinges on a critical assumption that the principal chooses the most efficient technique by understanding the relative amounts of outcome uncertainty and value complexity within the principal-agent relationship.¹⁴⁴ Additional application of agency theory into patron-client relationships within irregular conflict expanded behavioral incentive implementation techniques into a spectrum of positive persuasion (inducement) and coercive threats (conditionality).¹⁴⁵ Consequently, these applications restricted agency theory principles into binary approaches, reducing the theory's overall validity toward explaining complex real-world relationships.¹⁴⁶

¹⁴³ Rubinstein, Red Star on the Nile, 289–290.

¹⁴⁴ Eisenhardt, "Agency Theory: An Assessment and Review," 69.

¹⁴⁵ Ladwig, *The Forgotten Front*, 72.

¹⁴⁶ Eisenhardt, "Agency Theory: An Assessment and Review," 71.

Rigorously testing these binary approaches within a dynamic and complex large-scale combat environment frames this study's major contributions toward the holistic understanding of resolving principal-agent problems. The demanding framework of the 1973 Arab-Israeli War suggests that resolving principal-agent problems requires strategies to incorporate a mixture of behavioral and outcome-based incentives across a range of inducement and conditionality techniques. Acknowledging that all desirable outcomes within a patron-client relationship innately contain both behavioral and material components, resorting purely to one incentive typology reduces the efficacy of resolving the principal-agents problems needed for a desirable outcome. This characteristic also applies toward inducement and conditionality techniques. Versatile incentive strategies, within the 1973 Arab-Israeli War, applied inducement and conditionality techniques beyond purely behavioral incentives and applied conditionality caveats across a spectrum of constraints and coercive threats, displayed in Figure 6.



Figure 6. Incentive Techniques within the 1973 Arab-Israeli War. Created by author.

Applying a spectrum of techniques across a mixture of behavioral and outcome incentives explains only one piece of resolving principal-agent problems within a large-scale combat environment. Additional key components include the incentive strategy's effectiveness at generating a clear signal to the client and its adaptability toward emergent operational conditions. Most US incentives maintained clear and distinct conditionality caveats for specific forms of aid. These attributes revealed a distinct advantage over Soviet-Egyptian incentives, enabling the United States to maintain discrete influence over specific Israeli actions without significantly damaging the US-Israeli relationship. Furthermore, this study emphasizes that successful incentive strategies must not only compensate for changing client risk preferences, but adapt to promote favorable operational conditions. Figure 7 highlights that throughout the course the 1973 Arab-Israeli War, the US strategy shifted across the incentive spectrum, comprehensively converging Israel's risk preference toward an alignment with US interest. Whereas, the Soviet Union predominantly adhered to an outcome-based strategy, slowly transitioning to behavioral incentives that vaguely threatened the removal of all military aid. This strategy generated Egyptian bitterness toward its Soviet patron, inviting Egypt to terminate the relationship.



Figure 7. Agency Strategies with the 1973 Arab-Israeli War. Created by author.

Limitations and Potential Objections

Critiques of agency theory emphasize the theory's narrow focus, limiting its utility for broad application.¹⁴⁷ Acknowledging this perspective and deliberately scoping this research toward testing agency theory applications within US-Israeli and Soviet-Egyptian relationships during the 1973 Arab-Israeli War warrants possible competing theories of influence within the patron-client relationships. The theories of aid dependence, strategic value, and reverse leverage provide alternative perspectives.¹⁴⁸

The theory of aid dependence presents the first plausible argument, suggesting that Israel's dependence on US aid solely explains its adherence to US interest during the conflict. This factor actively contributed into Israeli leadership risk calculations.¹⁴⁹ However, the theory fails to explain Israel's attempts at blackmailing the United States for more aid or Israel's misbehavior during the termination of conflict. Moreover, the United States never threatened the removal of aid to influence Israeli ceasefire concessions.¹⁵⁰ The theory explains even less of the Egyptian perspective. The Soviet aid dependence strategy never produced the desirable results of controlling Egyptian behavior at any point within the conflict.

The theory of strategic value and reverse leverage presents the second plausible argument. This theory asserts that the perception of a client's strategic importance weakens the patron's influence over the client's actions, providing an explanation for Israel's aid blackmail actions and ceasefire disobedience.¹⁵¹ However, this theory only offers a piece of the story, missing a key Israeli lesson from previous conflicts—translating military success into political

¹⁴⁷ Eisenhardt, "Agency Theory: An Assessment and Review", 71.

¹⁴⁸ Ladwig, The Forgotten Front, 57,60.

¹⁴⁹ Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 194.

¹⁵⁰ Ibid., 233.

¹⁵¹ Ladwig, The Forgotten Front, 60.

victory requires patron support.¹⁵² The theory carries more weight across the Soviet-Egyptian relationship. However, the theory falls short of explaining Soviet reluctance to change its incentive policy after Egypt expelled Soviet troops before the conflict.¹⁵³ Furthermore, Soviet alignment with Egyptian critics and denying military aid in the post conflict environment maintained Soviet influence over Egypt, weakening the theory's argument.¹⁵⁴

Implications and Recommendations

Analysis of agency incentive strategies throughout the 1973 Arab-Israeli War confirms that no incentive category or implementation technique completely resolves principal-agent problems. Moreover, the findings from this study further validate other scholarly arguments that no singular action serves as a magic bullet; nor does increasing the amount of incentives equate toward a robust solution for principal-agent problems.¹⁵⁵ As a result, this study builds empirical evidence supporting the assertion that agency theory concepts increase in strength when incorporated with additional conceptual models.¹⁵⁶

Throughout the course of the conflict, the United States gradually incorporated alternative futures and stakeholder cognitive models within its incentive strategy.¹⁵⁷ This allowed the United States to tailor incentives that reduced uncertainty without overly restricting US and

¹⁵⁴ Ibid., 300-302, 307.

¹⁵² Bar-Siman-Tov, Israel, the Superpowers, and the War in the Middle East, 83.

¹⁵³ Rubinstein, Red Star on the Nile, 201.

¹⁵⁵ Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton Univ. Press, 1999), 10–12; Dietrich Dörner, *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations* (New York: Basic Books, 2010), 15, 53; Nassim Nicholas Taleb, *Antifragile: Things That Gain from Disorder* (New York: Random House Trade Paperbacks, 2014), 305–308.

¹⁵⁶ Eisenhardt, "Agency Theory: An Assessment and Review," 71.

¹⁵⁷ Kissinger, Years of Upheaval, 226, 486, 532, 608; Peter Schwartz, The Art of the Long View: Paths to Strategic Insight for Yourself and Your Company (New York: Bantam Doubleday Dell Pub. Group, 1996), 241–248; John M. Bryson, "What to Do When Stakeholders Matter: A Guide to Stakeholder Identification and Analysis Techniques" (paper presentation presented at the National Public Management Research Conference, The Georgetown University Public Policy Institute, October 9, 2003), 1–47. Alternative futures explore ways a situation may develop. Stakeholder analysis develops understanding of the abilities and interests of key parties within a situation.

Israeli actions toward a singular outcome. The United States strengthened its capability to resolve principal-agent problems by incorporating incentives that increased optionality toward favorable outcomes, promoting a distinct advantage over the Soviet strategy.¹⁵⁸

Final Thoughts

The 1973 Arab-Israeli War demonstrates agency theory's validity within dynamic largescale combat environments. However, this dynamic operational environment requires more robust incentive strategies. Diplomatic and military leaders must continually apply and evaluate a range of incentive approaches to maintain a comparative advantage over principal-agent problems in an increasingly complex, multipolar world. Agency theory provides operational and strategic planners another lens to focus efforts toward prevailing in competition across the spectrum of military conflict. Ultimately, this theory serves as an important tool toward understanding the context of war and enabling the transformation of tactical actions into operational and strategic success.

¹⁵⁸ Taleb, Antifragile, 174–185.

Bibliography

- Avner, Yehuda. *The Prime Ministers: An Intimate Narrative of Israeli Leadership*. New Milford: Toby Press, 2010.
- Bar-Siman-Tov, Yaacov. Israel, the Superpowers, and the War in the Middle East. New York: Praeger, 1987.
- Berman, Eli, David A. Lake, and Julia Macdonald, eds. *Proxy Wars: Suppressing Violence through Local Agents*. Ithaca: Cornell University Press, 2019.
- Bryson, John M. "What to Do When Stakeholders Matter: A Guide to Stakeholder Identification and Analysis Techniques." Paper presentation presented at the National Public Management Research Conference, The Georgetown University Public Policy Institute, 9 October 2003.

Calvocoressi, Peter. World Politics since 1945. New York: Pearson Longman, 2009.

- Cleveland, William L. A History of the Modern Middle East. Boulder: Westview Press, 2004.
- Daigle, Craig. The Limits of Détente: The United States, the Soviet Union, and the Arab-Israeli Conflict, 1969-1973. New Haven: Yale University Press, 2012.
- Dean, Michael J. "The Soviet Concept of The Correlation of Forces." *Strategic Studies Center Stanford Research Institute* (May 1976): iv-v. Accessed 23 March 2020. https://pdfs.semanticscholar.org/eecf/94535e3b1f4da0756484f062227dd045ab68.pdf.
- Department of Defense. Summary of the 2018 National Defense Strategy of the United States of America. Washington, DC: Department of Defense, 2018. Accessed 8 January 2019. https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf
- Dörner, Dietrich. *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations*. New York: Basic Books, 2010.
- Dupuy, Trevor. Elusive Victory the Arab Israeli Wars, 1947-1974. Fairfax: Hero Books, 1984.
- Eisenhardt, Kathleen M. "Agency Theory: An Assessment and Review." *Academy of Management Review* 14, no. 1 (January 1989): 57–74. Accessed 8 January 2019. https://www.jstor.org/stable/258191.
- Feaver, Peter. Armed Servants: Agency, Oversight, and Civil-Military Relations. Cambridge: Harvard University Press, 2003.
- Fox, Amos C. "Conflict and the Need for a Theory of Proxy Warfare." Journal of Strategic Security 12, no. 1 (2019): 44–71. Accessed 28 October 2019. https://scholarcommons.usf.edu/jss/vol12/iss1/3.

—. "Time, Power, and Principal-Agent Problems Why the U.S. Army Is Ill-Suited for Proxy Warfare Hotspots." *Military Review* 99, no.2 (2019): 30–41.

- Gaddis, John Lewis. *Strategies of Containment: A Critical Appraisal of American National Security Policy during the Cold War*. Rev. and Expanded ed. New York: Oxford University Press, 2005.
- George, Alexander L. *Managing U.S.-Soviet Rivalry: Problems of Crisis Prevention*. Westview Special Studies in International Relations. Boulder: Westview Press, 1983.
- -------. Presidential Decision making in Foreign Policy: The Effective Use of Information and Advice. Westview Special Studies in International Relations. Boulder: Westview Press, 1980.
- George, Alexander L., and Andrew Bennett. *Case Studies and Theory Development in the Social Sciences*. Cambridge: Belfer Center for Science and International Affairs John F. Kennedy School of Government Harvard University, 2004.
- Gerring, John. "What Is a Case Study and What Is It Good For?" *American Political Science Review* 98, no. 2 (May 2004): 341–354.
- Glassman, Jon D. Arms for the Arabs: The Soviet Union and War in the Middle East. Baltimore: Johns Hopkins University Press, 1975.
- Hatch, Mary Jo. Organization Theory. 4th ed. Oxford: Oxford University Press, 2018.
- Haykal, Muhammad Hasanayn. *The Road to Ramadan*. New York: Quadrangle/New York Times Book Co, 1975.
- Herring, George C. From Colony to Superpower: U.S. Foreign Relations since 1776. The Oxford history of the United States. New York: Oxford University Press, 2008.
- Herzog, Chiam. The Arab-Israeli Wars. New York: Random House, 1982.
- Jervis, Robert. System Effects: Complexity in Political and Social Life. Princeton: Princeton Univ. Press, 1999.
- Kissinger, Henry. Years of Upheaval. Boston: Little, Brown & Company, 1982.
- Kohler, Foy D., Léon Gouré, and Mose L. Harvey. *The Soviet Union and the October 1973 Middle East War: The Implications for Detente Monographs in International Affairs.* University of Miami: Center for Advanced International Studies, 1974.
- Ladwig, Walter C. *The Forgotten Front: Patron-Client Relationships in Counterinsurgency*. Cambridge: Cambridge University Press, 2017.
- Leitenberg, Milton, Gabriel Sheffer, and Cornell University, eds. *Great Power Intervention in the Middle East.* Pergamon policy studies on international politics. New York: Pergamon Press, 1979.

London Sunday Times. The Yom Kippur War. Garden City: Doubleday, 1974.

Lt. Gen. McMaster, H.R. "Continuity and Change the Army Operating Concept and Clear Thinking About Future War." *Military Review* 95, no. 2 (2015): 7

- Mearsheimer, John J., and Stephen M. Walt. *The Israel Lobby and U.S. Foreign Policy*. New York: Farrar, Straus and Giroux, 2007.
- Pritchard, Justin. "Moral Hazard: Definition and Examples." Accessed 1 February 2020. https://www.thebalance.com/moral-hazard-what-it-is-and-how-it-works-315515.
- Rabinovich, Abraham. *The Yom Kippur War: The Epic Encounter That Transformed the Middle East*. New York: Schocken Books, 2017.
- Rubinstein, Alvin Z. Red Star on the Nile. Princeton: Princeton University Press, 1977.
- Sadat, Anwar. In Search of Identity: An Autobiography. New York: Harper & Row, 1978.
- Sappington, David E. M. "Incentives in Principal-Agent Relationships." *Journal of Economic Perspectives* 5, no. 2 (Spring 1991): 45–66.
- Schwartz, Peter. The Art of the Long View: Paths to Strategic Insight for Yourself and Your Company. New York: Bantam Doubleday Dell Pub. Group, 1996.
- Shazly, Saad. The Crossing of the Suez. San Francisco: American Mideast Research, 2003.
- Taleb, Nassim Nicholas. *Antifragile: Things That Gain from Disorder*. New York: Random House Trade Paperbacks, 2014.
- Votel, Joseph L, and Eero R. Keravuori. "The By-With-Through Operational Approach." *Joint Force Quarterly*, no. 89 (Quarter 2018): 40–47.
- Worley, Robert. Orchestrating the Instruments of Power: A Critical Examination of the U.S. National Security System. Lincoln: University of Nebraska Press, 2015.