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# Towards an Operational Framework for Lesser Evil Reasoning in International Politics

Master's thesis in Political Science Supervisor: Jo Jakobsen December 2023



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"A clever person solves a problem.

A wise person avoids it."

(Albert Einstein)

#### **Abstract**

This thesis explores decision-making and morality within international politics. The point of departure is the worldview of classical realism and Hans Morgenthau's interpretation of evilness in politics justifying that lesser evil principle as bearing moral compass in international politics. Despite the historical tradition of the lesser evil principle, neither Morgenthau nor other thinkers have established an operational framework to guide decision-makers in its application. Instead, lesser evil reasoning is fraught with shortcomings and pitfalls. Thus, I hereby propose a framework that aims to cater to these shortcomings and help decision-making.

Drawing on a theoretical interpretation of key aspects of classical realism and the concept of wicked problems, the thesis proposes a framework, termed the Problem Complexity Framework, that seeks to comprehend the 'evilness' (or complexity) inherent in a problem or situation and provide a robust justification for selecting the lesser evil alternative to address it. Seven factors, termed complexity factors, are suggested to contribute to the problem's complexity and how various alternatives might impact these factors, subsequently influencing the overall degree of complexity. By comparing how each alternative alters the complexity of the problem or situation, the alternative that diminishes the 'evilness' the most becomes the lesser evil alternative and the preferable choice. Thus, the framework's moral dimension aligns with the ethical underpinning of the lesser evil principle.

The framework's application and usage are demonstrated by assessing the complexity of the situation before the US invasion of Iraq in 2003 and how key decision alternatives, Deterrence and Invasion, would impact this complexity. Arguing that the Deterrence alternative would possibly reduce the complexity, in contrast to the Invasion alternative, the Deterrence alternative is deemed to be a lesser evil option. I further discuss how the framework improves the justification for reaching the lesser evil alternative from a comparable assessment made in my bachelor thesis. I have titled the thesis "Towards an Operational Framework to Lesser Evil Reasoning in International Politics". Clearly, the framework is far from mature and is empirically not validated through this thesis. Hence, I discuss not only perceived contributions but also some key issues and challenges that motivate new avenues for further research. Still, the framework represents a modest step towards such a goal, and could, if developed, hopefully represent a useful tool in political decision-making, supplementing other approaches and models.

### Sammendrag

Denne oppgaven belyser moralperspektivet i beslutningsprosesser i internasjonal politikk. Oppgaven er inspirert av den klassiske realismens forståelse av verden, Hans Morgenthaus tolkning av politisk moral og hvorfor han mener prinsippet om 'the lesser evil' bør være det bærende moralske kompasset i internasjonal politikk. Til tross for at dette prinsippet har lange tradisjoner, innebærer bruken av det avdekket en rekke fallgruver. Et omforent rammeverk for å systematisk identifisere et «lesser evil»-beslutningsalternativ finnes heller ikke.

Jeg foreslår i denne oppgaven et rammeverk til å understøtte dette moralske prinsippet om 'lesser evil' i internasjonal politikk. Rammeverket bruker kompleksitet som et mål på 'evilness' og derfor kalt det *Problem Complexity Framework*. Det er basert på en teoretisk tolkning av nøkkelområder i klassisk realisme, samt konseptet 'wicked problems'. Jeg utleder syv (7) såkalte kompleksitets-faktorer. Disse faktorene skal bidra til å evaluere graden av kompleksitet av et problem.

Innenfor internasjonal politikk er internasjonale konflikter en sentral problemtype. Utenrikspolitiske tilnærminger som diplomati, avskrekking, sanksjoner og militærmakt er forskjellige måter å håndtere/løse en konkret konflikt. I mitt rammeverk kan ulike beslutningsalternativer antas å påvirke kompleksiteten til konflikten. Ved å sammenligne hvordan hvert alternativ endrer konfliktens kompleksitet, blir det alternativet som best håndterer eller reduserer kompleksiteten ansett som det 'lesser evil' beslutningsalternativet og dermed det beste moralske valget.

I oppgaven eksemplifiserer jeg rammeverket gjennom en analyse av kompleksiteten i konfliktsituasjonen før den amerikanske invasjonen av Irak i 2003. Jeg analyser hvordan beslutningsalternativene avskrekking og invasjon ville påvirke kompleksiteten til situasjon. Jeg argumenterer for at avskrekkingsalternativet muligens ville redusere kompleksiteten til konflikten, i motsetning til invasjons-alternativet. Av disse to alternativene fremstår avskrekking derfor som et riktigere moralsk valg (the lesser evil) fremfor bruk av militærmakt.

Tittelen på oppgaven antyder at rammeverket fortsatt er umodent og i liten grad empirisk validert gjennom denne analysen. Men oppgaven gir et grunnlag for videre forskning og forhåpentligvis kan dette rammeverket være et mulig nyttig verktøy til å analyse det moralske perspektivet i politisk beslutningstaking, som supplement til andre tilnærminger og modeller.

#### **Preface**

This thesis marks the culmination of my Master's studies in Political Science at the Norwegian University of Science and Technology. This work stems from a genuine concern regarding the marginal role of morality in international politics. I have been strongly inspired by Hans J. Morgenthau and his interpretation of morality and what constitutes evil forces in politics. Moreover, after decades of extensive experiences with assessing real-world problems in the business domain, I have experienced the immense complexity that exist in the social world. Thus, an appreciation of the value of explicit awareness regarding factors contributing to complex problems further underpins and motivates this endeavor, informing the framework's development and application.

While the lesser evil principle serves as a useful guide for decision-makers, it is burdened with shortcomings and pitfalls. Foremost among these is, in my view, the absence of a standardized framework for analyzing factors contributing to evilness, comparing decision alternatives aimed at managing evilness, and determining the lesser evil alternative. The primary objective of this thesis is to establish such a framework and elucidate its practical application.

I am deeply indebted to Professor Jo Jakobsen for support, help and challenging me throughout this process. His honest and thorough guidance, as well as prompt and comprehensive feedback have been invaluable. Further, I want to thank an anonymous friend who has used considerable time and effort in meticulously reviewing the language and content of the thesis. Finally, heartfelt thanks go to my partner, Vivian, who has been a very patient observer of my long and strenuous intellectual adventure and, at the same time, provided valuable comments and critiques of parts of the work.

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Trondheim, December 2023,

Odd Ivar Lindland

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# 1 Introduction

#### 1.1 Background and rationale

This thesis explores decision-making and morality within international politics, examining foreign policy choices that vary in significance and ranging from narrow bilateral relationships to long-term strategic decisions impacting global relations. Some decisions arise from unexpected events or crises, while others result from comprehensive deliberations involving entire populations in referendums.

Frameworks for analyzing foreign decision-making have evolved over time. Early models presumed international leaders to be rational decision-makers (Allison, 1969; Reyna & Rivers, 2008; Simon, 1979), while recent research highlights the influence of psychological and emotional factors (Busemayer et al., 2007; Lerner et al., 2015; Wang & Ruhe, 2007). Despite this ongoing debate, morality is seldom explicitly considered in the analysis and justification of contemporary great power decisions (Bartels et al., 2015; Miner & Petrocz, 2003). Morality occasionally surfaces in decision discourse (Brostrom, 2016), often as rhetorical statements lacking substantial grounding in moral theories (Goldsmith & Posner, 2002; Hoefer & Green, 2016; Krebs & Jackson, 2007). However, considering the inherent adverse consequences of most complex political decisions, moral factors should be recognized as crucial criteria in the decision-making process.

There is a growing awareness of the necessity for morality to play a more explicit role in international politics. Eminent scholars like Joseph Nye, Richard Ned Lebow, and Yan Xuetong have advocated for this shift in their recent publications. Nye's *Do Morals Matter? – Presidents and foreign policy from FDR to Trump* introduces a three-dimensional moral framework and assesses the moral reasoning of US presidents (Nye, 2020). Lebow's *Ethics and International Relations: A Tragic Perspective* argues for the success of leaders grounded in honesty and justice (Lebow, 2020). Yan's *Leadership and the Rise of Great Powers* presents a synthesis of Western classical realist thinkers and Chinese philosophy, terming it moral realism (Yan, 2019).

To comprehend state relations and decision-making, the discipline of International Relations (IR) offers diverse assumptions and lenses, termed IR theories (Sørensen et al., 2022). This thesis focuses on classical realism, highlighting states' inherent suspicion of each other within the anarchical Westphalian state system. Classical realism emphasizes power and national interests in foreign policy decision-making and acknowledges the uncertainty of the social world (Elman & Jensen (Eds.), 2014; Kirschner, 2022; Morgenthau, 1948; Sørensen et al., 2022).

Within classical realism, thinkers historically varied in their treatment of morality (Lebow, 2003, Wong, 2000, Williams, 2005). While Thucydides and Machiavelli didn't explicitly include moral perspectives (Thucydides, 2009[~400 AD]; Machiavelli & Mansfield, 1998 [1532]), Hans J. Morgenthau, the founder of modern classical realism, strongly advocated for a moral outlook. This latter insight contradicts conventional wisdom but is extensively documented by recent research (Bain 2000; Cozette, 2008; Cristol, 2009; Jervis, 1994; Molloy, 2004; Murray, 1996; Lang, 2007; Lebow, 2003; Scheuerman, 2009; Williams, 2004, Wong 2000). Morgenthau asserted that morality should align across public and private spheres, emphasizing a moral perspective in state decisions (Morgenthau, 1945).

Morgenthau highlighted the inherent evilness in politics, rooted in the complex and unpredictable nature of the social world and a pessimistic view of human nature (Morgenthau, 1945). His article 'The Evil of Politics and the Ethics of Evil' from 1945 lays the foundation for a moral perspective in political decision-making, justifying the lesser evil principle as a core moral approach. However, neither Morgenthau nor other thinkers have successfully established an operational framework for applying these principles. Consequently, lesser evil reasoning suffers from inherent shortcomings and pitfalls (Spielthenner, 2009).

#### 1.2 Objective, Approach, and Key Results

This thesis will propose a framework for moral decision making in international politics by specifically supporting *lesser evil reasoning*. The objective of this framework is to comprehend the inherent 'evilness' of a problem or situation and establish a robust justification for selecting the lesser evil alternative to address it. The framework intends to explain key factors contributing to the 'evilness' and assess how various alternatives may impact these factors, and consequently influencing the overall 'evilness'. Through comparing how each alternative alters the 'evilness' of the problem or situation, the alternative that diminishes the 'evilness' the most will constitute

the lesser evil alternative and therefore, the preferred choice. Hence, rooted in the morale perspective underlying the lesser evil principle, the framework's morale dimension is well-founded.

The factors contributing to 'evilness' will be explored through an examination of two primary sources. Firstly, classical realism is deemed to offer a suitable approach for understanding complex social problems and situations in international politics (Kirschner, 2022). Secondly, the concept of wicked problems will complement classical realism in establishing the theoretical foundation for the framework. The term 'Wicked problem' was introduced in a landmark article, 'The Dilemmas in a General Theory of Planning' by Horst Rittel and Mel Webber in 1973 (Rittel & Webber, 1973). This concept signifies that certain problems are exceedingly complex to solve, particularly those within the social realm, where politicians often act as key 'problem solvers.' Despite varying backgrounds and political contexts, both classical realism and wicked problems propose that certain types of social problems differ fundamentally from those associated with natural and management sciences. Furthermore, they both contend that these problems are, in principle, unsolvable; at best, they can be managed or mitigated (Morgenthau, 1947; Rittel & Webber, 1973).

The theoretical deliberation provided a basis for proposing seven distinct characteristics that impacted complexity in politics. I have opted to reframe the terminology, choosing to use 'complexity' instead of 'evilness' or 'wickedness', while retaining the notion of the "lesser evil". Hence, I present the *Problem Complexity Framework*. This framework comprises seven factors that, in my perspective, are most relevant in influencing the complexity of a problem (formerly referred to as 'evilness in politics'): *i) scope, ii) seriousness, iii) uniqueness, iv) urgency, v) disagreement, vi) dynamic*, and *vii) inadequacy*. The direction of all factors is deliberately chosen to ensure a positive relationship between each factor and the problem's complexity. Thus, the higher prevalence of a factor, the greater the complexity.

The framework aligns with the rational tradition of political decision-making. Therefore, the higher quality of information used to justify the factors will enhance the confidence in the assessment. Apart from outlining the key components of the framework, this thesis also addresses its practical application. The ultimate objective is to be able to operationalize it within political decision-making. Initial requirements and guidelines for utilizing the framework are suggested. Furthermore, understanding the current complexity of a situation is pivotal but equally important

is assessing the impact of different decision alternatives. This evaluation forms the basis for determining the lesser evil option.

Having proposed the framework and initial guidelines, I demonstrated its usage through a real-world example: the situation that led to US's invasion of Iraq in 2003, aimed at eliminating Iraq's asserted weapons of mass destruction program. I assess the complexity of the situation as it later was confirmed (the Reality scenario) and compare it to the scenario that the US falsely portrayed (the Fictitious scenario). Additionally, I utilize the framework to evaluate the two most contested alternatives: the Deterrence and Invasion alternatives. The assessment suggests that the Deterrence alternative was the lesser evil option.

While the proposed framework shows promising potential in facilitating lesser evil reasoning in political decision-making, substantial research is needed to enhance its validity. Moreover, applying the framework to more real-world examples would be valuable in establishing its position as a supplement to existing decision-making models.

#### 1.3 Structure of the thesis

The thesis structure will follow this outline:

Chapter 2 will delve into the categorization and description of the concept of evil by prominent political thinkers. It will emphasize Morgenthau's views on morality in politics and his advocacy for the lesser evil principle. Additionally, it will briefly explore the historical promotion of the lesser evil principle in managing moral dilemmas and outline key pitfalls associated with its application. This chapter will lay the foundation for establishing a framework to assess the 'evilness' related to situations and the consequences of decision-making.

In Chapter 3, I will discuss how major thinkers in the school of classical realism influence the concept of 'evilness'. I will extract and term the main factors that serve as the foundational elements of the framework. To further refine and extend these factors, I will analyze the concept of wicked problems, which shares many similarities with Morgenthau's perspective on social issues. The combined analysis of classical realism and wicked problems will shape the proposed 'Problem Complexity Framework'.

In Chapter 4, I will elaborate on the proposed framework and its constituent factors. It will introduce a set of guidelines for utilizing the framework to evaluate problem complexity, analyze various decision alternatives, assess their influence on complexity, and identify the lesser evil

alternative. I will illustrate the framework's application by evaluating four common foreign policy decisions.

In Chapter 5, I will apply the framework to the 'Iraq problem'. This entails assessing the complexity of the situation before the US invasion of Iraq in 2003 and analyzing how key decision alternatives, namely Deterrence and Invasion, would impact complexity. I will argue for the lesser evil alternative based on this assessment.

Chapter 6 will wrap up the thesis and suggests areas that merits further research. First, I will reiterate the rationale and the point of departure for the work, focusing on increased awareness of morality in decision-making in international politics. I will discuss how compatible the usage of the framework aligns with Morgenthau's assessment of morality and summarize the theoretical deliberation that provides the basis for the proposed framework. Finally, I will review my work critically, first and foremost the usability of the framework in practice. I will also outline some areas for further research.

I have added two appendices. Appendix A discuss the framework with respect to stated requirements and how well it addresses Spielthenner's asserted pitfalls. Appendix B suggest a research design for empirical validation of the framework.

## 2 Evilness in politics

The focus of this thesis is the lesser evil principle and its application in decision-making within international politics. This chapter will discuss the concept of evil in politics. Initially, I will provide a general perspective on the concept and provide a summary of the main factors commonly associated with it. Additionally, I will explore into the debates surrounding the concept of evil in moral and political contexts, drawing insights from major political thinkers such as Immanuel Kant, Hannah Arendt, and Friedrich Nietzsche.

Next, I will review Morgenthau's interpretation of evil. I will investigate Morgenthau's arguments for comprehensively applying the concept in his theory of international politics and political decision making, specifically his justification for applying the lesser evil principle. Additionally, I will present the primary aspects of the lesser evil principle and highlight the pitfalls associated with lesser evil reasoning.

The chapter provides an essential context for the thesis, illustrating the significance of the lesser evil principle in political decision-making and emphasizing the current absence of an analytical framework for its application.

#### 2.1 Definition and Categorization

The term 'evil' originates from a religious context, particularly Christian/Western theology, where it denotes the absence of God and is associated with actions attributed to the Devil (Calder, 2022; Chignell, 2019; Nys & De Wijze, 2019; Peterson, 2018). However, in this thesis I will focus on its secular evolution and its application within a political context. While there is no universal accepted definition, philosophical and secular literature offer various interpretations and theories concerning it (Calder, 2022; Nys & De Wijze; 2019). Oxford defines it as something "profoundly immoral and wicked" (Stevenson, 2010, p. 607).

The concept is often categorized into a *broad concept* and a *narrow concept* (Calder, 2022). The broad concept encompasses any adverse situation, wrongful action, or character flaw, further divided into *natural evil* and *moral evil*. Natural evils are inherent natural phenomena, like hurricanes and earthquakes, devoid of human involvement. Conversely, moral evils stem from intentions or negligence of *moral agents*, such as murder and lying (Calder, 2022). On the other hand, the narrow concept of evil emphasizes the most immoral actions, characters, events, typically

attributed solely to moral agents and their actions. In contemporary moral, political and legal contexts, this category of evil is commonly referenced.

Another dimension related to the concept of evil is linked to individual personalities of moral agents, denoted as *evil personhood* or *evil character*. Various theories categorize evil characters into regularity or dispositional accounts on the one hand, and action-based, affect-based, or motivation-based accounts on the other (Calder, 2022).

In philosophical discourse, there are opposing views on the concept of evil: *evil-skeptics* and *evil-revivalists*, respectively. Evil-skeptics advocate abandoning the concept due to unwarranted supernatural commitments, lack of explanatory power or its harmfulness when used in moral, political, and legal contexts. Conversely, evil revivalists assert that the concept of evil holds significance in moral and political discourse (Calder, 2022).

This thesis aligns with the evil-revivalist viewpoint, focusing on evils involving moral agents. Its objective is to explore complex problems and situations faced by moral agents, particularly politicians in international relations. The focus remains on the inherent evil within situations and a statesman's responsibility and capacity to manage such situations. The remaining part of this chapter will seek to understand the interpretations and discussions of the concept by some key thinkers, including its central position in Morgenthau's reasoning on moral questions and his justification for the lesser evil principle (Morgenthau, 1945).

#### 2.2 The concept of evil explained by philosophers and presidents

The concept of evil has been extensively explored by several prominent philosophers throughout history (Nyz & DeWijze (Eds.), 2019).

Immanuel Kant was the first philosopher to propose a purely secular theory of evil. In *Religion Within the Limits of Reason Alone* Kant defines evil as a human possessing a will that is not entirely good (Kant et al., 1960[1792]). He argues that individuals are morally good in their will only if they choose to perform morally right actions (Kant et al., 1960[1792]). According to Kant, those lacking a good will exhibit evilness or will corruption at three levels: 1) *Frailty*: Individuals with a frail will aim to perform morally right actions but lack strength to execute their plans. 2) *Impurity*: Those with an impure will perform morally right actions partly because they are morally right and partly due to some other incentive, such as self-interest. Kant contends that impurity is worse than frailty because it allows an incentive other than the moral law to guide actions. 3) *Perversity, or wickedness:* Individual with a perverse will prioritize self-love over the

moral law, adhering to the moral law only if it aligns with their self-interest. While recognizing human beings 'free will', Kant believed we have an innate propensity to evilness, echoing somewhat the Christian concept of original sin. He termed this doctrine 'radical evil' (Grimm, 2002, p. 160).

Hanna Arendt, a German philosopher, offers a notable secular analysis of evil, shaped by her study of the atrocities in Nazi death camps. In *Origins of Totalitarianism*, Arendt employs Kant's term 'radical evil' to describe the evil of the Holocaust (Arendt, 1951). However, her interpretation differs from Kant's. She employs the term to signify a new form of wrongdoing wherein human beings lose spontaneity or freedom. According to Arendt, radical evil emerges in totalitarian regimes to reinforce control, underlining the notation that anything is possible (Arendt, 1951). In *Eichmann in Jerusalem: A Report on the Banality of Evil* (Arendt, 1964) Arendt scrutinizes individual behavior in totalitarian regimes, focusing on the Nazi functionary Adolf Eichmann and his trial in 1961. Arendt portrays Eichmann as a seemingly ordinary individual who didn't deeply reflect on his actions, describing his motives and character as banal rather than monstrous. (Arendt, 1964).

Friedrich Nietzsche, the nineteenth century German philosopher, stands as a celebrated evil skeptic. In *On the Genealogy of Morality: A Polemic*, Nietzsche suggests that the concept of evil stems from the negative emotions like envy, hatred, and resentment. He asserts that the powerless and weak created it to retaliate against their oppressors (Nietzsche et al., 1964[1887]). Nietzsche argues for abandoning the concept, deeming it dangerous and divorced from moral reality, employed merely used to demonize adversaries. Moreover, he claims that it has negative effects on human potential and vitality by promoting the weak in spirit and suppressing the strong.

Kant and Arendt associate their interpretations of evil with the character of the human being, while Nietzsche links the concept to situations where one group oppresses another. In this thesis, I advocate for the relevance of the concept, emphasizing the evil characteristics inherent in a problem or situation rather than in the human character. Therefore, I will apply a different secular interpretation of evil that differs from those of Kant and Arendt, aligning closer with Nietzsche's perspective. However, in contrast to Nietzsche, I aim to acknowledge its existence rather than aiming to ignore it.

In discussions concerning the concept of evil, it has been noted that two U.S. presidents in modern times employed the term 'evil' in political arguments. Ronald Reagan first used it in March

1983 during a speech delivered to the National Association of Evangelicals, amid the peak of the Cold War and the Soviet-Afghan War. In this address, Reagan referred to the Soviet Union as an 'evil empire' and 'the focus of evil in the modern world,' attributing primary responsibility for the nuclear arms race to them.

A similar phrase was later echoed by U.S. President George W. Bush during his State of the Union address in January 2002, when he labeled Iran, Iraq, and North Korea as the 'Axis of evil'. (Bush, 2002a). This term subtly evoked the Axis powers of WWII (Nazi Germany, Fascist Italy, and Imperial Japan) and drew parallels with Reagan's phrase, 'Evil Empire' (Reagan, 1983).

On both occasions, the use of the term 'evil' served as a rhetorical device for the public audience, vividly framing an adversary that required conquering (Choi, 2010). Implicitly, it depicted an epic struggle between forces of good and evil in the world, portraying the 'good' force as justified in using means to eliminate the 'evil' one. This concept, as discussed below, stands in stark contrast to Morgenthau's view of the 'ubiquity of evil' (Morgenthau, 1945, p. 14).

This interpretation highlights a significant divergence between the portrayal of the United States as a morally superior force, justifying its actions, and Morgenthau's perspective on the pervasive nature of evil.

#### 2.3 Morgenthau's definition of evil

As noted, various key thinkers possess diverse views and analyses regarding the concept of evil. Curiously, none of the cited thinkers directly connect the concept to the moral approach of political decision-making through lesser evil reasoning. However, this connection serves the cornerstone of Hans Morgenthau's exploration of evil in politics and forms the basis for his preference for the lesser evil principle. First, though, given Morgenthau's influential rationale within this thesis, a short summary of him and his core contributions is warranted.

Hans Morgenthau, the most prominent scholar from the classical realist school in the 20th century, was born in Germany in 1904 and emigrated to the United States in 1937. He spent most of career as a professor of political science at the University of Chicago. Morgenthau maintained a dual role, actively engaging in academia while also participating in various capacities within the US government. He served as a consultant to the US Department of State during both the Kennedy and Johnson administrations (Scheuerman, 2009).

His prominence rose significantly during the Vietnam War due to his increasingly vocal opposition to the conflict. Initially a supporter of containing potential communist expansion,

Morgenthau's views shifted as the US involvement escalated. He became deeply concerned with the war's moral aspects and its potential damage to US national interests. This evolution led to his dissent and active anti-war activism, eventually resulting in the termination of his engagement with the Johnson administration (Rafshoon, 2001; See, 2001; Zambernardi, 2011).

Morgenthau's political theories are primarily articulated in *Scientific Man versus Power Politics* (Morgenthau, 1947) and *Politics Among Nations: The Struggle for Power and Peace* (Morgenthau, [2006]1948). The former discusses limitations in science and technology in solving political and social problems. Despite being an empiricist who advocates basing knowledge and actions on sense impressions and reason, Morgenthau acknowledges the influence of non-rational and irrational forces in human decision-making processes (Wong, 2000).

His work *Politics Among Nations: The Struggle for Power and Peace* stands as his most influential contribution to political science. In its opening pages, he presents the philosophical foundations of classical realism and introduces the "Six Principles of Realism". Additionally, he delineates the fundamental disparities between realism and liberalism. Morgenthau argues that liberalism's vision of a rational and moral political order, derived from universally valid principles, is unattainable. Realism, according to him, adopts a pragmatic approach to international relations, recognizing the intricacies of human nature. To effect change in the world, one must collaborate with, rather than oppose, the forces inherent in human nature. He posits that moral principles can never be fully realized but, at best approximated (Morgenthau, 2006 [1948]).

When Morgenthau's realism principles are introduced in academic textbooks, they often emphasize his pessimistic depiction of human nature and states' struggle for power in pursuit of their national interests (Morgenthau, 2006[1948]; Sørensen et al., 2022). However, such portrayals oversimplify Morgenthau's version of realism, which is intricate and multifaceted, encompassing both descriptive and normative dimensions.

A growing number of scholars have explored into the normative dimension and moral underpinnings of his realism principles (Bain 2000; Cozette, 2008; Cristol, 2009; Jervis, 1994; Molloy, 2004; Wong 2000). His moral perspective is inspired from various renowned philosophers and scholars, including Aristotle (Lang, 2007; Mollov, 2009), Augustine (Murray, 1998), Epicurus (Molloy, 2009), Niebuhr (Molloy, 2009), Plato (Pin-Fat, 2005), and Weber (Gismondi, 2004; Molloy, 2009; Williams, 2004).

Morgenthau's description of evil within the political sphere initially surfaced in the article "The Evil of Politics and the Ethics of Evil" (Morgenthau, 1945). This article encapsulates pivotal aspects of his perspective on the nature of politics and the role of morality, expanded upon in *Scientific Man and Power Politics* (Morgenthau, 1947). These works establish the bedrock of Morgenthau's moral viewpoint, justifying its relevance in political decision making. In the following section I will extract the main topics and arguments from the named article.

Initially, Morgenthau echoes and extends Aristotle's renowned phrase "man is by nature a political animal" (Aristotle, 2013[?], 1253a1) by stating: "Man is a political animal by nature; he is a scientist by chance or choice; he is a moralist because he is a man" (Morgenthau, 1945, p.1). This single sentence encapsulates the essence of Morgenthau's perspective on politics. It asserts that human beings are inherently inclined to engage in the political realm and are compelled to make moral judgements. Consequently, morality forms an indispensable part of all political activities. The intrinsic interweaving of politics and morality arises due to the human nature. In contrast, Morgenthau views involvement in science as optional, suggesting that becoming a scientist might occur randomly or as a conscious choice.

Morgenthau diminishes the role of science and the ideology scientism as a universal approach to knowledge. While acknowledging supremacy of natural sciences and the scientific method in revealing truths about the physical world, he argues that scientism is not a universally applicable for humankind in all instances, especially in the social and political domains (Morgenthau, 1945, p.1). This places him at odds with viewpoints of Machiavelli and Hobbes, whom Morgenthau believes advocate for scientism. He contends that an overreliance on the scientific method in analyzing the real world and making decisions could risk ignoring vital perspectives, insight, and considerations essential for resolving complex political problems (Morgenthau, 1945, p.2).

Morgenthau stresses the vital importance of moral judgement within the realms of political power. He advocates for placing moral issues at the forefront of the political agenda, cautioning against the dominance of science in this arena, as it might inadvertently limit or disregard the role of morality (Morgenthau, 1945, p. 1).

Exploring prominent moral theories, Morgenthau highlights *utilitarianism* as the prevailing school of thought. This theory focuses on maximizing human satisfaction by rationally weighing advantages against disadvantages, ultimately favoring decisions that serve the strongest or richest

interests. Morgenthau contends that this moral theory is directly associated with sciences (Morgenthau, 1945, p. 2). In instances where decisions yield negative outcomes, he suggests that any ignorance or lack of knowledge should be addressed through education and training. Additionally, Morgenthau underscores the role of propaganda in concealing the adverse effects of decisions influenced by utilitarianism (Morgenthau, 1945, p. 2).

Morgenthau challenges the relevance of *Christian ethics* as a guiding force in human actions. He posits, that Christian ethics may have become a mere ceremonial tribute, with hollow symbols no longer expected to guide human conduct (Morgenthau, 1945, p. 2). He juxtaposes the practice of utilitarianism with the preaching of traditional ethics, suggesting that their merger can lead to inner conflicts within individuals. These conflicts arise when utilitarian decisions for self-satisfaction clash with and individual's awareness of the potential disparity in their personal ethical experience (Morgenthau, 1945, p.2).

Moreover, Morgenthau identifies what he perceives as a flaw in applying morality to public and private purposes. He associates this attitude with Machiavelli and Hobbes on the *raison d'état*, which asserts that a state can act in its own interest without external justification or control. This viewpoint suggests that a nation's foreign policy primarily serves the nation's interests from a standpoint of expediency rather than aligning with the moral framework by which citizens are judged (Morgenthau, 1945, p. 5). Consequently, it is commonly accepted that statesmen and political decision-makers are exempt from the moral rules that governs the private sphere. They are expected to prioritize decisions that serve the best interests of the nation or its population (Morgenthau, 1945, p.6). In Morgenthau's opinion, this *dual morality* will eventually be destructive for any nation. Over time, the practices of different ethical standards in different spheres, Morgenthau believes, create an "ethical gap" that must be eliminated or at least justified according to a "higher principle" (Morgenthau, 1945, p. 6).

Furthermore, Morgenthau examines the relationship between ends and means in morality, questioning its use to justify any immoral means if the intention or end is considered good. He challenges this concept, deeming it an improper manifestation of the dual morality concept (Morgenthau, 1945, p. 8). He argues that when the rationale behind the stated end is challenged, ends become means in principle. This could potentially create an endless chain of means and an end goal that transcends human involvement (Morgenthau, 1945, p. 9).

Morgenthau's discussion suggests that individual ethics might surpass or replace political ethics, potentially reducing or eliminating the amount of evil in politics (Morgenthau, 1945, p.10). However, he dismisses this notion, arguing that the assumption of a distinction between actors in the private and political spheres is false. According to Morgenthau, it is always the individuals that influence both realms, making the distinction artificial (Morgenthau, 1945, p. 10).

Then, Morgenthau then shifts his focus to the forces influencing individual ethical judgement. He argues that due to the limitations in foreseeing all consequences, all individual actions inherently possess the potential for some degree of immorality (Morgenthau, 1945, p. 10). Consequently, abstaining from decision-making or action may seem morally preferable. However, Morgenthau asserts that refraining from making a choice or acting does not equate to a moral alternative. Every choice or lack thereof results in both positive and negative consequences for different parties involved. Thus, the morality associated with a deliberation or action also depends on the perspectives of others (Morgenthau, 1945, p. 12).

Morgenthau contends that the principal cause for the evil lies in humanity's yearning and contest for power; what he terms *animus dominandi*. According to Morgenthau, this struggle for power, if unchecked, corrupts the political community and diverts it from its primary objective of working for the common good of the nation's population or citizens (Morgenthau, 1945, p. 13).

Morgenthau claims that human beings are prisoners of the evilness of power struggle in politics, as active participants, and as passive observers. He argues that the ethics within politics inherently involves the commission of evil. By acknowledging that all decisions or actions involve some degree of evil, he emphasizes that science, politics, or ethics cannot harmonize the conflict between politics and ethics and suggests that wise consideration of circumstances and options, with moral courage to choose the least evil alternative, is the best approach (Morgenthau, 1945, p. 18).

### 2.4 The lesser evil principle

Morgenthau's view of evil in politics led to his preference for the lesser evil principle as a fundamental ethical guide in addressing political dilemmas or complex problems in international politics. To offer a comprehensive overview and evaluation of the lesser evil principle, I will briefly summarize selected historical instances of moral dilemmas where the principle applied. Additionally, I will examine critical pitfalls and deficiencies highlighted in existing literature,

substantiating the necessity for a framework that supports lesser evil reasoning in political decision-making.

The lesser evil principle serves as a method for resolving moral dilemmas wherein a person must choose between unfavorable alternatives. According to the Cambridge Dictionary (Cambridge, 2023): "A dilemma is a situation in which a choice has to be made between possibilities that will all have results you do not want". The moral aspect implies that the choice will be judged by whether it is a good or bad choice, right or wrong characteristic of a binary choice.

A thorough review and discussion of moral dilemmas and their main influences in the medieval period has been carried out by M. Dougherty in the book *Moral Dilemmas in Medieval Thought: From Gratian to Aquinas* (Dougherty, 2011). Initially, he acknowledges the ancient roots of such dilemmas. The lesser evil principle was introduced as a moral compass by great ancient thinkers such as Plato, Aristotle, and Cicero (Dougherty, 2011).

Moreover, Dougherty presents and discusses different versions of moral conflicts and dilemmas, one of which are situations where an agent is simultaneously obliged to perform an action and not to perform the same action. That is, a moral conflict implies that it is harmful or morally wrong *not* to act as well. Dougherty refers to the term *perplexity* that commonly occurred among medieval thinkers. In this situation an agent is entrapped between two conflicting sins, and it is impossible to avoid any wrongdoings. Thus, this interpretation resembles the meaning that contemporary philosophers refer to as a moral dilemma.

The lesser evil concept was also addressed in Spinoza's famous work *Ethics* (de Spinoza, 2020 [1677]). Spinoza, challenging traditional religion and reviving pantheism as a guiding worldview, spurs human beings to focus on understanding all aspects of the world through reasoning. He reiterated the principle from ancient and medieval thinkers in Proposition 65 of Part IV: "According to the guidance of reason, of two things which are good, we shall follow the greater good, and of two evils, follow the less." (de Spinoza, 2020 [1677], part IV, P65)

Edward John Lemmon, in *Moral Dilemmas*, distinguishes three levels of requirements a moral agent may face: duties, obligations, and moral principles (Lemmon, 1962). He suggests that moral principles, like the lesser evil principle, should supersede duties and obligations. This implies that moral principles hold greater weight than international laws or treaties in the realm of

politics, reinforcing the importance of explicitly including moral principles in political decisionmaking.

While traditionally interpreted as having only two alternatives, I will expand the understanding of a dilemma to encompass all relevant outcomes in a situation or problem. The lesser evil principle involves choosing between alternatives, all of which have harmful consequences for someone. However, one alternative inflicts less harm than the others. Though the term implies a choice between two options, I will consider all relevant alternatives in this work.

Fast forward to recent history. The lesser evil principle has been applied in various contexts, such as in elections when voters are compelled to choose the lesser of undesirable candidates or parties (Agerberg; 2020). Another area that has elaborated on applying the lesser evil principles in studies of regime types (Bellamy, 2007; Dubil, 2004; Ignatieff, 2004; Winkler, 1990). It has also been invoked in medical context (Allison & Saag, 2006; Schover, 2008)

A famous philosophical debate concerning the lesser evil principle is centered around the 'Trolley Problem', originally phrased by Judith Thomson (Thomson, 1984), which presents a moral dilemma of diverting a runaway trolley to kill one person instead of five. This problem has sparked extensive debates among deontologists and consequentialists. Recent debates surrounding the lesser evil principle in the context of the Trolley problem include arguments by Helen Frowe, who strongly advocates for turning the trolley to minimize harm (Frowe, 2018). However, scholars like Gordon-Solmon & Pummer (2022) and Lazar & Graham (2021) express skepticism about Frowe's arguments, providing an extensive discussion of the lesser evil principle.

The applicability of the lesser evil principle in this thesis will be far wider than the more focused topics above. Aligning with Morgenthau's interpretation of evilness, the lesser evil reasoning should be carried out in political contexts viewing all real-world problems and situations to have some degree of evilness associated with it.

#### 2.5 Shortcomings and pitfalls in lesser evil reasoning

Despite the extensive philosophical tradition of the lesser evil principle in addressing moral dilemmas, there remains a lack of an authoritative standard framework to assist agents in lesser evil reasoning. Spielthenner's discussion highlights this fact in 'Lesser evil reasoning and its pitfalls' as well as several pitfalls associated with lesser evil reasoning that are important to consider (Spielthenner, 2009).

Spielthenner asserts that lesser evil reasoning is not thoroughly understood by proponents, emphasizing problems related to terminology, scope, and applicability of the principle (Spielthenner, 2009, p. 140). He particularly points out varying interpretation of the term 'evil'. This aligns with my discussion of the evil concept above. Additionally, Spielthenner clarifies that his discussion relates to situations where 'evil' is a predicate act only and not related to the evil will of individuals (Spielthenner, 2009, p. 141). Spielthenner defines his reasoning within the boundaries of moral absolutism and value incommensurability. Moral absolutism suggests situations where the lesser evil principle cannot be applied due to the absolute nature of certain moral obligations. Value incommensurability posits that some alternatives are incomparable, making it impossible to determine which is the lesser evil. Spielthenner argues that measuring the degree of evilness on a scale is crucial for comparison, highlighting the need for an ordinal scale to rank the alternatives (Spielthenner, 2009, p. 142-44).

In my opinion, Spielthenner's assertions emphasize the need for an analytical framework guiding lesser evil reasoning. His discussion introduces valuable variables that are pertinent to my endeavor of establishing such a framework, thereby warranting a comprehensive review.

Spielthenner introduces a typology of situations where lesser evil reasoning is employed, categorizing them based on the outcomes' certainty. For certain outcomes he distinguishes between *unidimensional* and *multidimensional outcomes*. For uncertain outcomes, Spielthenner distinguishes between *probabilistic* and *non-probabilistic* situations (Spielthenner, 2009)

Let us summarize the pitfalls that he discusses. The first pitfall involves boxing *oneself in with two alternatives* (Spielthenner, 2009, p. 145). This may occur if decision-makers restrict themselves due to biases or ideological preferences, limiting their consideration of alternatives. The second pitfall relates to *ignoring defeasibility* (Spielthenner, 2009, p. 145). New information or premises may alter initial arguments, impacting the ranking of the alternatives. Additionally, Spielthenner highlights the third pitfall, as *overlooking crucial consequences of alternatives*, particularly in multidimensional reasoning under certainty (Spielthenner, 2009, p. 146). A related, fourth trap involves *regarding an act as evil solely because it has negative consequences* (Spielthenner, 2009, p. 147). This overfocus on negative outcomes may lead to mischaracterizing an act as evil despite its overall positive consequences (Spielthenner, 2009, p. 147).

Spielthenner discusses *Asserting unjustified premises* as the fifth pitfall. (Spielthenner, 2009, p. 149). He argues that the reasoning becomes flawed when the premises lack sufficient

justification. For instance, if probabilities are associated with outcomes, adequate evidence, such as statistics, should support the assessment.

A related, and sixth, pitfall *is making unjustified value judgement* (Spielthenner, 2009, p. 150). The challenge here is to provide credible valuation of the outcome of the decision. Again, this is key to be able to compare the alternatives.

For non-probabilistic uncertain situations, meaning it is not possible to assign a definite likelihood of various outcomes. Spielthenner introduces the *Maximin and Maximax principles*, recommended by some scholars. The Maximin principle suggests selecting alternatives based on identifying the least bad outcome while the Maximax principle suggests choosing the alternative that provides the best outcome. Critics of this principle argue that it is too easy to find the worst outcome and recommend identifying the best outcome for each alternative; and choose the alternative that provides the best outcome. According to Spielthenner, this *Maximax Principle* challenges the lesser evil concept in general since the best outcome often is not regarded as evil.

This leads to the seventh and final pitfall: *overfocusing on the negative* (Spielthenner, 2009, p. 151). Thus, the mindset associated with lesser evil reasoning may unintentionally create a bias towards the negative aspects of a situation. Spielthenner recommends balancing positive and negative aspects in decision-making (Spielthenner, 2009, p. 152).

Spielthenner's comprehensive assessment of lesser evil reasoning introduces a novel typology of various problems and situations, shedding light on critical pitfalls. These should form the basis for analytical frameworks. The proposed framework should comply with a set of requirements that establish expectations to avoid these pitfalls.

#### 2.6 Towards a framework for lesser evil reasoning

Despite an extensive investigation of relevant literature, no directly applicable analytical framework supporting lesser evil reasoning has been identified within the field, which appears surprisingly limited in this aspect. However, one distant exception is worth noting: Joseph Nye proposed a recent framework for evaluating the moral perspectives of states leaders in *Do Morals Matter?: Presidents and Foreign Policy from FDR to Trump.* (Nye, 2020). Nye introduces a three-dimensional framework - Intentions and Motives, Means, and Consequences – to assesses the moral reasoning and situational awareness of various presidents. While suitable for qualitative assessments of presidential morality, this framework falls short in directly evaluating different decision alternatives where the principle of choosing the lesser evil is to be applied. For instance,

the prudence criterion within Nye's framework highlights contextual intelligence in decision-making but lacks specificity in determining which alternative qualifies as the lesser evil.

The crux of applying the lesser evil principle lies in confidently determining the lesser evil alternative. An essential component is an analytical framework enabling the assessment and comparison of alternatives to justify that the decision and subsequent actions produce less harm than other alternatives.

Drawing from the preceding discussions, effective lesser evil reasoning requires several key considerations. First, moral agents faced with the evilness of a situation must decide among alternatives, all of which are deemed evil. Second, the assessment of evilness is contextual, considering the complexity and the consequences of the situation itself. The focus remains on the situation and problem, with the moral agent's degree of evilness linked to their handling of lesser evil reasoning. Third, the number of evil alternatives isn't limited to two but can encompass several relevant choices. Fourth, inaction or not deciding is considered a valid evil alternative. Finally, these alternatives are not restricted by laws or moral absolutes, even if they conflict with established norms. Legal assessment of the alternatives is not a priority. Establish mechanisms for comparing or ranking the alternatives with respect to evilness is crucial.

At the core of these prerequisites are mechanisms that indicate or preferably explain which real-world phenomena or characteristics that contributes to the evilness. The framework should facilitate a moral agent in considering these characteristics and establish an understanding of how these characteristics impacts evilness. Similarly, the decision alternatives on their influence on the characteristics and subsequently, the situation's evilness should be supported.

Establishing causal relationships among real-world phenomena remains an elusive aspiration in social sciences, including political science. While deemed unattainable by eminent thinkers, verified correlations stand as the next best approach. This thesis represents an initial stride toward this objective. Central to this research is the endeavor to maintain equilibrium between parsimony and explanatory prowess; the framework should contain the smallest set of factors as possible, to give the most complete explanation of what influences the problem's complexity (Hancke, 2009; Moses & Knutsen, 2019).

Based on these overall premises for a framework, I have proposed as set of supplementary requirements and expectations. These are as follows:

- 1. The framework shall balance two main (competing) goals of a theoretical framework: Parsimony vs. explanatory power.
- 2. The framework shall indicate the level the evilness or complexity of a situation/problem.
- 3. The framework shall describe the change in complexity for a given decision alternative.
- 4. The framework shall be suitable for lesser evil reasoning.
- 5. The framework shall contain a set of characteristics/ factors/variables that have direct impact on the complexity.
- 6. The proposed factors shall be labeled to indicate a positive relationship between the level of a factor and the level of complexity. In other words, the more of one factor present, the higher the complexity.
- 7. The proposed factors should be generic, meaning they should potentially be relevant for all problems and situations.
- 8. The proposed factors shall be independent of each other. That is, the assessment of one factor should be made without considering other factors in the framework.
- 9. To evaluate the level of a factor, a set of topics or sub-factors can be introduced. These topics are specifics either to the problem or to the various decision alternatives that might affect the complexity of the problem. While these topics are not included in the framework, they should be considered for all problems or situations being assessed.
- 10. For each factor, a scale should enable indicating the level of a factor and its contribution to the complexity of Problem A allowing comparison to the contribution of the same factor in Problem B.
- 11. If possible, the same scale shall be used for all factors.
- 12. Alongside the assessment of each complexity factor, it is important to specify the level of confidence in the assessment, including supporting justification.
- 13. The framework and its factors shall be utilized to assess various relevant decision alternatives.
- 14. The decision alternatives will represent a potential change in current problem complexity. Each decision alternative shall be assessed for all complexity factors.
- 15. For each complexity factor, the change shall use the scale for the factor and represents a quantitative increase, decrease or no change for the complexity factor. The net change for the problem complexity is the sum of all factor changes.

- 16. The net change shall be calculated for all decision alternatives following the above procedure.
- 17. The decision alternative that exhibits the smallest net change (ideally a negative number) is considered the lesser evil alternative.

It is important to stress that these requirements are not exhaustive but seen as a starting point to establish an initial version of the framework. The proposed requirements should enable a framework that guide the users to avoid the pitfalls that Spielthenner discusses. In this framework complexity (evilness) is the dependent variable, and the complexity factors are independent variables.

#### 2.7 Summarizing key points from the chapter

In this chapter, I have explored various categorizations of evil and contributions of key secular thinkers in understanding this concept. My interpretation and focus pertain specifically to a political context, where decision-makers confront morally complex choices. I emphasize the moral dimension inherent in these decisions, given the political landscape where agents act on behalf of a state and its populace- While Kant's view of evil will and Arendt's examination of banal evil within the common individual are not directly relevant to this work, I lean towards Nietzsche's context, advocating for a revival of this perspective in the political realm. Hence, I adopt a broad interpretation of evil, suggesting that nearly all situations and political decisions carry inherent 'evil'. In this regard, I echo Morgenthau's notion of the omnipresence of evil, linking this concept to the complexity of a situation or a problem and the risks associated with actions or decisions.

So, much of rationale for this thesis draws heavily on Morgenthau's understanding of the social world and how this affects international relationships and politics. Echoing Aristotle, characterizing human beings as inherently political animals, framing politics as an arena that is grappling with complex and morally challenging situations. Consequently, political decision making is seen as primarily a moral endeavor. He contends that common moral theories like utilitarianism and Kant's deontological ethics inadequately addresses the inherent 'evil' in politics. Instead, he acknowledges the prevalence of evil and advocates for lesser evil reasoning as a moral compass to navigate these complexities and define the most appropriate political decisions—the 'lesser evil' choices—when faced with problematic scenarios (Morgenthau, 1945).

Morgenthau's argument on the presence of evil in politics primarily stems from his observations of human nature, particularly the human desire for power ('Animus dominandi'). However, these aspects are intricately linked to the characteristics of the problems themselves. To elucidate systematic patterns in lesser evil reasoning and moral foundations shaping decision-making, a thorough understanding of these problem characteristics and their influence on the degree of acceptance of 'evilness' by decision-makers is necessary.

A problem comprises various characteristics that impact its 'evilness' or complexity. To address these problems, decisions must be made that alter these characteristics, ultimately rendering the problem's complexity more manageable. The goal is to justify each decision as a 'lesser evil' by effectively tackling key problem characteristics to reduce overall complexity.

It is crucial to note that decisions can impact different problem characteristics in divergent ways—some might increase complexity, while others decrease it, and some remain unaffected. Political decisions must assess alternative courses of action that influence various aspects of the situation's characteristics and complexity. Guided by the lesser evil principle and associating 'evil' with the situation's complexity, the 'lesser evil' alternative becomes the one that most effectively diminishes this complexity or 'evilness' of the problem.

This interpretation of the lesser evil principle extends beyond assessing direct consequences for individuals, finances, or the environment. It also encompasses the consequences for the problem itself. Building on Morgenthau's arguments, I maintain that certain political problems subjected to lesser evil reasoning cannot be fully resolved but only mitigated. Therefore, evaluating a decision's impact on the problem's complexity or the situation's 'evilness' becomes crucial.

The lesser evil principle, however, lacks an establish framework for comprehensive analysis and justification in complex political scenarios. Despite renewed scholarly interest, persistent shortcomings, and pitfalls, as highlighted by Spielthenner, hinder its application. Hence, the primary objective of this thesis is to propose an analytical framework that can effectively support lesser evil reasoning. Specifically targeting decision- making in international politics, the framework seeks to assist decision-makers in making morally informed decisions within uncertain situations, as classified by Spielthenner's typology. Spielthenner delineated seven pitfalls associated with lesser evil reasoning, classified in line with his typology. The framework and its guidelines should be designed to navigate these pitfalls and facilitate morally sound decision-

making processes. The proposed premises and requirements for the framework should support such an aim.

Now, it is time to investigate what real-world phenomena that may contribute to evilness of a situation or problem complexity. These characteristics will be the foundational elements constructing the framework.

# 3 Primary characteristics of the social world

#### 3.1 Introduction

Understanding problem characteristics contributing to complexity is essential. Often, situations and problems in the social world bear similarities to others yet possess unique elements contributing to their complexity. Recognizing this premise is fundamental for evaluating a situation's complexity and identifying alternatives capable of reducing it.

The primary aim of this thesis is to identify a set of general problem characteristics deemed to significantly impact complexity—a foundation for lesser evil reasoning and the establishment of the 'lesser evil' alternative. A prudent decision, in essence, hinges on grasping the current social reality related to the problem rather than relying on hopeful visions of what it ought to be. While decisions may be guided by aspirational goals, without a clear understanding of the present reality and its complexity, the risk of making suboptimal or counterproductive decisions looms large.

Among theories in international politics, classical realism stands out in providing pertinent insights into the factors shaping the current situation and its complexity (Kirschner, 2022). It offers a natural starting point for identifying problem characteristics that could be generalized for lesser evil reasoning. The primary factors of the framework will be established in the next sections. Furthermore, while classical realism is a natural route, I believe that there could be different paths to explore as well. *Wicked problem* is a concept introduced by Rittel & Webber to underscore the complexity of real-world problems (Rittel & Webber, 1973). The latter part of this chapter will investigate how Rittel & Webbers 10 proposition, as well as recent research of the concept can confirm and extend the factors that will constitute the framework.

#### 3.2 Human nature and national interests

Classical realism underscores human nature as the predominant force shaping global politics (Elman & Jensen (Eds.), 2014; Kirschner, 2022). Previously, we referenced Morgenthau's assertion that mankind's innate desire and struggle for power, termed 'Animus dominandi,' form the primary basis for the inherent 'evilness' within political spheres (Morgenthau, 1945). Morgenthau echoes the sentiments akin to Thomas Hobbes' grim assessment of human nature in his seminal work, *Leviathan* (Hobbes, 2005[1651]).

In *Leviathan*, Hobbes presents a pessimistic portrayal of a hypothetical world devoid of laws or regulations, referred to as the *state of nature*. Here, resources are scarce, and individuals exist in a constant state of fear—fear of theft, violence, and death. It is a realm of anarchy, described by Hobbes as a 'war of all against all', whereby survival reign supreme. Hobbes posits that within limited variations, individuals possess equal mental and physical faculties. This basic equality, devoid of ultimate power to establish order, underpins the misery within the state of nature. To escape this condition, everyone, through a social contract with each other, surrenders freedoms to an overarching sovereign, termed the Leviathan (Hobbes, 2005[1651]).

The anarchic nature of the Westphalian state system mirrors this 'state of nature' at the level of states. Realism, as a school of thought, stresses survival as the primary objective for all states (Elman & Jensen (Eds.), 2014; Sørensen et al., 2022). It advocates that possessing an appropriate level of power, either independently or through alliances, is pivotal in achieving these goals. Morgenthau, particularly, emphasizes the concept of national interest stating that 'The main signpost that helps political realism to find its way through the landscape of international politics is the concept of interest defined in terms of power.' ((Morgenthau, 2006[1948], p. 29).

To sustain the pessimistic view of human nature and its link to power, a central tenet within realism is the 'Security Dilemma,' observed and coined by John Herz (Herz, 1950). The dilemma illustrates how states can spiral into conflict due to mutual distrust. It describes the incremental escalation of tension between states and subsequent military build-ups because of uncertainty regarding each other's intentions.

In observing mankind's constant struggle for power—driven by the imperative of survival, security, and national interest—conflicting interests emerge, becoming a fundamental factor contributing to 'evilness' in international politics. I will introduce the term 'Disagreement' as the initial factor to assess the complexity of a problem. Greater disagreement between states signifies increased complexity within the situation.

#### 3.3 Power

The above discussion presents power in a negative light, offering a critique of classical realism for its absence of a moral perspective in international relations (Elman & Jensen (Eds.), 2014). This perspective finds support in the work of Thucydides, the first known classical realist, a Greek historian (460-411 BCE) who chronicled the Peloponnesian War (431–404 BCE) in 'The History of the Peloponnesian War.' Thucydides detailed the conflict between Sparta, the

established power, and Athens, the rising power, including events, deliberations, battles, and consequences. Particularly, the 'Melian Dialogue' recounts Athens' invasion of the neutral island of Melos. When the Melian leader rejected Athens' ultimatum to join forces against Sparta, asserting their lawful and moral position, the men of Melos were killed, and women and children enslaved. The Athenian leader's retort, 'the strong do what they can, and the weak suffer what they must', often rationalizes power politics in international relations (Thucydides, 2009[~400 AD]).

Power is commonly equated with the military capability of a state and is therefore naturally termed 'hard power' (Wilson III, 2008). However, in contemporary literature, power is defined more broadly and nuanced. Power can be seen as 'the general capacity of a state to control the behavior of others,' as posited by Holsti (Holsti, 1995, p. 118). Holsti introduced the 'influence ladder', a spectrum of methods states employs to influence others:

- 1. Persuasion: Arguing for a proposal or protesting without obvious threats.
- 2. Offer of Rewards: Promising favor in return for compliance.
- 3. Granting of Rewards: Providing rewards prior to behavior change to ensure credibility.
- 4. Threat of Punishment: Threatening to increase tariffs, boycott, embargo, or use force.
- 5. Infliction of Nonviolent Punishment: Carrying out threats to alter behavior.
- 6. Force: Use of force or violence as a means of influence.

Aligning with this broader view of power, the role of economic power promoted by Gilpin becomes central (Gilpin, 2016[1987]). Additionally, Nye's concept of 'soft power' expands the economy into a cultural dimension that may legitimize persuasion attempts. Soft power is non-coercive, using culture, political values, and foreign policies to enact change. It involves shaping the preferences of others through appeal and attraction (Nye, 1990). Smart power, a further evolution stage of the power concept, is defined as the ability to combine hard- and soft-power resources into effective strategies (Nye, 2013), an intelligent integration and networking of diplomacy, defense, and development.

In this work, I perceive the purpose of power slightly differently than these scholars. Since power may manifest in various forms such as knowledge, economy, culture, wisdom, and military power, it may be viewed even more constructively rather than as enforcing the will on other states. I contend that power serves as a pivotal factor in managing or reducing the complexity of a situation. The proper application of suitable forms and levels of power is essential, as the absence or misuse of power can escalate the complexity of a situation.

I propose 'Inadequacy' as the second relevant factor in determining problem complexity. Inadequate state power translates to heightened problem complexity, emphasizing the significance of power dynamics in shaping complex scenarios.

### 3.4 Endlessness, History, and Uncertainty

The realist school of thought emphasizes the perpetual and open-ended nature of politics, a perspective shared by numerous scholars and thinkers. Jonathan Kirschner's recent book, *Unwritten Future - Realism and Uncertainty in World Politics*, comprehensively advocates classical realism, asserting that in international politics, the resolution of one conflict often leads to new clashes looming on the horizon or just beyond (Kirschner, 2022, p. 12).

In *The Thucydides Trap*, Graham Allison emphasizes the heightened risk of conflict when a rising power challenges the ruling power. Allison underscores the importance of history as a source of knowledge to comprehend present and future conflicts. Rather than seeing history as deterministic, it serves as valuable reference knowledge to understand the underlying causes behind the development of international relations. Allison studied sixteen historical cases aligning with the Thucydides trap, twelve of which culminated in war (Allison, 2017).

As the title above indicates, 'uncertainty' is a primary problem characteristic examined by Kirschner in his recent book (Kirschner, 2022). Niccolò Machiavelli, a dominant classical realist thinker, discusses 'Uncertainty' in his famous work *The Prince* (Machiavelli & Mansfield, 1998 [1532]). He outlines guidelines for a new ruler (prince) to maintain power, emphasizing the need to prepare for future dangers during stable periods. Machiavelli underscores that while half of all situations are the result of coincidences or 'Fortuna,' the other half can be influenced by the prince. Success in all situations is unattainable; decisions should be context-dependent, and the prince must exhibit virtue—defined as resoluteness and active influence, distinct from Aristotle's emphasis on moderation and prudence.

Similarly, Carl von Clausewitz, renowned for *On War*, draws from his experience during the Napoleon Wars to argue that war introduces radical uncertainty. He highlights the divergence between planned battles (ideal) and actual battlefield experiences (reality). Unexpected events or 'friction', such as changes in weather, geography, equipment failure, or communication disruptions, often disrupt or reverse plans (Clausewitz, 1984[1832], p. 118-121).

Edward Hallet Carr, a British historian, diplomat, and IR theorist, is known for *The Twenty Years' Crisis*, published in 1939 during World War II's outbreak. Carr initiated the resurgence of

the realist school of thought in the 20th century. His viewpoint underscores the constant state of change in a state, influenced by various forces like culture and time (Carr, 2016[1939]).

So, prominent classical realists provide compelling arguments that the future is unpredictable and subject to unforeseen change and uncertainty. Further, I contend that the more abrupt and unpredictable these changes become, the greater the complex is the situation or problem. I propose *Dynamic* as a third factor for assessing problem complexity. That is, the more dynamic a problem is, the more complex the problem becomes.

## 3.5 Uniqueness

Uniqueness is a characteristic of the social world hallmarked by the constructivist approach to social science (Moses & Knutsen, 2019, p. 225). Morgenthau makes this characteristic a central part of his critique of the application of scientific methods to understand the social world (Morgenthau, 1945; Morgenthau, 1946). Unlike the physical realm, which is analyzed by natural sciences and universal laws, the social world, driven by human behavior, is indeterministic. That is, it is not possible to establish causal relationships between phenomena in the social world, since each situation possesses unique aspects that differentiates it from others.

Hobbes's philosophy and his theory on *nominalism* is even more explicit on the unique characteristic of each situation of the common world. Nominalism, a metaphysic view, revolves around particulars and universals. 'Particulars' are specific objects in the real world, whereas 'Universals' are abstract objects that exist merely as names or labels (Callaghan, 2001; Watkins, 2017). The names are created due to convenience since one acknowledges the similarities between the particulars. Hobbes argues that all particulars are inherently unique, lacking a common denominator that can be abstracted. Michael S. Williams extensively discusses this part of Hobbes's philosophy (Williams, 2005).

Acknowledging these aspects supports the idea of including *Uniqueness* as a distinct factor to influence complexity. The less similarities with comparable situations or problems, the more complex the problem becomes.

## 3.6 Direct consequences

The characteristics outlined above stem from various facets of the social world emphasized by classical realists. The lesser evil principle falls under the category of moral theories termed *consequentialism* wherein moral decisions are evaluated solely based on their consequences

(Driver, 2011). Moreover, in the context of this thesis these consequences are judged concerning their impact on the society rather than individuals (Švaňa; 2016). Recent studies of Morgenthau's moral approach have focused on his lesser evil reasoning as a "consequentialist Weberian ethic of responsibility" (Zambernardi, 2022, p. 12). Thus, understanding the real-world consequences in decision-making is fundamental and is important to be aware of and understand. The consequences may vary, covering main categories like financial, human, environmental impacts.

In this work, the focus of the consequences' impact will be on the complexity (or evilness) of the situation or problem, rather than merely on the direct material outcomes. That said, recognizing the significance of direct material consequences is important. I assert that the more severe the negative consequences of a decision, the more complex the problem becomes. Subsequently, I introduce Seriousness as a distinct dimension in the framework. Furthermore, the problem or situation should be assessed by its seriousness without making any decision, which further justifies Seriousness as a distinct factor influencing the complexity.

### 3.7 Wicked problems

Thus far, I have utilized key reasoning from prominent classical realists to establish five distinct characteristics in assessing problem complexity and lesser evil reasoning; Yet will these adequately cover the dominant characteristics by which to assess problem complexity, or might there be additional characteristics within the real world that should be included? While Classical realism is a natural route, I believe that there could be different paths to explore as well.

Wicked problem is a concept that acknowledges the complexity of the social world and, as I will argue in this chapter, shares many characteristics of Morgenthau's description of evilness in politics and classical realists' view the social world. In the next section, I will review the main characteristics of wicked problems as they are presented as 10 propositions by Rittel & and Webber (Rittel & Webber, 1973) designed to determine if additional key characteristics can be derived.

The wicked problem concept was first introduced in 1967 in a brief guest editorial in the journal *Management Science* by West Churchman (Churchman, 1967). In this commentary, Churchman referred to a seminar where Horst Rittel discussed a set of problems that traditional scientific and mathematical approaches could not effectively resolve. Intriguingly, Churchman drew a direct parallel to between the term "wicked" and "evil" stating:

"The adjective "wicked" is supposed to describe the mischievous and even evil quality of these problems, where proposed "solutions" often turn out to be worse than the symptoms."

(Churchman, 1967, p. B-141).

Churchman challenged the established operational research methods in management science pointing out the moral aspects of dealing with wicked problems. He viewed attempts to tame (a part of) the problem, or actively limit or tailor the problem to something that is solvable by methods like operational research, is a deception that becomes a moral issue. As he states: "whoever attempts to tame a part of a wicked problem, but not the whole, is morally wrong" (Churchman, 167, p. B-142).

The Wicked problem concept was first extensively discussed in a landmark 1973 article "Dilemmas in a General Theory of Planning" by Horst Rittel and Mel Webber (Rittel & Webber, 1973). In this article some of the key characteristics of this problem type is well elaborated. Both Rittel and Webber had their theoretical background in domestic policy problems and urban planning processes; so, the context of their work is related to planning of urban development that takes place in bureaucratic departments and dealing with conflicting needs different interest groups. These interest groups will be affected by the urban development as well as by opportunities and limitations in technological solutions for new or improved urban infrastructure.

The experiences that Rittel and Webber gained in the topic of urban planning form the basis of general reflections that the article portrays on a given set of social and political problems. Despite different backgrounds and political contexts, both Morgenthau and Rittel/Webber assert that certain types of social problems differ fundamentally from those linked to natural and management sciences. They contend that these problems are, in principle, unsolvable, at best, managed or mitigated (Morgenthau, 1945; Rittel & Webber, 1973).

## 3.8 10 propositions defining Wicked problems

In "Dilemmas in a General Theory of Planning" Rittel & Webber introduced the role of the *Planner*, general term describing individuals responsible for or involved in planning and designing urban development projects. They state that the primary objective of a Planner is to "...To establish a plan from going from a description of current state-of-affairs to future (should be) state..." (Rittel&Webber, 1973, p.159). During their investigation into the planning process, they increasingly recognized its inherent complexity. Thus, they conclude that the problem type (social and policy planning) that the Planner should deal with fundamentally differ from those addressed by natural scientists partly engineers (Rittel & Webber, 1973, p. 160). They label the two main types of problems 'wicked' and 'tame', respectively. Further, they state that problem is

not amoral by nature, but claim that it is morally questionable if the Planner ignores the unique properties of a wicked problem and treats them as a tame one.

The article introduces ten propositions that define the key characteristics of wicked problems. These are presented in <u>Table 1</u>.

#	Proposition
1	There is no definitive formulation of a wicked problem
2	Wicked problems have no stopping rule.
3	Solutions to wicked problems are not true-or-false, but better or worse.
4	There is no immediate and no ultimate test of a solution to a wicked problem.
5	Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial and error, every attempt counts significantly.
6	Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.
7	Every wicked problem is essentially unique.
8	Every wicked problem can be considered, to be a symptom of another problem
9	The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution.
10	The social planner has no right to be wrong (i.e., planners are liable for the consequences of the actions they generate).

Table 1: Rittel & Webbers 10 propositions of Wicked Problems.

Rittel and Webber assert that fully understanding problems depends on knowing how to solve them, and they claim that the actual process of formulating a problem is central to the problem itself. Proposition 1 emphasizes the significance of available information, implicitly addressing its quality. This includes completeness, validity, and consistency of information sourced from various channels. Rittel and Webber stress that the information should encompass not only the aspects of the problem—such as symptoms and causes—but also potential solutions to the problem (Rittel & Webber, 1973, p. 161). This proposition introduces a perspective of complexity that may apply to distinct characteristics or factors and can be seen as an overarching factor across other elements. I will term this *level of confidence* as the agent's ability to justify the assessment of complexity using relevant experience, knowledge, and various information sources.

Proposition 2, a consequence of Proposition 1, states that there is no clear rule or explicit check defining when a problem is formulated or solved (Rittel & Webber, 1973, p. 162). In practice, the Planner must balance constraining factors like time, money, and competence to establish an adequate quality level for both the problem formulation and the temporary solution.

The Planner must acknowledge that wicked problems cannot be entirely solved, leading directly to Proposition 3. This proposition embodies a core characteristic of a wicked problem: that it is unsolvable, meaning the problem isn't eliminated going forward. The answers are neither true nor false. Hence, instead of aiming to completely solve the problem or achieve an unrealistic future state, the Planner should focus on a solution that is "good enough".

Rittel & Webber's main justifications are related to the pluralistic nature of stakeholders involved in wicked problems, which is another central aspect. There is no authoritative judge of wicked problems that can completely determine the correctness of problem formulation or solutions. Different stakeholders possess varying interests and perspectives, forming biases toward both the problem and its solutions. This reasoning resembles the "Disagreement" characteristic from Section 3.2.

Proposition 4 highlights the consequences of solving a wicked problem and the inherent risk of creating an even bigger problem. Due to the chain and network of causes and effects within a problem, there is a risk of exacerbating the problem into new and larger issues. Therefore, the possibility of immediately and definitively testing a solution to the original wicked problem is limited or non-existent (Rittel & Webber, 1973, p. 163). This reasoning echoes the "Dynamic" characteristic from Section 3.4.

Proposition 5 centers on the unique correlation between the problem and its solution, asserting that the Planner has only one attempt to implement the solution. While more explicitly stated in Proposition 7, this proposition implicitly discusses this aspect as well. Hence, there is no possibility to repeat or redo the solution as its impact creates a different basis (a different problem) for subsequent solution attempts (Rittel & Webber, 1973, p. 163).

According to Proposition 6, Rittel & Webber argue that a considerable number of potential solutions typically emerge for a (wicked) problem. Additionally, there exists another subset of relevant, and possibly more suitable, solutions that are not considered. This creates a trade-off between analyzing existing solutions and identifying additional ones (Rittel&Webber, 1973, p. 164). Moreover, it is impossible to establish a complete set of well-described operations that the Planner can utilize to solve the problem. Based on this reasoning, I propose that the size of the problem-solution space can be seen as a distinct new characteristic of a problem, termed "Scope."

Proposition 7 represents another key feature of a wicked problem. It acknowledges that a specific problem encompasses a wide array of contributing factors. These factors, their

combinations, and associated information elements vary from problem to problem (Rittel & Webber, 1973, p. 164). Recognizing the uniqueness of each wicked problem is crucial for approaching the solution process, as similar patterns from past experiences might lead to predetermined approaches that overlook crucial factors. This aligns with the "Uniqueness" characteristic from Section 3.5.

Problems generally consist of observed elements (symptoms) and a set of underlying causes. The causes may be hierarchically organized so that causes at one level become symptoms for deeper problems. Traditional problem-solving aims to find root causes and eliminate them, which is especially complex for wicked problems (Rittel & Webber, 1973, p. 165). Rittel & Webber argue against incrementalism as a proper problem-solving approach since it primarily addresses symptoms, potentially exacerbating problem wickedness or giving rise to new wicked problems.

Proposition 9 emphasizes that the group's view of the causes or explanation is impacted by their biases or prejudices. The group or individual that wins the explanation rivalry will determine how the problem-resolution process will be conducted (Rittel & Webber, 1973, p. 166). This proposition implicitly indicates that the group that has most power may control or influence the solution process. However, this group may not represent the most appropriate solution (approach). Rittel & Webber argue that those who harbor a holistic view of the problem and have broadest set of know-how, resources, and mechanisms, are in the best position to solve it. This reasoning aligns with the "Inadequacy" characteristic from Section 3.3.

Proposition 10 highlights the responsibility of the Planner. The Planner decides how the problem shall be formulated and which solution approach is most appropriate. Given the potential harmful consequences of any erroneous problem formulation or failed solution approach, the Planner must be particularly wise in dealing with wicked problems. (Rittel & Webber, 1973, p. 167). Nevertheless, this reasoning resembles the "Seriousness" characteristic from Section 3.6.

In summary, Rittel & Webber's ten propositions related to the wicked problem concept support the characteristics influencing problem complexity derived from the discussion of Morgenthau's and other classical realists' views of the social world: "Disagreement," "Uniqueness," "Dynamic," "Inadequacy," and "Seriousness." Additionally, a new distinct characteristic, "Scope," has been proposed. To explore whether further relevant characteristics can be established, a brief review of contemporary research related to wicked problems is advisable.

### 3.9 Status of wicked problems research

It is 50 years since Rittel & Webber introduced their landmark article with the 10 propositions that should characterize wicked problem. Since then, research related to the wicked problem concept has gradually increased and expanded into many disciplines. Several research summaries have been published (Danken et al., 2016; Head, 2019; Lönngren & Van Poek, 2021; Termeer et al., 2019). The main finding from these summaries is that the concept, 5 decades later, continues to lack a sound theoretical and conceptual foundation, but it is extensively used for rhetorical purposes. "If the concept shall be used as descriptive analytical tool, researchers need to provide a clear definition and a detailed description of how to operationalize the concept". (Lønngren & Van Poek, 2021, p. 492). On the other hand, the concept is valuable for exploratory research since it provides an inspirational entry for reflection more broadly covering a wide range of social and political disciplines. Further, the findings suggest that that the wicked problem concept is suitable as a critical tool to challenge established schools of thoughts or theories (Lønngren & Van Poek, 2021, p. 493). Hence, this does support my motivation for bringing the concept into the theoretical deliberation of establishing an analytical framework to better understand what contributes to problem complexity, at the same time humbly acknowledging the challenges in creating with it.

Despite the overall bleak status of wicked problem research, one promising attempt to analyze 'wickedness' is the typology of Alford and Head. This typology states that the 'wickedness' of problems can be understood along three main dimensions (Alford & Head, 2008; Alford & Head, 2017): i) *Complexity* of the problem itself, how many parts it consists of and their different interdependencies, and ii) *Divergence*, meaning fragmentation of viewpoints, values, and intentions.

I have already included these dimensions in my review of wicked problems, although different terms have been proposed. First, I have reserved the term "Complexity" to depict the overall characteristics of a social problem, and I have tried to identify relevant factors that may influence complexity. Thus, I have proposed "Scope" as the term for complexity in Head's typology. Moreover, I have proposed "Disagreement" rather than "Divergence". Parts of this typology have recently been extended into a two-level model, where the dimensions "Complexity" and "Divergence" are decomposed into granular characteristics (Alford & Head, 2017). No

additional new characteristics that can be extracted for my purpose have been identified from this model.

Another enhanced concept, termed *Super wicked problem*, has emerged recently (Lazarus, 2009; Levin et al., 2012). These characteristics are: (1) Time is running out; (2) There is no central authority, or only a weak central authority, to manage the problem (3) The same actors causing the problem and they seem to solve it; and (4) The future is discounted radically so that contemporary solutions become less valuable. This concept introduces a distinct new characteristic, available time to solve the problem. This time element is most apparent with climate change as the primary example. In international conflict, time may also play an important role in avoiding escalations, and subsequent heightened complexity. Available time is a new characteristic that I will adopt in characterizing the complexity of social problems. I will term this factor "Urgency".

Finally, it should be noted that Peters discusses the term 'Wickedness' and makes a thorough alignment with the term 'Complexity' (Peters, 2017). This supports the approach taken in this thesis where I treat these terms synonymously, together with the term 'evilness'.

### 3.10 Summing up

This chapter established theoretical reasoning behind the factors that explain complexity of a social problem, evilness in politics (or in this context international conflicts). The reasoning stems from two main sources of inspiration. The main source is an interpretation of key political thinkers within the school of classical realism. The secondary source is the concept of wicked problems. From a review of classical realism, I have extracted five distinct factors or variables to positively relate to and influence the complexity of a situation. These are shown in <a href="Table 2">Table 2</a>, highlighting key characteristics of classical realism and its main contributors. The integration of the wicked problem concept has expanded the summary of dominant characteristics influencing the complexity of a situation or problem. The propositions defined by Rittel and Webber align with the five distinct characteristics derived from the analysis of classical realists' views of the real-world. Additionally, I have introduced two pertinent characteristics, "Scope" and "Urgency", considered essential in comprehending the factors contributing to problem complexity, inspired by the "Complexity" dimension of Alford and Head's typology and the time dimension central to super wicked problems, respectively.

Classical realism characteristics	Key contributor (Classical realism)	Wicked problem Proposition #	Wicked problem typology	Proposed complexity factor
Human nature, national interest,	Hobbes, Morgenthau	3	Divergence	Disagreement
Power (in different variations)	Thucydides, Morgenthau, Holsti, Nye	2,9		Inadequacy
Endlessness, History, and Uncertainty	Kirschner, Clausewitz, EH Carr	4		Dynamic
Uniqueness	Morgenthau, Hobbes	5, 7		Uniqueness
Direct consequences	Morgenthau	10		Seriousness
		6	Complexity	Scope
			Super wicked problem	Urgency

Table 2: Summary of the key sources to the proposed complexity factors.

This leads to a framework of seven factors in total, significantly expanding existing typologies to analyze wickedness of wicked problems. I assert that a comprehensive framework to assess which factors are the main sources for complexity will be important to guide and prioritize the decision to reduce the complexity and effectively manage a real-world problem. So, to balance the conflicting ideals of parsimony and explanatory power is obtained. I will in the next chapter present the proposed framework in detail.

# 4 Problem Complexity Framework

The previous chapter established the theoretical foundation for a methodology that supports lesser evil reasoning in decision-making. Named the 'Problem Complexity Framework', it acknowledges that the complexity of a problem or situation contributes to evilness in politics. This framework structures the assessment of a problem's complexity by evaluating the seven factors, which are suggested as the primary sources to complexity. Any decision related to the problem can alter the complexity; either increasing it or decreasing it. Different decision alternatives may impact the seven factors, subsequently affecting the problem's complexity. The alternative that best manages or reduces the complexity is considered the lesser evil. Identifying the lesser evil alternative is not straightforward; it often involves an iterative process where the confidence in the evaluation incrementally builds. Among other requirements, it demands open-minded individuals (moral agents) with access to trustworthy information relevant to the assessment.

This chapter will present the framework, its components, and its practical application. The structure of the presentation follows a common format. Initially, each factor is introduced in general terms, along with the mechanism influencing the complexity related to that factor. Then I will illustrate how the factor is adapted and utilized to analyze predominant problem type in international politics, particularly international conflicts. Within each factor, I will propose one or two *primary drivers* relevant to this problem type. When managing international conflicts, politicians have different policy approaches at their disposal. I will discuss four common approaches: diplomacy, deterrence, economic sanctions, and military invasion. These approaches, whether used individually or in combination, may represent decision alternatives to address specific conflicts. Each approach will have a distinct impact on the seven factors and, subsequently, on the complexity of the situation or problem. Moreover, I will outline a set of relevant topics for each approach, contributing in different ways to the effects of the decision alternative.

I will present the seven factors sequentially, following a natural investigative flow. At this initial stage, each factor is regarded to have a similar potential impact on complexity. However, this may evolve as we gain experience from using the framework and conduct more empirical

studies. A brief description of the four policy approaches common in international conflicts follows:

### 4.1 Common decision alternatives in international politics

The focus of this thesis revolves around international conflicts. States, especially great powers, employ various policy approaches to manage such issues. To illustrate the framework's elements within this problem type, I will highlight four prevalent policy approaches, which also serve as viable decision alternatives addressing these problems:

- 1. **Diplomacy/treaties:** This approach aims to peacefully influence behavior or decisions of other states. It involves establishing or maintaining diplomatic relationships between states with the aim of resolving issues through dialogue and negotiations (Berridge, 2022; Bjola & Kornprobst, 2018). This may occur within existing treaties or international law or with the purpose of establishing a binding agreement (Klabbers; 1996).
- 2. **Deterrence:** This approach entails using threats to dissuade another state from initiating certain actions. It includes both military and non-military means (Huth, 1999; Morgan, 2012).
- 3. **Economic sanctions:** This approach is meant to deprive countries from economic gains that can be obtained through trade. International economic sanctions are often favored by nation states or by international organizations as a means of projecting power or influencing another government's behavior without resorting to military force (Gilpin, 2016[1987]; Gordon, 2013; Kaempfer & Lowenberg, 2007; Smeets, 2018).
- **4. Military invasion:** This approach involves a state using military force, based on their perceived national interest, to address or resolve an issue. The motivation for military invasion can vary, including pre-emptive war (Gathii, 2005), preventive war (Levy, 2011) responsibility to protect (R2P) (Bellamy, 2018).

Next, I will present the seven dimensions or factors that may influence the complexity of the situation. For each factor, I will elaborate on relevant topics associated with the four policy decisions. It is the unique situation that determines the relevance and steers which factor, and its associated topics are specifically pertinent. In some situations, a specific topic will be relevant to address, whereas in other situations the same topic may not be relevant and can be ignored. The

list of topics is by no means exhaustive, and additional topics may be included for a given problem and in a more mature version of the framework.

The four policy decisions will be used to exemplify how specific topics may be associated with each complexity factor. A more comprehensive example is presented in Chapter 5, focusing on the situation and the decision alternatives that led up the invasion of Iraq in 2003. This analysis will examine how principles of lesser evil reasoning could have influenced the assessment of the situation and the decision-making process leading to the Iraq War.

## **4.2 C1-Scope**

The first complexity factor is C1-Scope. This factor concerns the magnitude of the problem and is tied to the problem's structure, the number of components, the interdependencies among these components, and the variability among different instances of each component. Scope complexity is closely related to the nature of the problem and the effort required to mitigate or solve it. Generally, a broader scope signifies a more complex problem.

Different problems typically encompass diverse topics that influence the scope. A systematic analysis to identify the most relevant and impactful topics is a recommended approach to structure the scope for further analysis. Dependencies among different topics often contribute to expanding the scope. Focusing on international conflicts, a relevant interpretation of the Scope will be the coverage of the conflict; that may be local, regional, or global. Therefore, the number of states and their position in the international state system are considered primary drivers for the Scope factor. This implies that the more states involved, especially great powers, the larger the scope of the conflict. Additionally, the alliance structure and the degree of commitment within these alliances may also impact the scope across all four policy approaches.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion	
Primary drivers	<ul> <li># States and position in state system</li> <li>Alliance structure and commitments</li> </ul>				
Selected topics to consider	Span of topics in negotiations     Relevance and coverage of treaties and laws     Degree of commitment	<ul><li>Type of treat</li><li>Rivals position and response</li></ul>	<ul> <li>Products and service affected.</li> <li>Global trade</li> <li>Supply-chain effectiveness</li> <li>Incentives</li> </ul>	<ul><li> Military targets</li><li> Civilian targets</li></ul>	

Table 3: Primary drivers and selected topics for "C1-Scope" for four policy approaches.

These primary drivers are stated in <u>Table 3</u>, which also delineates a set of relevant topics for assessing the complexity factor C1– Scope for each of the four policy alternatives. These topics encompass aspects specific to each approach (although some topics may be relevant to multiple approaches) and that can impact this factor.

Under the diplomacy/treaty approach, the range of topics covered in negotiations, the relevance of existing treaties or international law, and the degree of commitment to these agreements can impact the scope. In the context of deterrence, the nature of the threat prompts rivals to assess their positions relative to the threat, thereby determining an appropriate response.

Regarding economic sanctions, the types of products and services affected by the sanctions significantly impact the scope. The repercussions on global trade and the effectiveness of supply chains also influence the scope, including considerations about the potential backfire risk of the sanctions. There might also be incentives to lift existing sanctions and analyze their impact.

For military invasion, the scope is assessed based on whether the military campaign or war is limited to military targets or expands to include civilian infrastructure as additional targets. These factors collectively contribute to evaluating the scope of the conflict.

#### 4.3 C2-Seriousness

The second complexity factor is C2-Seriousness. This factor emphasizes the consequences of the problem, particularly the implications of not resolving it; either reducing the complexity or eliminating the problem. This factor highlights who is affected, the number affected, and the level of danger the problem poses. Seriousness can manifest in various forms and degrees, ranging from mild irritations, uncertainties, economic losses, reputational damage, to fear, and in the worst-case scenario, death. The more serious a problem is, the more complex it becomes.

The assessment of consequences is an important exercise and is often conducted in connection with *risk assessment* (Power, 2004). The impact of the risk may vary in types: environmental, personal, financial, or reputational. Different problems may present various combinations of the impact types. Furthermore, seriousness is a subjective judgement by individuals affected, and perceptions of seriousness can differ among stakeholders. Hence, obtaining a comprehensive and nuanced perspective on the problem's seriousness involves allowing multiple stakeholder groups to assess it.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion	
Primary drivers	<ul><li>Causality rate/Death rate</li><li>Economic impact (GDP)</li></ul>				
Selected topics to consider	Concessions     Commitment     Domestic economy     and resource     redistribution	Military ramp-up	<ul> <li>Products and service affected.</li> <li>Global trade</li> <li>Supply-chain effectiveness</li> <li>Incentives</li> </ul>	<ul><li>Military targets</li><li>Civilian targets</li></ul>	

Table 4: Primary driver and selected topics for "C2-Seriousness" for four policy approaches.

Focusing on international conflicts, a relevant interpretation of the Seriousness involves assessing the severity of the problem, often measured by casualty or death rates, economic impact, or a combination of these parameters. These assessments are typically applicable across all four policy approaches, indicating the degree of severity associated with the decisions made. These are suggested to be primary drivers for the Seriousness and are stated in <u>Table 4</u>. Furthermore, the table outlines a set of relevant topics to assess related to the complexity factor C2– Seriousness for each of the four policy alternatives.

The diplomacy/treaty and deterrence method usually have limited impact on severity, although exceptions can arise. Negotiations within diplomatic solutions may involve concessions or commitments that could affect domestic economies or resource redistribution. Similarly, in deterrence, an escalation in military capacity might be necessary to bolster the credibility of the threat.

Regarding economic sanctions, the severity depends on the products or services affected, significantly impacting the conflict. The duration of sanctions influences not only the economic situation for the affected country but also mortality rates due to unavailable health and food products, among other factors.

In the case of military invasion, the severity of effects is notably high. Beyond severe casualties among military personnel and infrastructure, civilians often endure unbearable conditions. Restricted or lack of access to vital infrastructure services like energy, power, water, and food supply can result in reduced healthcare services, famine, migration, and various other potential outcomes.

### 4.4 C3-Uniqueness

The third complexity factor is C3-Uniqueness. This factor gauges the extent to which a problem has been previously encountered. It assesses whether a problem shares similar symptoms and underlying causes with other issues. Prior experience and knowledge play crucial roles in evaluating the uniqueness of a problem. Generally, the more unique a problem is, the more complex it becomes.

For many problems, standardized methods, approaches, and tools exist for analysis and resolution. Various standardization organizations across disciplines have compiled extensive experiences, synthesizing knowledge into general principles, methods, and guidelines. However, caution is necessary when applying established standardized methods to novel or complex problems. There is a risk of tailoring the problem to fit available methods rather than analyzing the problem objectively.

By holistically applying this complexity framework to a problem, considering all factors without prematurely assuming commonalities with other problems, it becomes apparent that all social world situations and problems possess some unique elements. Moreover, using this framework to assess uniqueness allows comparing a problem's complexity profile with other problems that have established complexity profiles to gauge its degree of uniqueness. However, it is important to note that perceptions of uniqueness are somewhat subjective and can vary among those dealing with the problem. What appears unique to one group or business may be more common to others. Leveraging expertise or resources with experiences related to similar problems could prove beneficial.

In international conflicts, and as argued for complex problems in general, it is important to view the problem and its situations as unique. Assessing the degree of uniqueness relies on access to comparable cases and their associated information, serving as the primary driver for determining uniqueness (See <u>Table 5</u>). Currently, it is fair to regard that no complete set of empirical data exists following the proposed framework structure. Consequently, fragmented information for each policy approach is the present best scenario.

Furthermore, the table outlines a set of relevant topics to assess related to the complexity factor C3– Uniqueness for the four policy alternatives.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion		
Primary drivers		Comparable cases				
Selected topics to consider	<ul> <li>Comparable treaties and laws</li> <li>Relevant court rulings</li> <li>Conflict resolution approaches</li> </ul>	<ul> <li>Treat types and their effects</li> <li>Treat credibility</li> </ul>	<ul> <li>Sanction types and their effects</li> <li>Self-infliction</li> <li>Trade effects</li> <li>Supply-chain effectiveness</li> </ul>	<ul> <li>Type of warfare</li> <li>Effectiveness of weapon system</li> <li>Type and degree of resistance</li> <li>Impact on civilian elements</li> </ul>		

Table 5: Primary driver and selected topics for "C3: Uniqueness" for four policy approaches.

Furthermore, specific topics associated with each policy approach may shed light on what contributes to the uniqueness. For the diplomacy/treaty approach, relevant information might encompass comparable treaties, the application of similar laws and court rulings, as well as conflict resolution approaches. Deterrence is linked to the type of threat and its effectiveness in deterring, which should be considered in conjunction with anticipated and actual credibility assessments.

Regarding economic sanctions, the information might involve different types of sanctions and their effects, the degree of self-infliction, and impacts on trade and supply-chain effectiveness. Lastly, in the case of military invasion, the information might encompass the type of warfare, effectiveness of weapon systems, degree and type of resistance encountered, and the impact on civilian elements.

## 4.5 C4-Urgency

The fourth complexity factor is C4-Urgency. This factor pertains to the available time for solving a problem before its consequences become severe or the problem becomes unsolvable. The more urgent the need for a solution, the more complex the problem becomes. Urgency, or the time factor, is particularly critical for problems classified as 'crisis' or 'emergencies.' These problems often arise suddenly with severe consequences, such as natural disasters, or situations that rapidly deteriorate. In such cases, the goal is to mitigate the impact as much as possible.

Some urgent problems may have already occurred, and the challenge lies in reducing their impact swiftly. In contrast, other problems haven't yet happened but need to be averted within a limited timeframe. Projects aimed at addressing problems often rely on plans to organize and schedule work. These plans may have fixed and unchangeable milestones. For instance, organizing the Olympics exemplifies a large-scale problem with fixed milestones; delays in key deliveries or

activities can increase complexity by reducing the remaining time available to complete the project.

Various approaches can address limited available time. If the available time is fixed, prioritization might help reduce the scope of work. Additionally, extending working hours through shifts, overtime, or 24\*7 schedules can be considered. Time management methods and 'time-boxing' techniques exist to enhance time efficiencies. Other urgent problems may not have fixed milestones but are still regarded as urgent. For instance, in hostage situations, efforts to 'buy more time' can reduce complexity and allow appropriate events to address various aspects of the problem.

Urgency in international conflicts should be linked to the available time to manage the conflict before it escalates beyond control and is proposed as primary driver for this factor (See <u>Table 6</u>) None of the involved actors can foresee or control the future chain of events. Time, as an objective parameter, holds relevance for all policy approaches, albeit interpreted somewhat differently for each. Furthermore, <u>Table 6</u> outlines a set of relevant topics to assess related to the complexity factor C4–Urgency for the four policy alternatives.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion
Primary drivers		• Availa	ble time	
Selected topics to consider	<ul> <li>Deadlines</li> <li>New actors from elections</li> <li>Other conflicts with dependencies</li> </ul>	<ul><li>Deadlines</li><li>Red lines</li></ul>	Immediate/short-term effects     Medium-/long-term effects	<ul><li>Humanitarian corridors/pauses</li><li>Ceasefire</li><li>Truce</li></ul>

Table 6: Primary driver and selected topics for "C4-Urgency" for four policy approaches.

In diplomacy/treaty approaches, the aim often involves maintaining or creating a calm and stable situation, enabling deliberate and thorough attempts to manage the conflict. Introducing deadlines by any party increases the urgency, raising the risk of hasty, irrational, and counterproductive decisions. Additionally, shifts in power due to elections with different ideological preferences or policy approaches can impact the time available to reach sustainable agreements. Ongoing negotiations or conflicts with dependencies on the current conflict also affect the urgency of negotiations.

Regarding deterrence, this approach leans towards a more durable and stable context. Time pressure escalates if fixed positions or deadlines, like "red lines," are introduced.

For economic sanctions, conflict levels are implicitly heightened. However, depending on the sanction type, the temporal effects may vary. Immediate or short-term effects may differ from medium- or long-term consequences. Severe short-term impacts increase the urgency to contain the conflict, while medium- and long-term effects could allow for more time to address them.

Military invasion dramatically elevates the conflict level, leading to immediate and diverse effects. Urgency arises in mitigating its impact and halting military activities. Short-term mechanisms like humanitarian corridors/pauses, ceasefires, or truces should be encouraged among the parties, allowing for longer-term resolutions of the conflict.

### 4.6 C5–Disagreement

The fifth complexity factor is C5-Disagreement. This factor relates to the number and strength of diverging interests, opinions or viewpoints that exist among the problem stakeholders, decision makers, influencers, and those that are affected by the problem. The more disagreement related to the problem and the solution, the more complex it is.

Understanding the level of disagreement involves utilizing methods from stakeholder management (Pedrini & Ferri, 2019) and change management (By, 2005; Lauer, 2010). Stakeholder management often categorizes individuals into typologies based on power and interest, focusing on actors with the most significant power and interest related to the problem. Disagreement among these individuals or groups substantially contributes to complexity and requires primary attention. In international politics, understanding the perspectives and national interests of the great powers is crucial in assessing disagreement levels.

Moreover, recognizing what aspects of the problem the disagreement is associated with is vital to align different viewpoints and potentially reach common ground among key decision-makers. Diplomacy, mediation, and negotiations play critical roles in reducing disagreement. Additionally, this complexity framework can help understand how stakeholders perceive problem complexity and which complexity factors contribute to it.

Change to reduce a problem's complexity often encounters resistance, as some stakeholders may perceive it as unfavorable or uncertain. Resistance to change may create unwillingness to contribute to reducing problem complexity. Addressing this resistance is vital in change management approaches.

In many international political problems, this factor significantly contributes to overall complexity, especially when political dimensions and ideologies influence stakeholders. Different

ideologies or party affiliations lead individuals to perceive problems through varying perspectives and value systems, limiting their willingness to seek and adopt relevant knowledge vital for understanding the problem and reducing its complexity. Consequently, the entrenched positions of key decision-makers or stakeholders can impede efforts to reduce complexity. This framework explicitly recognizes these aspects, making disagreement a pivotal complexity factor that encourages stakeholders to be more open-minded toward information they might otherwise dismiss.

Disagreement is the primary cause of international conflict. The quality of the relationship among conflicting actors often determines the conflict's intensity. Even close allies may disagree on issues, leading to diplomatic tensions or, in some cases, the termination of treaties. Historical adversaries or regimes with opposing ideologies may engage in more severe conflicts more readily. Quality of relationship is suggested as the primary driver as shown in <u>Table 7</u>.

Furthermore, the table outlines a set of relevant topics to assess related to the complexity factor C5–Disagreement for the four policy alternatives. Specific topics associated with each policy approach can contribute to understanding the depth of disagreement.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion		
Primary drivers		Quality of relationship				
Selected topics to consider	<ul> <li>Diversity of stakeholders</li> <li>Value and national interests</li> <li>Ideological coherence</li> <li>Personal relationship</li> <li>Type of dialog</li> <li>Authorities given</li> </ul>	<ul> <li>Alter         communication or         mediation         approach.</li> <li>Termination or         alternation of         diplomats.</li> <li>Involve third         parties as         mediators.</li> <li>Seek UN         resolutions</li> </ul>	<ul> <li>Involve third parties as mediators.</li> <li>Seek UN resolutions</li> </ul>	<ul> <li>Involve third parties as mediators.</li> <li>Seek UN resolutions</li> </ul>		

Table 7: Primary driver and selected topics for "C5-Disagreement" for four policy approaches.

In diplomacy, various factors impact the level of disagreement, including the number and type of stakeholders, conflicting values and national interests, ideological coherence, personal relationships, types of dialogue and communication, and the authorities among negotiators and decision-makers.

In deterrence, disagreement and tension are implicitly heightened and might not be resolved in the short term. Efforts to reduce disagreement might involve changing communication channels or mediation approaches, altering, or terminating diplomats, involving third-party mediators, seeking UN resolutions to legitimize positions, and more.

For economic sanctions and military invasion, the conflict becomes more active, intensifying the level of disagreement, reaching its peak during a military invasion. Similar topics to those in deterrence apply, albeit with increased intensity, involving third-party mediators and the UN Security Council in seeking potential resolutions.

### 4.7 C6-Dynamic

The sixth complexity factor is C6-Dynamics addressing the unpredictable nature of a wicked or complex problem. The more dynamic a problem is, the more complex it becomes. Most problems are influenced by various forces and typically evolve over time. Some forces or events can be anticipated, while others may arise completely by surprise. 'Black swans', a phenomenon well described by Taleb (2007), belong to the surprise category and may represent new, highly unique problems or contribute to existing ones, thereby increasing their complexity. Another concept related aspect is the knowledge typology, that distinguishes between "knowns" and "unknowns" (Mitzen & Schweller, 2011). For "known knowns" relevant knowledge exists, and one is aware of it and its application in problem-solving. Ensuring confidence in its validity and completeness is key. "Known unknowns" signify lacking in relevant knowledge but being aware of its existence, often prompts inquiries or intelligence activities to acquire this knowledge. "Unknown knowns" denote possessing relevant knowledge but being unaware or unconscious of it; diverse teams with complementary expertise can help in uncovering this knowledge. Finally, "unknown unknowns" represent the absence of relevant knowledge and being unaware of it. Active probing, hypothesis testing, 'what-if' simulations, continuous learning, and improvement capabilities are useful in addressing risks associated with the unknown unknowns, often resembles 'Black swans'.

This factor also underscores that a problem's complexity varies over time. Decisions, intentional or unintentional, social forces, or events may either increase or decrease complexity. Therefore, the dynamic factor can be considered a meta-factor, as it accounts for complexity variations over time. Sudden or frequent changes, particularly increases, in complexity among different factors elevate the dynamic factor and subsequently the problem's complexity.

In connection with the C2-Seriousness factor, where we discussed the impact part of risk analysis and management, risk management becomes relevant as a method to understand or predict the dynamic aspect of a problem. Risk factors represent topics or events that may occur in the future, potentially influencing different aspects of the problem and different complexity factors. Analyzing and assessing both the impact and likelihood of these risk factors provide a basis for mitigating the risk and proactively reducing the potential dynamics of the problem.

Dynamics related to international conflicts refers to the anticipated likelihood of events that could alter the current situation or the most probable future scenarios for a conflict. States involved in a conflict typically develop plans and scenarios regarding how a conflict might evolve. Various categories of knowledge or awareness, or the lack thereof, play a pivotal role in dealing with the anticipated future of complex situations. I suggest using likelihood of unpredictable or unprepared events as primary driver for C6-Dynamics, as shown in <a href="Table 8">Table 8</a>. Furthermore, the table outlines a set of relevant topics to assess, related to the complexity factor C6-Dynamic for the four policy alternatives.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion
Primary	Likelihood of unpredictable/unprepared events			
drivers				
Selected topics to consider	<ul><li>Contain focus</li><li>External factors (black swans)</li><li>Implementation of the treaty</li></ul>	<ul><li>Balance of power</li><li>Security dilemma</li><li>Escalation risk</li><li>Black swans</li></ul>	Escalation risk     Black swans	<ul><li>Radical uncertainty"</li><li>Highly unpredictable situation</li></ul>

Table 8: Primary driver and selected topics for "C6-Dynamic" for four policy approaches.

In the context of the four policy approaches to dealing with international conflict, their relationship with dynamic factors varies. Diplomacy/treaties and deterrence typically aim for stability in the future, emphasizing prevention of unexpected external events' impact. Actors engaged in diplomatic negotiations need protection while preparing for potential scenarios. Maintaining robust diplomatic environments, trustworthy dialogues, and secure, uninterrupted conversations is critical.

For deterrence, maintaining credible threats is essential for effectiveness. Avoiding factors that diminish credibility is essential, as deterrence might trigger a security dilemma, leading to an iterative, uncontrolled process of escalating threats and rearmament.

Economic sanctions, a more active policy approach than deterrence, require preparation for future scenarios and an understanding of anticipated impacts. Analyzing the risk of retaliatory actions, including further economic sanctions or even military responses, becomes significant due to the increased unpredictability and uncertainty.

Lastly, military invasion introduces a highly dynamic situation, marked by radical uncertainty, significantly altering the conflict landscape.

### 4.8 C7–Inadequacy

The seventh and final complexity factor is C7-Inadequacy, encompassing all relevant and available resources for understanding and solving the problem. The fewer resources available, the more complex the problem becomes. This includes know-how, human resources, analytical capacity, economic resources, willpower, etc.

Inadequacy is intertwined with other factors such as scope, uniqueness, and disagreements. The nature and scope of the problem define the type and quantity of resources required to reduce complexity or potentially solve the problem. Adequate financial funding is pivotal to make other resources, materials, and knowledge available. Moreover, the uniqueness of a problem impacts resource scarcity; standard, well-known problems often have readily available relevant expertise and capacity, while unique problems demand scarcer expertise.

Additionally, high levels of disagreement and dynamics necessitate an extended number of resources and time to reduce complexity compared to problems with higher consensus among key stakeholders/decision-makers or those that are more stable.

"Inadequacy" in the context of international conflict refers to the lack of power to influence the conflict's course of action or future events. As discussed in Section 3.3, power encompasses all relevant elements associated with soft, hard, and smart powers. Great powers are in the best position to positively manage an international conflict. Conversely, they are also frequently involved in creating complex conflicts. I suggest using lack of power types as primary driver for C7-Inadequacy and as shown in <u>Table 9</u>. Furthermore, the table outlines a set of relevant topics to assess for the four policy alternatives.

	Diplomacy/treaties	Deterrence	<b>Economic sanctions</b>	Military invasion
Primary		<ul> <li>Lack of p</li> </ul>	ower types	
drivers				
Selected topics to consider	• Soft power • Smart power	Smart power	Economic power	<ul><li> Military power</li><li> Nuclear capability</li><li> Military production capability</li></ul>

Table 9: Primary driver and selected topics for "C7-Inadequacy" for four policy approaches.

For these approaches, different subsets of the power spectrum play a role. In the diplomacy/treaties approach, diplomatic capabilities are crucial. Understanding the rival's history, culture, interests, and concerns are essential aspects. Intelligence capabilities become important for gathering updated, relevant information about the other party's position (intent and capabilities).

In deterrence, credibility of power, particularly in economic and military dimensions, becomes a key factor. This involves a state's historical willingness and success in using economic and military power.

Economic sanctions primarily involve a state's economic power. Imposing sanctions on another state involves considering the risks of retaliation and the possibility of the sanctions backfiring on the state's own economy. Economic robustness and diversity significantly impact a state's power in this regard.

Finally, military invasion is primarily linked to a state's military capability, encompassing weapon systems, the size and scope of army, navy, and air force. Nuclear power represents an important additional capability, though it introduces its own dynamics. Military production capability and innovation capacity are crucial factors for improving existing weapon systems and developing new ones.

## 4.9 Complexity assessment

The seven complexity factors of the framework have been proposed and described. Additionally, the most relevant topics concerning four common policy decisions have been outlined for each factor. Moving forward, I will propose how the framework can be used to assess complexity and how different decision alternatives contribute to the complexity of a problem.

<b>Complexity factor</b>	Low	Medium	High
C1-Scope	Scope is understood, contained and manageable.	Scope is understood, but not manageable.	Scope is neither understood nor assumed manageable.
C2-Seriousness	Effects are not harmful.	Effects are modestly harmful, but containable.	Effects are harmful and not containable.
C3-Uniqueness	Standards and substantial experience exist.	No standards, but modest experience exist.	Limited or no experience exist.
C4-Urgency	Reasonable time is available.	Available time is a concern.	Limited time available.
C5-Disagreement	Shared interests and broad consensus among key stakeholders.	Divergent interests and views among key stakeholders.	Conflicting interests and views among key stakeholders.
C6-Dynamic	Stable context and external environment.	Uncertain context and external environment.	Volatile and un- predictable context and external environment.
C7-Inadequacy	Reasonable resources are available and committed.	Resources are scarce and risk of being re-allocated or not allocated.	Resources are neither available nor committed.

Table 10: High-level evaluation criteria for the complexity factors.

The primary aim of the complexity assessment is to understand which factors contribute most to the complexity. Hence, an important goal is to rank the seven complexity factors for the specific problem or situation. This ranking can be achieved by having individuals familiar with the problem review all seven factors and rate the complexity on a simple scale: High, Medium, or Low. In <u>Table 10</u>, I have proposed a high-level set of evaluation criteria for this scale per complexity factor. Furthermore, a reference problem with an established complexity profile, common among assessors, could also serve as a basis for comparison, enhancing transparency and simplifying justification of the rating.

Different individuals possess varying levels of knowledge about a problem. Some may have in-depth insights into one or two complexity factors, while others may have a broader but less detailed understanding of each factor. Therefore, when individuals rate a problem's complexity factors, they could also indicate their confidence level in the rating. The confidence level scale might also be categorized as High, Medium, or Low. <u>Table 11</u> provides a simple schema to justify different levels of confidence.

Level of confidence	Description
No	Speculative assessment with no knowledge.
Low	Honest assessment, with superficial knowledge.
Medium	Knowledgeable assessment based on secondary sources.
	Lack of access to primary sources.
High	Confident and thorough assessment backed with verified primary sources.

Table 11: Schema to describe different level of confidence.

Furthermore, establishing an overall complexity score for a problem could be relevant. One approach may involve converting rating levels (High, Medium, Low) into numerical values (3, 2, 1) and calculating the complexity score by adding these numbers for the seven factors. For the sake of simplicity and the framework's guidelines, I won't weigh the relative importance among factors. Similarly, an overall confidence score could be calculated by summing the confidence levels of all seven factors.

Table 12 provides an illustrative example of a *complexity profile*, associated *confidence profile* of a problem assessed by an individual (A), and the aggregated complexity and confidence scores resulting from this assessment.

Complexity factor	Complexity (High/Medium/Low)	Confidence (High/Medium/Low)	Ranking
C1-Scope	High (3)	Low (1)	3
C2–Seriousness	Medium (2)	High (3)	4
C3–Uniqueness	High (3)	High (3)	1
C4–Urgency	Low (1)	Medium (2)	6
C5-Disagreement	Medium (2)	Medium (2)	5
C6-Dynamic	High (3)	Medium (2)	2
C7-Inadequacy	Low (1)	Low (1)	7
Score	15	14	

Table 12: Complexity and confidence profile made by Person A.

Based on this example, a ranking of the complexity factors has been determined. As per current guidelines, complexity factors with higher ratings are ranked higher relative to other factors. Additionally, factors rated with higher confidence levels take precedence over those with lower confidence levels. However, complexity rating is considered more important than confidence rating. As shown in the table, complexity factor C3-Uniqueness is given the highest

ranking followed by C6- Dynamic. Aiming for reduced complexity, efforts in this example should focus on addressing the factors. Moreover, for complexity factors rated with Medium or Low confidence, it is important to further investigate the rating to increase confidence levels or provide information that might alter the complexity rating. Therefore, the assessment will be both iterative and incremental.

The preceding table reflects an assessment conducted by one individual. Another individual (B), familiar with parts of the problem, might have a different perspective and could generate an alternative complexity profile. Accepting this individual possesses significant knowledge about Urgency and Inadequacy factors in the problem, a separate complexity profile might be established, as demonstrated in <u>Table 13</u>. Furthermore, as indicated in the table, individual B lacks insight into complexity factors C1 and C2 and chooses not to assess these factors. Consequently, these factors are marked as Not Applicable (NA), and their confidence levels are also NA.

Complexity factor	Complexity (High/Medium/Low)	Confidence (High/Medium/Low)	Ranking
C1-Scope	NA	NA	
C2–Seriousness	NA	NA	
C3–Uniqueness	Low (1)	Medium (2)	4
C4–Urgency	High (3)	High (3)	1
C5-Disagreement	Low (1)	High (3)	5
C6-Dynamic	High (3)	Medium (2)	2
C7-Inadequacy	Medium (2)	High (3)	3
Score	Incomplete	Incomplete	

Table 13: Complexity and confidence profile made by Person B.

Moreover, person B rates factors C4, C5, and C7 with higher confidence levels compared to person A's rating for these factors. Considering person B's higher confidence level, B's assessment of these factors takes precedence over person A's assessment. However, person B cannot provide a complexity or confidence score for the problem because factors C1 and C2 were not rated (shown as N/A).

By combining the contributions of both individuals, A and B, a revised complexity profile is presented in <u>Table 14</u>.

Complexity factor	Complexity (High/Medium/Low)	Confidence (High/Medium/Low)	Ranking
C1-Scope	High (3) / A	Low (1) /A	4
C2–Seriousness	Medium (2) /A	High (3) /A	5
C3–Uniqueness	High (3) /A	High (3) /A	1
C4–Urgency	High (3) /B	High (3) / B	1
C5-Disagreement	Low (1) /B	High (3) /B	7
C6-Dynamic	High (3) /A and B	Medium (2) / A and B	3
C7-Inadequacy	Medium (2) / B	High (3) / B	5
Score	17	18	

Table 14: Revised complexity and confidence profiles made by Persons A and B.

Which person who contributes to the score is indicated as well. With the input from person B, the assessed complexity of the problem is higher than what person A assessed individually (increasing from 15 to 17). Additionally, the overall confidence level of the complexity assessment has increased (rising from 14 to 18). The ranking of the factors has also changed, influencing the consideration on which factors to prioritize to reduce complexity.

The above examples demonstrate how a complexity assessment can change based on the involvement of specific experts. This involvement can be further expanded by engaging additional stakeholders in the assessment process. Assessments can be conducted individually or as a team effort, such as focus groups, allowing individuals to discuss various factors and potentially provide a more robust assessment with a higher level of confidence than what individuals might achieve separately. The primary focus should be on swiftly establishing a ranking of complexity factors with reasonable confidence and using a reasonable number of resources and time. The level of effort required will depend on the problem and its inherent complexity.

Once an initial complexity assessment is completed, the problem will possess a *baseline* complexity profile and *baseline* complexity score. Any alterations in the complexity profile and score will be measured in comparison to these baselines.

## 4.10 Complexity reduction

To reduce the complexity of a problem to a manageable level, a series of decisions is required. Each decision may involve various alternatives, each carrying different complexity change profiles. These complexities change profiles can indicate the anticipated complexity profile

when a decision alternative is chosen and fully implemented. Therefore, the problem's characteristics will transition into a future state with a revised complexity profile and score.

In <u>Table 15</u>, I have outlined two decision alternatives with different complexity change profiles. The expected complexity profiles for both alternatives have been calculated based on the baseline complexity profile and the change profiles.

With both alternatives equally costly and timely to implement, Alternative 2 should be chosen. This alternative is expected to reduce the complexity the most, from a baseline complexity score of 17 to an expected complexity score of 11.

Complexity factor	Baseline complexity (High/Medium/Low)	Decision alternative 1	Expected Complexity for 1 (High/Medium/Low)	Decision alternative 2	Expected Complexity for 2 (High/Medium/Low)
C1-Scope	High (3)	-	Medium (2)		Low (1)
C2–Seriousness	Medium (2)	-	Low (1)	-	Low (1)
C3–Uniqueness	High (3)	0	High (3)	0	High (3)
C4–Urgency	High (3)	-	Medium (2)	-	Medium (2)
C5-Disagreement	Low (1)	+	Medium (2)	0	Low (1)
C6-Dynamic	High (3)	-	Medium (2)	-	Medium (2)
C7-Inadequacy	Medium (2)	0	Medium (2)	-	Low (1)
Score	17	-3	14	-6	11

Table 15: Complexity change profile for two decision alternatives and their expected complexity profiles.

However, when conducting a new complexity assessment after implementing the decision, the actual complexity profile and score may differ from the anticipated one at the time of the decision. This discrepancy could arise from the implementation not yielding the expected results. Alternatively, it could result from one or more complexity factors being influenced by events or forces beyond the scope of the decision. In <u>Table 16</u>, we observe an assessment of the actual complexity profile following the implementation of Decision Alternative 2. Instead of realizing an expected complexity reduction from 17 to 11, the actual complexity score is only reduced to 15 from 17. The gap between the expected and actual complexity profiles after Decision Alternative 2 is also shown in the table. The new actual complexity profile becomes the new baseline for making future complexity reduction decisions.

Complexity factor	Baseline complexity (H/M/L)	Decision alternative 2	Expected Complexity for 2 (H/M/L)	Actual Complexity for 2 (H/M/L)	Gap between expected and actual
C1-Scope	H (3)		L(1)	L(1)	0
C2–Seriousness	M (2)	-	L(1)	M (2)	+
C3–Uniqueness	H (3)	0	H (3)	H (3)	0
C4–Urgency	H (3)	-	M (2)	M (2)	0
C5-Disagreement	L(1)	0	L (1)	M (2)	+
C6-Dynamic	H (3)	-	M (2)	H (3)	+
C7-Inadequacy	M (2)	-	L (1)	M (2)	+
Score	17	-6	11	15	4

Table 16: Difference between actual and expected complexity profile after implementing Decision Alternative 2

#### 4.11 What is the lesser evil alternative?

The discussion so far has emphasized how involving more individuals can enhance the confidence in complexity assessments. I have also delved into how different decision alternatives possess varying change profiles, impacting complexity scores and profiles differently. A fundamental principle is to opt for the decision alternative that minimizes complexity the most, assuming equal costs and implementation durations. Lastly, I have illustrated that decision implementations often deviate from expected outcomes due to external forces and events that influence problem complexity independently of decision implementation.

This chain of activities—complexity assessment, decision development and analysis, decision making, implementation, and renewed complexity assessment—can occur multiple times over an extended period. For complex problems, the number of decisions might be very high, taking years or longer to reduce complexity to an acceptable level.

The framework and complexity reduction process offer a systematic analytical approach to explicitly evaluate problem complexity and actively select the decision alternative that best reduces it. This chosen alternative is termed the 'lesser evil' alternative. However, it could be debated whether this term is appropriate since the aim is to diminish the 'evilness' (complexity). Perhaps 'greater good' might be more fitting since the rationale behind the framework is to have an analytical tool for assessing the 'evilness' (complexity) of a problem and guiding decision-

makers toward the alternative that effectively manages or reduces complexity. Nonetheless, 'lesser evil' remains the preferred term for the chosen alternative.

The examples used thus far have been to illustrate the primary guidelines of complexity assessment and how decision alternatives may influence complexity to identify the lesser evil alternative. While presenting the various factors of the framework, I indicated the main topics relevant to consider for four common foreign policy decisions. However, I didn't delve into how these decisions might impact the complexity of each factor. Furthermore, I have outlined for each factor how policy decisions might impact the degree of complexity. It is essential to note that this assessment is indicative and serves the purpose of comparing how different policy decisions may affect the complexity of a given situation. Specifics of the problem at hand will determine the degree of complexity that suits it best. Additionally, the policy decisions in the table, arranged from left to right, are depicted as an escalation ladder. This implies that when an escalating policy decision is made, the default consequence might be an increase in the problem's complexity. To address these aspects of the proposed framework, I will assess a real-world situation, US-led invasion of Iraq in 2003. This will be covered in the next chapter.

# 5 Real world example – Invasion of Iraq in 2003

The previous chapter introduced the Problem Complexity Framework aimed at aiding the assessment of the complexity of a given situation or problem and comparing the effects of complexity for different decision alternatives. The framework encourages lesser evil reasoning and advocates for the alternative that best manages, or preferably reduces, the problem complexity.

In this chapter, I will apply the framework to a specific historical case – the US's decision to invade Iraq in 2003, which initiated the Iraq War. The purpose is to demonstrate the steps to reach a viable lesser evil alternative. This practical application to uncover aspects of the framework that may increase or decrease its usability, including pre-requisites that are preferrable and potential pitfalls and challenges. The content in this chapter should not be regarded as a comprehensive case study to validate the framework.

An in-depth analysis of the factors associated with decision alternatives would necessitate access to classified information, trustworthy sources, official documents, and interviews with key decision-makers all of which would significantly enhance confidence in supporting each topic and decision points However, these intellectual ambitions fall beyond the scope of this thesis. Therefore, the complexity problem assessment will be high-level, relying on published research and subjective judgments, resulting in a lower level of confidence. Nonetheless, this example is sufficient to demonstrate the framework's purpose, potential and usage, despite potential challenges and pitfalls.

The validity of the framework will be tested by empirical studies that are broader and more extensive than this single example. Nevertheless, in this context, I will employ the complexity framework and 'lesser evil' reasoning to assess the relevance of policy alternatives that could have been a considered instead of an invasion.

## 5.1 Background – US relationship with Iraq

US interest in the Middle East and Iraq, emerged as part of the United States' grand strategy after World War II, to contain the spread of communism and secure access to reliable and cost-effective oil resources (Brooks, Ikenberry, Wohlforth, 2013). This interest resulted in a notable US presence in the region, characterized by significant economic and military support for countries such as Israel, the Kingdom of Saudi Arabia, and others.

The relationship between the US and Iraq has been intricate. Following the 1979 Islamic revolution in Iran and during the Iraq-Iran War from 1980 to 1988, the US formed a friendly alliance with Iraq. During the Reagan administration, Iraq received intelligence and military equipment from the US. Moreover, Iraq obtained licenses to acquire technology capable of producing biological and chemical weapons, which were later employed against Iran and the Kurdish population in Iraq (Hook & Spanier, 2019, p. 199).

However, the relationship significantly deteriorated when Iraq invaded and occupied Kuwait in August 1990, partly due to a dispute over oil quotas. President George H.W. Bush and his administration successfully assembled a robust international coalition. With support from a United Nations Security Council resolution, Iraqi President Saddam Hussein was issued an ultimatum to withdraw from Kuwait. Failing to comply, a US-led coalition, initiated Operation Desert Storm in January 1991, to defend Kuwait and safeguard US oil interests. The operation swiftly concluded, resulting in a decisive victory for the coalition. However, it did not bring about a change Iraq's regime. Instead, the country faced a series of economic sanctions, which included the granting of UN inspectors, permission to investigate manufacturing practices potentially linked to the development of weapons of mass destruction.

When George W. Bush was sworn into the oval office as the 43rd President of the United States, his administration retained influential figures from his father's administration in key positions, shaping the new foreign policy. Notably, Vice President Dick Cheney, Deputy Secretary Paul Wolfowitz, and Secretary of Defense Donald Rumsfeld. All were members of the Project for a New American Century, a group that had sent an open letter to President Clinton in January 1998 advocating for regime change in Iraq (Schmidt & Williams, 2008, p. 193).

## 5.2 The main arguments for the Iraq War

Political science scholars have contended that the covert preparations orchestrated by Vice President Cheney and Defense Minister Rumsfeld for the invasion of Iraq in 2003 were precipitated by the events of the 9/11 attacks (McKinney, 2005; Mithcell & Massoud, 2009; Pfiffner, 2009). However, notable observations suggest that President Bush delivered publicly hinted at an impending invasion of Iraq, predating the events of 9/11.

During the annual State of the Union Address on January 29, 2002, President Bush proclaimed that Iraq harbored terrorist groups, supported their activities, and was on a path to develop weapons of mass destruction (Bush, 2002a). Consequently, Bush advocated for decisive

action. In another address at the military academy West Point on June 1, 2002, Bush reaffirmed the urgency of action, stressing the ineffectiveness of strategies like deterrence and containment against Iraq and hinting at the necessity of preventive measures (Bush, 2002b).

On September 17, 2002, the US National Security Strategy was published (Bush, 2002c), marking the official statements of the Bush Doctrine. Further developments unfolded on October 16, 2002, when the US Congress sanctioned the use of military force against Iraq (US Congress, 2002). During these Congressional sessions, three primary arguments were presented to justify immediate action.

The first centered around the imperative need to prevent Iraq from developing weapons of mass destruction, particularly nuclear weapons, citing Iraq's refusal to permit comprehensive inspections as evidence. The second argument revolved around Iraq's alleged ties to terrorist groups such as Al Qaeda, with implications suggesting Iraqi forces were involved in training the participants of the 9/11 attacks.

The third argument focused on effecting a regime change in Iraq for liberation purposes. The Bush administration believed that by overthrowing Iraq's authoritarian leader and restructuring its governance could lay the foundation for democracy in Iraq and potentially influence other parts of the Middle East. This aspiration echoed sentiments expressed by figures like Wolfowitz and Rumsfeld from the Clinton administration in 1998 (Kessler, 2003).

The Bush Doctrine exhibited neoconservative elements (Fukuyama, 2006; Schmidt & Williams, 2008); an ideology advocating for the promotion of democracy and interventionism in international affairs (Wolfson, 2004, p. 228). The Bush Doctrine gained growing support, suggesting that by recognizing and possessing superior military power, adversaries would yield to the threat of attack and align themselves with the United States.

The Bush administration was determined to invade Iraq but lacked broad international support and a clear legal justification. The intelligence community constructed 'evidence' that Secretary of State Colin Powell presented to the UN General Council in February 2003. Together with UN resolution 1441 (sanctioned in September 2022) provided an ambiguous international support for the invasion (Byers, 2004).

## 5.3 Realism and realists' arguments against the Iraq War

Except from Kissinger (Kissinger, 2002), most prominent voices from the realist camp strongly opposed the invasion of Iraq. Two leading realists, John Mearsheimer and Stephen Walt,

argued that the war would be unnecessary (Mearsheimer & Walt, 2003); and they dismissed the arguments of the Bush administration, contending that deterrence could effectively work. They believed that Saddam Hussein was a rational actor and that the strong US presence in the region, coupled with support from allies like Saudi Arabia and Israel, was enough to deter Iraq. Moreover, they did not perceive Iraq as posing a significant enough threat to the vital interests of the United States to justify a war; and other scholars supported these arguments (Kirschner, 2003; Knopf, 2002).

Additionally, Mearsheimer and Walt claimed that a war would be counterproductive because it could potentially undermine the ongoing War on Terrorism and make the non-proliferation of nuclear weapons more challenging (Kirschner, 2003; Mearsheimer & Walt, 2003).

In 'The Confrontation between Iraq and the US: Implications for the Theory and Practice of Deterrence', Robert Jervis assessed whether deterrence could be a viable alternative to resolve the 'Iraq Problem' (Jervis, 2003). While the article suggested that deterrence would work, the arguments were only partially founded within a common framework, making it challenging to transparently and convincingly compare preventive war and deterrence to war.

Media commentators and scholars questioned the thoroughness of the decision-making process prior to the invasion; Kessler labeled the process 'murky' (Kessler, 2003) and Sanger stated that the Bush administration exaggerated the threat by portraying "the Iraqi threat as one so large and so imminent that it challenges America's survival – an argument his critics were already saying tonight was exaggerated to justify a preventive war" (Sanger, 2003). Other scholars have analyzed the decision-making process of the Bush administration and claim it was marred by a series of shortcomings (Michaels & Massoud, 2009; Pfiffner, 2009). Galston emphasized that a war would damage US interests, leading to dire post-war consequences, potentially leading to long-term occupation (Galston, 2002, p.2).

## 5.4 Applying the Problem Complexity Framework

In the upcoming analysis, I will utilize the proposed complexity framework to assess the circumstances leading to the Iraq war, focusing on the primary rationale behind the invasion: halting Iraq's presumed development of nuclear capabilities. As previously highlighted, there was notable absence of thorough assessment regarding various alternatives to achieve this objective. This absence, coupled with a strong determination to invade Iraq and construct a justification for

this action, seemed to overshadow rational consideration of other viable options. Despite numerous prominent scholars advocating for deterrence and Secretary of State Colin Powell did presenting an economic sanction alternative, a comprehensive comparison of these options have been notably lacking.

In Section 4.1, I introduced four common foreign policy decisions: 1) diplomacy, 2) deterrence, 3) economic sanctions, and 4) military invasion (war). I discussed the relevant topics for each alternative and how they relate to factors in the complexity framework, indicating how these alternatives impact the level of complexity. The overall assessment suggests a potential escalation in problem complexity from diplomacy to military invasion. To effectively present and discuss the framework's usage, it is essential to assess and compare least two alternatives to arrive at a lesser evil decision.

In the context before the Iraq war, two debated alternatives were deterrence and military invasion. While deterrence aligned with the realism school of thought, military invasion prevailed as the choice of the Bush administration and neoconservative supporters. In this thesis, we will utilize the framework to evaluate the problem complexity consequences associated with both deterrence and military invasion options.

While diplomacy is often explored as an approach in such situations, it may not be particularly realistic as the sole or primary solution for the potential Iraq war scenario. It could however be employed in combination with other alternatives. Economic sanctions were imposed on Iraq throughout the 1990s, significantly impacting Iraqi society (Gordon, 2013). The option of easing existing sanctions as an incentive for Iraq its nuclear weapons program could have been considered but was not viewed as a viable alternative and was never actively promoted. Therefore, the evaluation will focus on the two primary debated alternatives: the Deterrence alternative and the Invasion alternative, respectively.

## 5.5 Framing the problem and its complexity

To make a fair assessment of the complexity of the Iraq situation, a key prerequisite is achieving a shared understanding of the situation. Conflicting perspectives on the situation may result in varying assessments of the problem's complexity and, consequently, different sets of relevant decision alternatives.

Complex problems in international politics often suffer from a lack of mutual understanding, and this was applicable to the pre-war situation in Iraq as well. I assert that three competing understandings or scenarios of the situation existed: i) Iraq was not in the process of establishing Weapons of Mass Destruction (WMD), ii) Iraq was in the process of establishing WMD, and iii) Iraq had verifiably acquired WMD.

The US strongly promoted the idea that Iraq either had or was manufacturing WMD, constructing "evidence" to justify their viewpoint (McKinney, 2005; Mitchell & Massoud, 2009). However, the reality was different because Iraq did not possess nor were they in the process of acquiring WMD; this was later confirmed and admitted by the Bush administration (Mitchell & Massoud, 2009). For simplicity, I will term scenario one as the "Reality scenario" and scenarios two and three as the "Fictitious scenario".

In Chapter 4, I proposed primary drivers or parameters for each of the framework's complexity factors associated with international conflicts. I will use these drivers to assess the complexity of both the Reality and Fictitious scenarios. Moreover, I will utilize the rating scheme proposed in Chapter 4, slightly adapted to the proposed drivers. For readability, I have composed Table 17 that will actively guide the assessment.

I will discuss the complexity of the problem using the seven complexity factors for the "Deterrence" and "Invasion" alternatives to establish a baseline complexity model.

Factor	Primary driver	Low	Medium	High
C1-Scope	<ul> <li># States and position in state system</li> <li>Alliance structure and commitments</li> </ul>	<ul> <li>Scope is understood, contained and manageable.</li> <li>Local conflict (2 states)</li> </ul>	<ul> <li>Scope is understood, but not manageable.</li> <li>Regional conflict (3-5 states)</li> </ul>	<ul> <li>Scope is neither understood nor assumed manageable.</li> <li>Global conflict</li> <li>(Above 5 states)</li> </ul>
C2-Seriousness	Causality     rate/Death rate     Economic impact     (GDP)	• Effects are not harmful.	Effects are modestly harmful, but containable.	• Effects are harmful and not containable.
C3-Uniqueness	Comparable cases	<ul> <li>Many comparable cases</li> <li>Standards and substantial experience exist.</li> </ul>	<ul> <li>Some comparable cases</li> <li>No standards, but modest experience exist.</li> </ul>	<ul> <li>Few or no comparable cases</li> <li>Limited or no experience exist.</li> </ul>

Factor	Primary driver	Low	Medium	High
C4-Urgency	Available time	• Reasonable time is available.	Available time is a concern.	• Limited time available.
C5- Disagreement	• Quality of relationship	<ul> <li>Strong relationship</li> <li>Shared interests and broad consensus among key stakeholders.</li> </ul>	<ul> <li>Neutral relationship</li> <li>Divergent interests and views among key stakeholders.</li> </ul>	<ul> <li>Adversary or enemy</li> <li>Conflicting interests and views among key stakeholders.</li> </ul>
C6-Dynamic	Likelihood of unpredictable/unp repared events	<ul> <li>Few or no Unknowns</li> <li>Stable context and external environment.</li> </ul>	<ul> <li>Some Unknowns</li> <li>Uncertain context and external environment.</li> </ul>	Many Unknowns     Volatile and unpredictable context and external environment.
C7-Inadequacy	• Lack of power types	<ul> <li>Large arsenal</li> <li>Reasonable resources are available and committed.</li> </ul>	<ul> <li>Some power types at disposal</li> <li>Resources are scarce and risk of being re-allocated or not allocated.</li> </ul>	Limited power     Resources are neither available nor committed.

Table 17: Tailored evaluation scheme to the primary driver per complexity factor.

**Scope**: The primary driver for assessing the scope of an international conflict is the number of states involved and the degree of alliances. For both scenarios, it was primarily the US and Iraq that represented the conflicting states. In the Reality scenario, I assert that the scope was contained to Iraq on one hand and the international community on the other. If the Reality scenario had prevailed, Iraq could have been closer integrated into the international community, and some existing harsh economic sanctions may eventually have been lifted. In the Reality situation, I resolve that Iraq had no investments in a nuclear weapons program, and no collaboration existed with external states to develop such weapons.

For the Fictitious scenario, the number of active actors was diverse. While the US was the leading state to invade Iraq, the "Coalition of the Willing" involved nearly 50 states (Althaus & Leetaru, 2008). Additionally, the Fictitious scenario explicitly linked Iraq to Iran and North Korea, jointly termed the "axis of evil" by Bush. Although the term "axis" could indicate an alliance between the three states, subsequently a potential larger conflict, scholars assert that it was mainly a rhetorical tool to underscore the danger and to legitimize the invasion (Choi, 2010, Kellner, 2007) Based on these assessments, I rate the Scope of the Reality scenario as "Low" indicating the scope is understood, contained and manageable. In contrast, for the Fictitious

situation, I assign a score of "Medium" due to the broader involvement of states and scope is understood but not manageable; the reference to the "axis of evil" is cited as supported awareness of the potential scope of the situation.

**Seriousness**: The primary drivers for assessing the severity of an international conflict are casualty/death rate and economic impact. The seriousness of the Reality situation in Iraq before the invasion was severe because the economic sanctions imposed by the international community throughout the nineties coupled with the regime's domestic policies to handle this crisis was already troubling for Iraqis (Gordon, 2013). For the Fictitious scenario, with the looming threat of an invasion, the seriousness is at least dire, with a bleak outlook for any improvement for Iraq's residence. Hence, I rate the Seriousness of the Reality scenario as "Medium" indicating effects are modestly harmful and the Fictitious scenario as "Medium/High" meaning effects are moving towards a harmful realm and are not containable.

Uniqueness: The primary driver for assessing Uniqueness is how many comparable cases provide relevant insight. Since no analytical framework exists for comparing complexity in international conflicts, relevant insight from other cases will be fragmented at best. For the Reality scenario, it is possible to draw experience from cases that have faced economic sanctions only, as documented in various surveys (Gordon, 2012; Smeets, 2018). For the Fictitious scenario, cases associated with arms control and non-proliferation of nuclear weapons, like the US approach to North Korea's nuclear program in 1994, termed the "Agreed Framework", would be relevant (Martin, 1999; Minnich, 2002). I rate both the Reality and Fictitious scenarios as "Medium" in terms of Uniqueness due to fragmented lessons and insights. Some comparable cases did exist.

**Urgency**: Available time is the primary driver for Urgency. The Reality scenario had ample time for the parties to contain the situation and establish a constructive relationship between Iraq and the US, making the Urgency limited, rated as "Low". For the Fictitious situation, the Urgency is increasingly elevated but still manageable; hence, I rate it as "Medium" meaning that available time is limited.

**Disagreement**: The primary driver for assessing Disagreement is the quality of relationships. The US and Iraq were the key actors, and if the Reality situation were acknowledged by the US, it could potentially lead to improved relations, adherence to UN resolutions, and lifted economic sanctions. Therefore, I rate the Disagreement of the Reality situation as "Medium" with a possibility of lowering it. Conversely, the tension between Iraq and the international community

in the Fictitious scenario would likely increase, supporting a rating of "Medium/High" for a neutral relationship scenario to adversary or enemy relationship.

**Dynamic**: Likelihood of unforeseen events is the primary parameter for the Dynamic factor. As argued in the chapter, the landscape of "Knowns and Unknowns" represents appropriate guides for judging this factor. For the Reality situation, it may be easier to grapple with a larger portion of the universe of Unknowns compared to the Fictitious scenario. Hence, I rate the Reality scenario "Low/Medium" for few to some "unknowns" and the Fictitious scenario "Medium/High" for some to many "unknowns".

**Inadequacy**: I have asserted that the lack of power is the primary driver for Inadequacy in an international conflict. In the Iraq situation, there was a great imbalance in power between the US, a hegemon with a vast range of different types of power at its disposal, and Iraq, with very limited power types. For both the Reality and Fictitious scenarios, I rate the Inadequacy as "Low" indicating Iraq did not have an arsenal of power available.

<u>Table 18</u> summarizes the complexity assessment for the Iraq situation in the Reality and Fictitious scenarios. The complexity of these scenarios varies significantly. Based on this assessment, I argue that the US, and parts of the international community, created a more complex problem than the actual complexity of the situation. After all, the Fictitious scenario was a false narrative.

<b>Complexity factor</b>	Reality	Fictitious
C1- Scope	Low (1)	Medium (2)
C2- Seriousness	Medium (2)	Medium/High (2,5)
C3–Uniqueness	Medium (2)	Medium (2)
C4–Urgency	Low (1)	Medium (2)
C5-Disagreement	Low (1)	Medium/High (2,5)
C6- Dynamic	Low/Medium (1,5)	Medium/High (2,5)
C7–Inadequacy	Low (1)	Low (1)
Total	9,5	14,5

Table 18: Complexity assessment of the Reality and Fictitious scenarios.

In the following section, I will investigate into the two dominant decision alternatives: i) Deterrence and ii) Invasion. Although two scenarios present differing problem complexities, it is important to note that the Reality scenario would not have led to a situation where the international

community had to choose between Deterrence and Invasion. Therefore, I will discuss the potential impact of these decision alternatives based on the complexities outlined in the Fictitious scenario.

#### **5.6** Assessing the Deterrence alternative

For the Deterrence alternative I have evaluated the potential impact based on a fair anticipation of its effects. As argued, the confidence level for such an assessment is low, providing a basis for further investigation. The aim of this assessment is to illustrate the framework's usage in establishing a comprehensive understanding of the expected effects of a Deterrence decision. Table 19 summarizes the input and the outcome of the assessment. The assessment for the Fictitious scenario for each complexity factor (with stated primary driver) from Chapter 4. This provides the baseline complexity on which the decision will influence. I have added the selected topics as potential input to the reasoning on Deterrence alternative.

Complexity factor (Primary driver)	Fictitious assessment	Selected topics	Expected effect (Iraq)	<b>Change</b> (-,0,+)
C1-Scope (# States and alliances)	Medium (2)	<ul><li>Treat credibility</li><li>Rivals position and response</li><li>Alliance potential</li></ul>	Low (1)	•
C2-Seriousness (Casualty rate and Economic impact)	Medium/High (2,5)	<ul><li>Treat credibility</li><li>Military ramp-up</li></ul>	Low/Medium (1,5)	-
C3-Uniqueness (Comparable cases)	Medium (2)	Treat types and their effects     Treat credibility	Medium (2)	0
C4-Urgency (Available time)	Medium (2)	<ul><li>Deadlines</li><li>Red lines</li></ul>	Low/Medium (1,5)	•
C5-Disagreement (Quality of relationships)	Medium/High (2,5)	<ul> <li>Alter communication or mediation approach.</li> <li>Termination or alternation of diplomats.</li> <li>Involve third parties as mediators.</li> <li>Seek UN resolutions</li> </ul>	Medium (2)	-
C6-Dynamic (Degree of Unknowns)	Medium/High (2,5)	<ul><li>Degree of Unknowns</li><li>Black swans</li><li>Security dilemma</li></ul>	Medium (2)	-
C7-Inadequacy (Lack of power types)	Low (1)	Smart power	Low (1)	0
Complexity	14,5		11	

Table 19: Assessment of the Deterrence alternative.

The output of the reasoning is shown in the latter two columns: the expected effect on each complexity factor for the Deterrence alternative and the expected derived net change per complexity factor.

**Scope:** The complexity assessment for the Fictitious scenario was rated "Medium". meaning the scope is understood, contained, but not manageable. The purpose of deterrence is to issue credible threats to Iraq, communicating that a military invasion would be the result if verified that Iraq had manufactured or was in the process of developing weapons of mass destruction, including nuclear weapons. The nature of threats made by the US could impact the Scope of the problem depending on Iraq's nuclear program status and the suitable and legitimate response from the Iraq, US, and other states. Given the broad spectrum of military capabilities possessed by the US, the country holds escalation dominance, meaning the US posed a significant threat over what Iraq could establish. A potential military invasion would have been conventional in nature because the use of nuclear weapons was not necessary. Credibility of the threat would be the key consideration of Saddam Hussein's response and subsequently the impact on the Scope and other factors. If Iraq had allies among significant states or great powers, the Scope of the situation may potentially had expanded. I assess that Iraq had limited potential in engaging new allies and that the "axis of evil" rhetoric from Bush did not have merit (Choi, 2010). Hence, the deterrence primarily revolves around Iraq. It has been debated among scholars how realistic was it that Hussain would deter (Barram, 2012; Mearsheimer & Walt, 2003). Moreover, lending on the assessment of Mearsheimer and Walt that Hussein was a rational actor, and the deterrence approach was viable, I assess that the Scope of this alternative is considered "Low". However, if Iraq had assembled a nuclear weapon and communicate its threats, the Scope of the problem would certainly escalate. An alternative reasoning on Hussein's rationality would further justify an elevated rating.

Seriousness: The complexity assessment for the Fictitious scenario was rated "Medium/High" (effects are harmful and not containable) due to the already severe situation in Iraq. Deterring Iraq would not have a direct material impact on it, because the country's self-determination would be restricted in economy sectors deemed relevant and possible for developing nuclear weapons, like military and specific industrial and technological areas. I assert that Saddam Hussein was a rational leader, and any threats should had been seen as credible. US involvement in the Gulf War and Washington's history of interventionist foreign policy increased the credibility

that deterred Iraq from developing WMDs. Deterrence might complicate diplomatic relationships, but with cooperation from great powers and regional actors, the policy's influence could increase and incentivized Iraq to improve its domestic policy. An expanded oil-for-food program would support such a scenario, though with strong oversight to avoid corruption (Birdsall & Subramanian, 2004; Hsieh & Moretti, 2006). Therefore, the overall Seriousness from the Deterrence alternative is downgraded to "Low/Medium".

Uniqueness: The complexity assessment for the Fictitious scenario was rated "Medium". Deterrence is a common foreign policy approach, but establishing a clear correlation between this approach and success remains unclear (Huth, 1999; Lebow, 2007; Morgan, 2012). The decisive factor for Iraq's outcome will be a rational calculation on the perceived cost of non-compliance with the threats versus its benefits of compliance. Therefore, the Uniqueness of the Deterrence alternative is rated as "Medium".

**Urgency:** The complexity assessment for the Fictitious scenario was rated "Medium/High" showing that limited time was available. Deterrence leans towards a durable situation to address root causes, but fixed positions or deadlines could heighten Urgency. The Urgency of the problem is related to Iraq's nuclear program status and the potential for unexpected events to further deteriorate the situation. After the 9/11 attacks and the establishment of the Bush Doctrine, the US perceived threats to its interests as urgent. However, if it could be verified that the program is not in an advanced state and that Deterrence would contain the situation, the Urgency could be downgraded to the "Medium" to "Low" range (moving towards reasonable time is available trending away from time is a concern).

**Disagreement:** The complexity assessment for the Fictitious scenario was rated "Medium/High" indicating a very poor relationship. In general, implementing deterrence increases tension between the deterring rival states. A deterrence decision most likely would not improve the relationship between the US and Iraq, resulting in a "Medium" or "High" level of Disagreement.

To reduce tension and foster trust, common confidence building measures should be considered (Holst, 1983; Vick, 1988). This may be related to communication channels, transparency willingness, mechanisms to conduct monitoring, and verification initiatives, etc. Furthermore, measures might include mediation approaches, altering, or replacing diplomats, involving third-party mediators, and seeking UN resolutions to legitimize position. Effective

communication between the US and Iraq, either directly through diplomatic channels or via trusted third parties, would be crucial. I posit that some of these mechanisms would be fruitful and lower the Disagreement factor slightly to "Medium".

**Dynamic:** The complexity assessment for the Fictitious scenario was rated "Medium/High" "indicating a volatile and uncertain situation. The Dynamics of the Iraq situation correlates with the effectiveness and longevity of the Deterrence alternative by envisioning and mitigating future risks and "Unknowns". Considering the US dominance and special interests in the region, there is a substantial likelihood of establishing a relatively stable geographic. However, there is always a risk that new events could change this situation, and increase dynamism; and assessing potential risks is crucial. The first risk would have been if Iraq indeed possessed nuclear weapons and threatened to use them against US interests or its regional allies. Even so, it would be improbable that Iraq could directly threaten the US mainland. Moreover, considering the US's military capacity, Iraq would still face escalation dominance, deterring actual weapon usage. However, if evidence surfaced indicating Iraq's nuclear capability or development, the situation would become more unstable. Another risk would involve regional relationships; if new alliances formed, weakening US influence, the situation might become more unstable. A comprehensive risk assessment and mitigation plan should manage the Deterrence alternative, preserving stability. In conclusion, I rate the Dynamic for the Deterrence alternative as "Medium".

Inadequacy: The complexity assessment for the Fictitious scenario was rated "Low" indicating a versatile set of power types, particularly from the US, at its disposal. The credibility of the deterrence threat relies on the actual and perceived military capabilities of the US and the perceived importance of the situation. The immense power of the US was undisputed. However, the Deterrence alternative in this case would additionally be accompanied with intelligence capability to monitor Iraq's plans for producing nuclear weapons and honest participation in the inspection programs. If Iraq would allow or was incentivized to depart from its "cat and mouse" attitude as well as US' intentions addressing these activities without strong prejudices and biases, a more robust and sustainable documentation about Iraq's situation could have been provided. Given these combined capabilities, the Inadequacy factor is maintained as "Low"."

Summing up, the overall effect on the complexity for the Deterrence alternative is positive. As shown in Table, the accumulated rating, using the simple numbering scheme, is reduced from 14,5 to 11.

## 5.7 Assessing the Invasion alternative

For the Deterrence alternative I have evaluated the potential impact based on a fair anticipation of its effects. However, the situation differs for the Invasion alternative. While investigating this alternative, it was necessary to establish the anticipated effects before the invasion and then comparing them with the actual effects post-implementation. This method will be employed to discuss both the expected and actual effects for each complexity factor.

Table 20 summarizes the input and the outcome of the assessment. The input covers the assessment of each complexity factor (with stated primary driver) for the Fictitious scenario from Chapter 4, establishing the baseline complexity on which the decision will exert influence. I have included the selected topics as potential input to the reasoning regarding the Invasion alternative. The output of this reasoning is shown in the latter two columns: the expected and actual effects on each complexity factor for the Invasion alternative.

Complexity factor (Primary driver)	Fictitious assessment	Selected topics	Expected effect	Actual effect
C1-Scope (# States and alliances)	Medium (2)	<ul><li>Conflict duration</li><li>Military targets</li><li>Civilian targets</li></ul>	Low (1)	Medium (2)
C2-Seriousness (Casualty rate and Economic impact)	Medium/High (2,5)	<ul><li> Military targets</li><li> Civilian targets</li></ul>	Medium (2)	High (3)
C3-Uniqueness (Comparable cases)	Medium (2)	<ul> <li>Type of warfare</li> <li>Effectiveness of weapon system</li> <li>Type and degree of resistance</li> <li>Impact on civilian elements</li> </ul>	Low/ Medium (1,5)	Medium/High (2)
C4-Urgency (Available time)	Medium (2)	<ul><li>Humanitarian corridors/pauses</li><li>Ceasefire</li><li>Truce</li></ul>	High (3)	High (3)
C5- Disagreement (Quality of relationships)	Medium/High (2,5)	<ul><li>Involve 3rd parties as mediators.</li><li>Seek UN resolutions</li></ul>	High (3)	High (3)
C6-Dynamic (Degree of Unknowns)	Medium/High (2,5)	<ul><li>Radical uncertainty"</li><li>Highly unpredictable situation</li></ul>	Medium (2)	High (3)
C7- Inadequacy (Lack of power types)	Low (1)	<ul><li> Military power</li><li> Nuclear capability</li><li> Military production capability</li></ul>	Medium (2)	High (3)
Complexity	14,5		14,5	19

Table 20: Assessment of the Invasion alternative.

Scope: The complexity assessment for the Fictitious scenario was rated "Medium". The Scope of a military invasion is defined by the geographic coverage of the conflict, its duration, the types of military weapons used, and whether the war targets military sites or not, creating a planned invasion of Iraq scenario. The expected Scope of the campaign was focused on military targets with a reasonably short duration. This was evidenced by the relatively modest ground force that the coalition initially deployed (Mitchell & Massoud, 2009). Thus, from a military invasion viewpoint, it can be argued that the expected Scope was "Low". However, the war turned out to have a much broader Scope than initially expected when the conflict lasted over eight years, and a dramatic impact on the civilian population and infrastructure was realized. At the same, the conflict was contained to Iraq only, although one may argue that it impacted the regional situation in its aftermath (Calculli, 2019; Fawcett, 2013). I therefore rate actual Scope as "Medium" because the scenario was understood and contained but it was not manageable as expected.

**Seriousness:** The complexity assessment for the Fictitious scenario was rated "Medium/High" due to the already severe situation in Iraq. In the case of military invasion, the severity of effects is notably high. Beyond severe casualties among military personnel and infrastructure, civilians endured unbearable conditions. Restricted or lack of access to vital infrastructure services like energy, power, water, and food supply caused reduced healthcare services, famine, migration, among other hardships. Although the US administration planned to limit the impact, the war turned out to be very destructive. I assert that the expected Seriousness was "Medium", whereas I will claim the actual Seriousness was "High'.

Uniqueness: The complexity assessment for the Fictitious scenario was rated "Medium". I have argued that real-world problems possess unique problem characteristics, and decisions made to address these generate new unique situations. This is true for military campaigns, where factors must include warfare variables, effectiveness of weapon systems, degree and type of resistance encountered, and the impact on civilian elements play important roles. While the scale of the military invasion planned by the US was uncommon, similar conflicts experienced by the US in the post-World War II era should have been enough to prepare for a more predictable development of the war. Yet the reality was vastly different than anticipated when nationalistic forces contributed to a more challenging conflict (Mearsheimer, 2005). Hence, I rate the expected Uniqueness of the Invasion alternative as "Low" to "Medium", whereas the actual Uniqueness rates as "Medium/High" indicating no comparable experience did exist.

**Urgency:** The complexity assessment for the Fictitious scenario was rated "Medium/High". One may argue that the Invasion decision reduced the perceived Urgency from the US's point of view. From an international community viewpoint, I would argue it expanded and complicated the conflict, making it even more difficult to manage. Urgency arises in mitigating its impact and halting military activities. Short-term mechanisms like humanitarian corridors/pauses, ceasefires, or truces should be encouraged among the parties, allowing for longer-term resolutions of the conflict. I assert that both the expected and actual Urgency were "High" because time to find manageable solutions was limited.

**Disagreement:** The complexity assessment for the Fictitious scenario was rated "Medium/High" indicating a very poor relationship. When the conflict escalates the level of disagreement intensifies further culminating during a military invasion. Moreover, the level of Disagreement will stay elevated for a significant period. I assert that the very poor relationship remains; and both expected and actual Disagreement were "High".

**Dynamic:** The complexity assessment for the Fictitious scenario was rated "Medium/High" "indicating a volatile and uncertain situation; war embodies radical uncertainty as military theorist Clausewitz noted (Clausewitz, 1984[1832]). While the Bush administration may have anticipated a predictable conflict resolution, the actual Dynamic became "High" due to unforeseen events and decisions. This uncertainty significantly affected US troops, as several unforeseen decisions and events, characterized as "Unknown Unknowns", led to a far more dynamic and protracted conflict than initially anticipated (Mitchell & Massoud, 2009). The expected Dynamic was "Medium", whereas the actual one was "High".

**Inadequacy:** The complexity assessment for the Fictitious scenario was rated "Low" indicating a versatile set of power types, particularly from the US. When US decides on the hard power approach, it automatically reduces available power types to manage the conflict. It is difficult to know if the Bush Administration made this type of reasoning and expected the range of power types to remain intact. The actual outcome turned out differently, and the US, relying on its unmatched military capabilities, expected to solve the Iraq situation but lacked insight into Iraq's cultural and nationalistic sentiment at that time. The expected Inadequacy was "Medium", while the actual was "High" illustrating a limit power and proper resources are neither available nor committed to the problem.

Summing up, the overall effect on the complexity for the Invasion alternative is negative as shown in <u>Table 20</u>. The accumulated rating, using the simple numbering scheme, remains at 14,5 for the expected alternative and the actual invasion alternative approaches the maximum score, 19 out of a possible of 21 points.

## 5.8 Comparing the alternatives

Comparing the alternatives, I have evaluated the complexity effects of both the Deterrence and Invasion alternatives, including the expected and actual effects for the Invasion alternative. These assessments are compared to the baseline complexity assessment for the Fictitious situation alternative, as previously argued. The summarized results are presented in <u>Table 21</u>.

Complexity factor	Baseline complexity (Fictitious)	Deterrence alternative	Invasion Alternative (expected)	Invasion alternative (actual)
C1- Scope	Medium	Low	Low	Medium
•	(2)	(1)	(1)	(2)
C2–Seriousness	Medium/High	Low/Medium	Medium	High
C2-Scriousness	(2,5)	(1,5)	(2)	(3)
C2 II.:	Medium	Medium	Low/ Medium	Medium/High
C3–Uniqueness	(2)	(2)	(1,5)	(2)
CA II	Medium	Low/Medium	High	High
C4–Urgency	(2)	(1,5)	(3)	(3)
C5 Discourant	Medium/High	Medium	High	High
C5-Disagreement	(2,5)	(2)	(3)	(3)
CC D	Medium/High	Medium	Medium	High
C6–Dynamic	(2,5)	(2)	(2)	(3)
C7 In decree	Low	Low	Medium	High
C7–Inadequacy	(1)	(1)	(2)	(3)
Complexity score	13	11	14,5	19

Table 21: Assessing the complexity impact of the Deterrence and Invasion alternatives.

This table indicates that the Deterrence alternative would reduce the complexity of the situation even if the false narrative were the reality. On the other hand, the Invasion alternative would essentially maintain the complexity, because the implementation matched the Bush Administration's expectations. However, the actual complexity of the Invasion alternative

increased significantly, resulting in a prolonged and severe problem. Therefore, considering these alternatives, the Deterrence alternative emerges as the lesser evil.

Based on this assessment, I would argue that the US made two serious and morally questionable decisions. Foremost, the US crafted a false narrative that portrayed a situation far more complex than reality; and the choice to address the problem through invasion increased the complexity considerably and resulted in a choice that was not the lesser evil option.

## 6 Discussion

This chapter wraps up the thesis and suggests areas that merits further research. First, I will reiterate the rationale and the point of departure for the work, focusing on increased awareness of morality in decision-making in international politics. I will discuss how compatible the usage of the framework aligns with Morgenthau's assessment of morality and summarize the theoretical deliberation that provides the basis for the proposed framework. Finally, I will review my work critically, first and foremost the usability of the framework in practice. I will also outline some areas for further research.

#### 6.1 On evilness and morality as understood by Morgenthau

The rationale for this thesis and the moral approach underlying the establishment of the complexity framework primarily derive from Morgenthau's view of evilness in politics. The interpretation adopted in this thesis aligns closely with Morgenthau's perspective that evilness encompasses not only the direct material effects of a political decision or action, but also their impact on a problem or situation that politicians need to acknowledge. This intertwines with the context of problems within the social world, where human nature plays a dominant role in shaping and evolving these issues. The constant struggle for power within human nature significantly contributes to these problems, supporting two key positions: first, that morality is an integral part of human and political life, and second, that contemporary politics has shifted focus from morality to the scientific realm, leading to moral erosion.

Guided by Morgenthau's perspective on moral erosion in politics, this thesis sought to reintroduce morality into political decision-making through the proposed framework. The premise of this interpretation is that a politician's primary moral goal should be managing the evilness in the social world, unrestricted by legal bindings or ideological biases. Therefore, the framework aims to serve as a non-legal, non-ideological guide for politicians to make morally appropriate decisions. It acknowledges the complexity of the social world and recognizes that one-dimensional biased positions distort reality and hinder the decision-making process.

Moreover, let me briefly discuss some of Morgenthau's issues regarding morality in political life that were summarized in Section 2.3. First, he challenges the idea of *dual morality* –

that is, the view that morality in public and political life is disconnected from private morality. Although he acknowledges, and agrees with Niebuhr (Niebuhr, 2013[1932]), that forces in society make it immoral, he also claims that these forces should be contested. The framework is a contribution to such a goal. It is an attempt to revitalize morality into the forefront of political decision making and proposes characteristics of the social world as key elements for moral deliberation.

Another moral topic discussed by Morgenthau is the *end-means relationship*, which he argues is an artificial distinction. Here, the introduction of the complexity framework may explicitly support this relationship and as such counter Morgenthau's position. The goal, or end, of morality is to reduce evilness in society. Thus, the end of using the framework is to understand and reduce complexity of a problem or a situation. The means is to identify the main contributing factors to the complexity and establish and decide on the alternative, the lesser evil one, that reduces the complexity the most.

Morgenthau also argues that not deciding or acting is not more morally justified than actively making political decisions. The framework emphasizes this aspect explicitly. By not deciding, no active measure to reduce complexity is taken. Thus, one implicitly accepts the current complexity and eventual forces and trends that may increase the complexity further. Managing or reducing complexity will in most cases require active decision making.

Morgenthau highlights animus dominandi, or humans' constant struggle for power as the core force of evil in politics. This aspect is explicitly embedded in the complexity framework through the "Disagreement" and "Inadequacy" factors. Thus, power struggle is viewed as a key source of complexity, but also an important mechanism to either increase or decrease the complexity.

Ultimately, Morgenthau advocates applying the lesser evil principle in navigating moral dilemmas and addressing evil in the real world and in political life. Despite the robust argumentation for the lesser evil principle, Morgenthau provides no practical guidance on how it should guide decision-making. This thesis seeks to fill that gap by proposing a framework and rules that, although challenging, aim to address the shortcomings and pitfalls in lesser evil reasoning. The proposed requirements and stated pitfalls are further addressed in Appendix A.

## **6.2** On the complexity factors

The complexity factors stem from two main sources of inspiration. The main source is an interpretation of key political thinkers within the school of classical realism. The secondary source is the concept of wicked problems. From a review of classical realism, I have extracted five distinct factors or variables assumed to positively relate to and influence the complexity of a situation. These are shown in <u>Table 22</u>, highlighting key characteristics of classical realism and its main contributors.

Classical realism characteristics	Key contributor (Classical realism)	Wicked problem Proposition #	Wicked problem typology	Proposed complexity factor
Human nature, national interest,	Hobbes, Morgenthau	3	Divergence	Disagreement
Power (in different variations)	Thucydides, Morgenthau, Holsti, Nye	2,9		Inadequacy
Endlessness, History, and Uncertainty	Kirschner, Clausewitz, EH Carr	4		Dynamic
Uniqueness	Morgenthau, Hobbes	5, 7		Uniqueness
Direct consequences	Morgenthau	10		Seriousness
		6	Complexity	Scope
			Super wicked problem	Urgency

Table 22: Summary of the key sources to the proposed complexity factors.

A prominent characteristic of classical realism revolves around a pessimistic view of human nature, primarily emphasized by Hobbes and Morgenthau (Hobbes, 2005[1651]; Morgenthau, 1945). Morgenthau's perspective of humans' perpetual struggle for power, which translates into national interests at the state level, forms the basis for "Disagreement" as a key complexity factor. Additionally, Power, in various forms, and utilized constructively, emerges as crucial in addressing or containing international problems. Holsti, Morgenthau, Nye, and Thucydides have been cited as key sources for this characteristic (Holsti, 1995; Nye 1990; Nye 2013; Morgenthau, 1945; Thucydides, 2009[~400 AD]). Conversely, a lack of capabilities can

complicate matters, leading to the factor Inadequacy. The introduction of "Dynamic" as the third factors acknowledges that international problems tend to be long-lasting, as Kirschner denotes them endless (Kirschner, 2022). This signifies a multitude of significant and minor decisions associated with the problem. Understanding the history of a problem is therefore important in its assessment. Moreover, according to von Clausewitz and others, anticipating an uncertain future, as stressed by Carr, indicating the inevitability of changes (Carr, 2016[1939]; Clausewitz, 1984[1832]). Thus, the level of Dynamic future contributes to increasing the complexity of the problem.

Another key characteristic, highlighted by Hobbes and Morgenthau, but in different contexts is the "Uniqueness" of the problem. Finally, the perceived severity a problem and the direct material consequences of a decision significantly influence the complexity and how easy it will be to manage or preferably reduce the complexity. This justifies the inclusion of "Seriousness" as distinct complexity factor. I believe Morgenthau's broad view of the impact of political decisions supports this factor well.

Identifying (5) factors as potential explanations for complexity by reviewing key classical realists could have been a satisfactory starting point for testing their validity. However, recognizing that the rationale for solely utilizing classical realism is not entirely justified, I was interested in exploring whether other disciplines or school of thoughts either could support or challenge the five (5) candidates. Hence, I have advocated for the merits of considering the wicked problem concept. Its underlying characteristics of these problems share similarities with the problem types addressed by Morgenthau. Extracting key characteristics from this concept would be intriguing.

By incorporating the concept of wicked problems into the discussion, I have expanded the summary of the dominant characteristics influencing complexity of a situation or a problem, as presented in Table 22. It illustrates how the propositions of wicked problem defined by Rittel and Webber align with the five distinct characteristics derived from the analysis of classical realists' perspective of the real world. Additionally, two characteristics, "Scope" and "Urgency", have been introduced to comprehend elements contributing to the problem's complexity. References to the propositions are presented in the table. Moreover, recognizing the typology of Head and Alford's as an often-cited framework to assess wicked problems, its interpretation of "Divergence" and "Complexity" aligns well with the proposed factors "Disagreement" and "Scope", respectively.

Finally, the notion of time pressure emphasized for super wicked problems gives birth to "Urgency" as a complexity factor.

Therefore, the introduction of Wicked Problems aims to theoretically validate the five (5) candidates derived from the review of classical realism. The discussion suggests that these candidates find support by the perspective of wicked problems, potentially expanding to include two (2) additional factors. This theoretical validation is encouraging and support the existence of seven candidates.

One might argue that seven factors are not particularly parsimonious which is key ambition for all models in social and political sciences. Empirical research may indicate that a subset of these seven factors has the most significant impact on complexity and the number of factors may be reduced accordingly. However, considering the immense scope and complexity of social world, where numerous factors are relevant, seven factors should be manageable and allow for more nuanced analysis and deliberation. Finally, the theoretical discussion is encouraging and gives support to that the seven factors are viable candidates for further empirical research. To document the explanatory power of the factors extensive testing of real-world cases is needed.

### **6.3** On usability of the framework

The framework seems to have mitigated various pitfalls in lesser evil reasoning (see Appendix A for detailed discussion), serving as a practical tool that aligns with Morgenthau's moral approach in international politics. However, its creation was purely based on theoretical deliberation, and its current usage is confined to a high-level analysis of the Iraq invasion. The 'Problem Complexity Framework' remains untested and unchallenged in terms of widespread adoption as a decision-making support model. To play the role of a 'devil's advocate', a set of critical questions and concerns, derived from discussions with my supervisor, are raised for reflection. Employing a dialogue format for this reflection is deemed suitable as it will form a foundation for further research areas.

#### How does the framework fit in political decision making?

The proposed framework aims to enhance awareness of the moral perspective in political decision-making and streamline the decision process by applying the lesser evil reasoning as a moral compass. There is an ongoing debate on the conduct of political decision-making processes.

While inspired by Morgenthau's perspective on human nature and irrational forces, this framework seeks to channel these forces into a rational process. It invites actors to engage in a transparent and objective reasoning model to determine the lesser evil decision alternative.

#### How well does the framework explain evilness in politics?

The framework and its complexity factors represent a synthesis of theoretical deliberation on classical realism and the wicked problem concept, aiming to provide a stronger foundation than a review of classical realism alone. The understanding of evilness in politics heavily relies on the assessment of these proposed complexity factors. However, at this stage, the framework and its factors are merely candidates that require scrutiny, testing, verification, and improvements.

#### How suitable is the framework to identify the lesser evil?

#### How confident can one be that the lesser evil alternative has been found?

I have directly associated decision alternatives with the framework's factors, understanding that each decision can impact the evilness of a problem or situation by influencing underlying factors. Evaluating these changes demands mechanisms for assessing complexity, tracking complexity alterations, and integrating assessments across different factors. In this thesis, I have proposed a high-level schema and initial guidelines to facilitate assessing and comparing decision alternatives to recommend the lesser evil option. These mechanisms might evolve as the framework gets more extensive application. However, these guidelines serve practical purposes and lack robust scientific grounding.

Moreover, the confidence in our conclusions relies on additional factors related to framework usage. These include data quality, incorporating composite measures into alternatives, actor trustworthiness, and timeliness of assessments concerning decision-making. The current guidelines cover some aspects—for instance, explicit confidence rating and justifications encourage broad and versatile engagement in the assessment and comparison process. It is crucial to distinguish between expected and actual complexity changes and regularly monitor problem complexity, revising assessments and lesser evil expectations for optimal outcomes.

#### Who are the users of the framework?

The primary user group for this framework should ultimately be political decision-makers. In international politics, numerous actors are involved in or affected by a problem, but only a selected few will have a real impact on addressing it. These actors possess potential firsthand information crucial for assessing, comparing, and ultimately deciding on the course of action. Consequently, with dedicated and genuine efforts from these actors, the confidence level in the assessment is expected to be high. However, achieving this ambition requires several important prerequisites, primarily a shared understanding and framing of the problem among all involved parties. Sincere intent to reduce problem complexity is imperative, necessitating avoidance of ideological biases or predetermined stances when understanding the problem or determining solutions.

Establishing a common consensus on which problem to address and how to evaluate its complexity is crucial. This involves mutual agreement on the relevant topics within each complexity factor for assessment. Transparent documentation detailing how ratings are established, the level of confidence, and justifications is essential for scrutiny and transparency. If all actors comprehend the framework's purpose, structure, and use, employing it consistently enhances the likelihood of collaboratively managing and reducing complexity.

Therefore, embedding the framework into political decision processes supports actors responsible for preparation and decision-making. Other user groups could be 'independent observers' or academia. These entities might conduct an independent moral assessment of a policy decision, utilizing secondary or synthesized information, which may be outdated, fragmented, or biased at the decision point. An independent third party or institution could potentially act as a moral mediator or reviewer, facilitating and guiding complexity management or certifying compliance with the framework's guidance, ensuring decisions align with the lesser evil principle. Their contributions will be instrumental in further refining the framework and enhancing its usability.

# Will choosing the lesser evil alternative will always be the correct choice in dealing with a problem?

From a purely moral perspective, the unequivocal answer may seem to be yes. A moral actor, perceiving a situation and making a rational choice based on available information, ideally

opts for the lesser evil alternative. However, in the realm of international politics and complex geopolitical landscapes, actors might strategically increase the complexity of a situation—a move that, according to simulations, could yield strategic benefits (Bennet, 2000; Correa, 2001). It is crucial to note that the framework doesn't assess a decision's strategic benefits; its purpose is to provide a tool for evaluating the moral aspect when comparing alternatives at the time of decision-making.

There are instances where a decision initially judged as immoral may later prove to be more moral than first believed. This raises questions about whether changes in complexity due to responses from other actors or external forces should be credited for the longer-term outcome, rather than attributing it solely to the actor who decided to increase complexity. This issue necessitates further investigation. Currently, I perceive the framework as having merit as a moral facilitator or catalyst, focusing on individual situations or decisions.

## Many political decisions are context-dependent, meaning they cannot be made separate from a range of external circumstances. To which degree is context addressed by the framework?

I explicitly include context as a supporting argument for proposing the 'Dynamic' factor. This addition anticipates how external factors beyond the control of decision-makers might influence the nature of the problem. It is crucial to note that decision-makers may have varying intentions that significantly impact their decisions. Therefore, the framework's primary aim is to assess whether a decision changes complexity and how morally optimal it is. This evaluation remains independent of the intentions of the decision-makers.

#### What other issues are there to be aware of?

Addressing a complex social or political problem involves a series of interconnected decisions and actions. A 'situation' can represent a specific state of the problem at a given time, encompassing either the entire problem or a crucial subset of it deemed pertinent at that moment. The objective of decision-making is to navigate the complexity within the constraints of time and effort, striving to comprehend the complexity of the situation and select the alternative that diminishes it the most—the lesser evil alternative.

Another crucial consideration is the potential discrepancy between long-term and short-term complexity effects. For instance, one actor (A) might deliberately choose to heighten

complexity to compel another actor (B) into a position necessitating a different decision than originally anticipated. If actor B perceives A's decisions as morally questionable, they might respond in kind, perpetuating a cycle akin to Herz's security dilemma. Alternatively, actor B may seek to break this cycle, aspiring for moral ascendancy by actively de-escalating the situation and fervently pursuing the lesser evil alternative. This scenario could be termed 'moral dominance'.

#### **6.4** Areas of further research

This thesis endeavors to underscore the relevance of moral considerations in international politics, aligning with Hans Morgenthau's moral approach and his advocacy for the lesser evil principle in decision-making. The proposed complexity framework and its accompanying guidelines aim to offer additional insights into the intricacies of international politics in solving complex problems. However, the framework and its adoption does require additional research to enhance its robustness, scalability, and usability.

The previous section I indicated areas the justified further investigation. By complying to existing research approaches, I propose three main research avenues. The first challenge is to expand the Iraq example into a more comprehensive and in-depth case study analysis, with the purpose to establish a higher confidence in assessing complexity in lesser evil reasoning through access to primary data sources. This is feasible through "the Freedom of Information Act (FOIA)" that gives any person the right to request access to records of the Executive Branch of the United States Government.

Secondly, expanding on the Iraq case study in the temporal dimension, inspired from the process tracing approach, constructing a more comprehensive "within-case" (Moses & Knutsen; 2019, p. 220). This approach aims to assess how successive decisions can impact the complexity as well as uncover new relationships and contributing factors to changes in complexity of the problem. Although these two avenues will be useful in expanding insight into lesser evil reasoning in an international conflict, neither is likely to have generalization potential. (Moses & Knutsen, 2019, p. 139).

Therefore, a broader empirical (N-case) study becomes the third avenue, which targets towards generalizability in attempts to make inferences and compare results to other study results. I have will outlined the main elements of this avenue in Appendix B.

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## Appendix A – Addressing requirements and pitfalls

## **A.1** Compliance to stated requirements

In Section 2.6 I presented a set of requirements to that the proposed framework should meet. The requirements covered the structure of the framework and how the framework should be used. Based on the establishment and usage of the framework, I have made a set of observations that I discuss these for each requirement.

Id	Requirement	Compliance
	The framework shall balance two main (competing) goals of a theoretical framework: Parsimony vs. explanatory power	It is a goal of the framework to encompass the most relevant factors that explains the complexity of a social problem. Through theoretical deliberation integrating classical realism and the concept of wicked problem, I have proposed seven factors. The initial five (5) candidates were extracted a from a review of classical realism. To challenge this proposal, I argued that the concept of wicked problem could be suitable. Therefore, the framework is a synthesis of the theoretical deliberation of the classical realism and wicked problem concept, which collectively should stronger foundation compared to solely reviewing classical realism.
1		Parsimony means to obtain a framework that suggests most probable explanation of problem complexity involving the fewest factors possible. One might argue that seven factors are not particularly parsimonious. However, extensive empirical research could indicate that a subset of these seven factors has the most significant impact on complexity. Considering the immense scope and complexity of social world, where numerous factors are relevant, seven factors should be manageable and allow for more nuanced analysis and deliberation.
		The theoretical discussion is encouraging and gives support to that the seven factors are viable candidates for further empirical research. To document the explanatory power of the factors extensive testing of real-world cases is needed.
2	The framework shall indicate the level the evilness or complexity of a situation/problem.	This is the core of the complexity framework. Seven (7) generic factors are proposed to be the most relevant ones to understand the complexity of a social problem. Complexity is another term for evil or evilness, as well as for wickedness, in the political sphere.
3	The framework shall describe the change in	The framework and its guidelines provide the foundation for assessing the complexity of a situation or a problem., known as

Id	Requirement	Compliance
	complexity for a given decision alternative.	baseline complexity. Any decision alternative is expected to influence the baseline complexity - either by increasing it, by decreasing it, or, in some cases, maintaining it. Moreover, a decision alternative may alter the complexity profile, which refers to the configuration of the seven complexity factors and their levels of influence on the complexity. The change in complexity linked to a specific decision alternative is termed expected complexity change.
4	The framework shall be suitable for lesser evil reasoning.	The framework enables the introduction of several decision alternatives, each of which has a distinct impact on the complexity as pt. 2 describe. By comparing the expected complexity change associated with the relevant alternatives, it facilitates lesser evil reasoning.
5	The framework shall contain a set of characteristics/ factors/variables that have direct impact on the complexity.	I have proposed seven (7) complexity factors that I believe have a direct impact on complexity. The factors are derived from an interpretation of key characteristics of reality and the social world proposed by a selected set of thinkers within the classical realist tradition. Furthermore, these factors are supported and expanded upon through a review of the concept of wicked problems. It has been emphasized that the proposed factors can be independently assessed. The relative importance of each factor is not currently considered. Thus, I have indicated that all factors have a similar impact, although this assessment may change in the future. The application of the framework to several cases may provide a basis for establishing a weight on the factor.
6	The proposed factors shall be labeled to indicate a positive relationship between the level of a factor and the level of complexity. In other words, the more of one factor present, the higher the complexity.	There is a deliberate use indicating a positive relationship. To maintain consistency, I use the term 'inadequacy' explicitly stating that the more inadequate the funding, available resources, methods, etc., the more complex the situation becomes.
7	The proposed factors shall be generic, meaning they Shall potentially be relevant for all problems and situations.	There is a clear ambition that the proposed factors are generic and free from any ideology, bias, etc. Further research should establish cases that support this ambition.
8	The proposed factors shall be independent of each other. That is, the assessment of one factor shall be made without considering other factors in the framework.	It has been emphasized that the proposed factors can be assessed independently. This means that it should be possible to gather relevant information related to topics associated with one factor and make a separate assessment of the factor, without needing to gather information and provide an assessment of any other complexity factor.
9	To evaluate the level of a factor, a set of topics or subfactors can be introduced.	As demonstrated in the Iraq example, a range of topics related to the conflict and rivalry, as well as for different policy decision, were introduced to discuss each complexity factor. When

Id	Requirement	Compliance
	These topics are specifics either to the problem or to the various decision alternatives that might affect the complexity of the problem. While these topics are not included in the framework, they shall be considered for all problems or situations being assessed.	addressing a different problem and its decision alternatives, different topics might become relevant.
10	For each factor, a scale shall enable indicating the level of a factor and its contribution to the complexity of Problem A allowing comparison to the contribution of the same factor in Problem B.	In this thesis, I have opted for a rather coarse scale (Low, Medium, High). The intention has been to indicate the relative influence of various factors on complexity and utilize this for comparing the impact of decision alternatives. For the sake simplicity, I have used the same scale for all factors. To offer a more nuanced assessment, a finer-grained scale, such as 1-5 or 1-10, could have been proposed.
11	If possible, the same scale shall be used for all factors.	I have employed the same scale for all factors.
12	Alongside the assessment of each complexity factor, it is important to specify the level of confidence in the assessment, including supporting justification.	I believe this aspect is a very important aspect when considering the assessment of the complexity – both regarding the problem or situation and for each decision alternative. My evaluation of the Iraq problem and the Deterrence and Invasion alternatives has been conducted with a low level of confidence. The assessment is based on a diligent review of selected secondary sources. I have not engaged in discussion regarding the assessment with other individuals. Therefore, the assessment is subjective, primarily serving to demonstrate the application of the framework.  The assessment of the actual complexity of the Invasion alternative should be considered as the most reliable, considering the evidence collected after the invasion decision. However, a more robust assessment of the situation and alternatives before the invasion would necessitate a broad involvement from multiple experts with access to primary information sources that are relevant to all topics associated with the complexity factors.
13	The framework and its factors shall be utilized to assess various relevant decision alternatives	The Iraq example demonstrated the framework and its factors in assessing the complexity of the Iraq situation and how the two selected policy alternatives (Deterrence or Invasion) would impact it. Moreover, the framework facilitated a comparison between the complexity of two versions of the Iraq situation: i) the Reality situation, not verified but representing the likely scenario denounced by the US and key Western countries; and ii) the Fictitious situation actively promoted by the Bush administration. These versions of the situation differ significantly in complexity and complexity profiles, resulting in distinct set of relevant decision alternatives. This underscores the importance of

Id	Requirement	Compliance	
		having a fact-based objective description of the problem or situation.	
14	The decision alternatives will represent a potential change in current problem complexity. Each decision alternative shall be assessed for all complexity factors.	In the Iraq example, I evaluated that the Deterrence and Invasion alternatives represented different changes in problem complexity. Although with a low level of confidence, able to assess how the two alternatives, in different ways, I managed to assess how the two alternatives, would impact, and alter the seven complexity factors, subsequently influencing the overall problem complexity.	
15	For each complexity factor, the change shall use the scale for the factor and represents a quantitative increase, decrease or no change for the complexity factor. The net change for the problem complexity is the sum of all factor changes.	In this thesis I have used a rather coarse scale which I have converted as follows: High=3, Medium=2 and Low=1. By changing the complexity, it will either add or deduct the complexity using simple arithmetic.	
16	The net change shall be calculated for all decision alternatives following the above procedure.	For each decision alternative, the change in complexity profile might involve an increase in the 'amount' of some factors and a decrease in others. The net change is the sum of these alterations, determining whether the overall complexity of the problem or situation increases or decreases. As for the Iraq example, the overall actual complexity of the Invasion alternative turned out the be significantly higher than the expected complexity anticipated prior to the invasion decision.	
17	The decision alternative that exhibits the smallest net change (ideally a negative number) is considered the lesser evil alternative.	According to the lesser evil principle, the aim is to diminish the evilness of a problem or a situation. In this thesis, I have posited that evilness may be termed as complexity. Thus, the goal of lesser evil reasoning is to identify the decision alternative that minimizes the complexity of the problem the most.	

Table 23: Framework compliance to stated requirements.

## A.2 Addressing the pitfalls of Lesser evil reasoning

In Section 2.5, I presented Spielthenner's seven (7) pitfalls related to lesser evil reasoning. The complexity framework outlined, along with the complexity reduction process, is designed to actively support lesser evil reasoning. Consequently, the framework and process should discourage the occurrence of the pitfalls occurs.

The first pitfall involves *Boxing oneself in with two alternatives* (Spielthenner, 2009, p. 145). For illustrative reasons, I used two alternatives when demonstrating the framework in

Chapter 5. However, there is no limitation on the number of alternatives that can be included. Given a comprehensive set of complexity factors, the framework implicitly encourages assessing a broader set of complexity reduction alternatives that may effectively deal with different subsets of the seven complexity factors.

The second pitfall, *Ignoring its defeasibility* (Spielthenner, 2009, p. 145), is actively addressed by the proposed framework and the guidelines. These elements encourage the inclusion of new information and alternatives that could potentially reduce the problem complexity. Moreover, the explicit assessment of the confidence of the rating supported by justifying information, helps to mitigate this pitfall.

The third pitfall, *overlooking crucial consequences of the alternatives* (Spielthenner, 2009, p. 146), can be avoided by the framework's inclusion of seven factors that may influence the complexity. Users are encouraged to adopt a broad, preferably holistic, view of the problem and its contributing complexities. Subsequently, users are guided to assess how complexity may be reduced by potentially proposing complexity reduction decisions for all factors, balancing prioritizing the factors deemed to have the greatest influence on the complexity.

The fourth pitfall, regarding an act as evil because it has some negative consequences (Spielthenner, 2009, p. 147), is mitigated by the framework's acknowledgement of the inherent complexity of a problem and its decision. The frameworks aim is to avoid being associated with any biased ideologies, instead focusing on an objective understanding of the problem and guiding decision-makers towards alternatives that favorably reduce complexity.

Asserting unjustified premises, the fifth pitfall mentioned by Spielthenner (Spielthenner, 2009, p. 149), is countered by the proposed framework's emphasis on confidence assessment and verified information to support the assessment. However, there will be a trade-off between thorough analysis and quick decision-making, particularly when "Urgency" is the most relevant complexity factor for the problem.

The sixth pitfall is, *making unjustified value judgement* (Spielthenner, 2009, p. 150) is addressed by the framework's focus on analyzing the expected effect of a decision alternative, while acknowledging the associated assumptions and risk. This includes proactive risk analysis to mitigate negative impacts during decision implementation.

Finally, and seventh pitfall, *overfocusing on the negative* (Spielthenner, 2009, p. 151), is countered by the framework's encouragement to reduce complexity. It strives to present a realistic

and comprehensive perspective of a problem or situation, highlighting both negative and positive effects of decisions, thereby aligning with the lesser evil principle.

In summary, the proposed framework and complexity reduction process is actively supporting lesser evil reasoning and provides mechanisms in addressing Spielthenner's stated pitfalls. It is important to note, that the framework is still in an immature stage, with limited practical and empirical experience. Furthermore, the quality of the reasoning is also highly dependent on how it is used. The usability of the current version of the framework is reflected upon in Section 6.3.

## Appendix B - Empirical study - suggested research design

The proposed framework is currently theoretical without empirical validation. Therefore, establishing the correlation between complexity and the proposed factors remains unconfirmed. Here, I outline a research design to illustrate how an empirical study may uncover these relationships. The primary objective is to unveil systematic variations in the dependent variable due to variations in the independent variables. A tentative research question could be formulated as follows:

Is there a correlation between the complexity of a problem or situation and the following factors: i) scope, ii) seriousness, iii) uniqueness, iv) urgency, v) disagreement, vi) dynamism, and vii) inadequacy? Which factors provide the most explanatory power?

This study should focus on a prevalent problem in international politics: international conflicts. While numerous cases exist, the availability of data for the dependent and independent variables will dictate inclusion. The accessibility of information will impact the research quality, requiring researchers' diligence and neutrality (Moses & Knutsen, 2019, p. 235). Furthermore, the quality of research will be influenced by the availability of public information and the declassification of government documents made available through such programs as the Freedom of Information Act (FOIA) in the United States.

Both dependent and independent variables must offer representative interpretations and value sets conducive to statistical analyses like linear regression. The Statistical packages like for SPSS, Stata, etc. should support the analysis. Nonetheless, establishing reasonable categories for these variables is crucial for success.

The dependent variable, complexity, needs a distinct representation from the independent variables. Duration and intensity of conflicts could serve as proxies for complexity. Duration might reflect the conflict's complexity, while intensity could be measured by the number of UN Security Council resolutions, including those vetoed. Both dependent and independent variables will use a ranking system (1-5) with clearly defined interpretations (see Table 24 for the dependent variable).

Dependent variable	Proxy variables	Categories
	Duration of conflict AND # resolutions in UNSC.	5: Decades and # resolutions > 10 4: Years and # resolutions > 5
Complexity		3: Months and 1-5 resolutions 2: Days, 1-3 resolutions
		1: Days, no resolutions

Table 24: Proposed dependent variable and its five categories.

The categories and their proposed values for both dependent and independent variables will determine the cases to be included. Cases discussed within the UNSC and data available from entities like the Eurasia group (or similar) or Power index (or similar) will be considered. The selection of cases will depend on the completeness of available data. The independent variables will comprise seven complexity factors. These factors, derived from the primary drivers outlined in Chapter 5, will serve as the initial basis for interpreting complexity. The categorization will transition from a three (3) category schema (Low, Medium, High) to a five (5) category numbering system, with values ranging from 1 to 5, where higher numbers indicate a greater presence of the factor. Proposed categories for each complexity factor are outlined in Table 25.

Independent Variable	Proxy variable	Categories
C1-Scope (# States and alliances)	# countries and type of country involved	5: Global conflict 4: Regional conflict, where 1 great power directly involved 3: Regional conflict with no great power directly involved 2: Local conflict with at least one G-20 country having interests 1: Local conflict with minor states with no alliances involved
C2-Seriousness (Casualty rate and Economic impact)	# deathrate GDP	5: #deaths per year > 100 000 4: # deaths per year 10 > x > 100 000 3: Skirmishes with some casualties 2: Significant reduction in GDP 1: Modest reduction in GDP,
C3-Uniqueness (Comparable cases)	# comparable/similar cases	5: 0 4: 1-2 3: 3-5 2: 5-10 1: >10
C4-Urgency (Available time)	Time to manage problem	5: Days 4: Weeks 3: Months 2: Years 1: Unlimited
C5-Disagreement	Relationship among conflict actors	5: Claimed enemies 4: Unfriendly relationship

Independent Variable	Proxy variable	Categories
(Quality of relationships)		3: Neutral relationship 2: Good relationship 1: Close allies (treaties exist, i.e. NATO)
C6-Dynamic (Degree of Unknowns)	Risk assessment (based on Eurasia group annual risk assessment) https://www.eurasiagroup.net/issues/top-risks-2023)	5: Top 1-3 4: Top 4-6 Risks 3: Top 7-10 Risks 2: Mentioned max risk #6 in Risk register last 3 years 1: No risks assessed last 5 years
C7-Inadequacy (Lack of power types)	Lack of power assessment https://pareto-economics.com/global- power-index/	5: > 80 on Pareto Power index 4: 21-80 on Pareto Power index 3: G20 Country or BRICS country 2: G-7 Country 1: Top 2 great powers (US, China)

Table 25: Proposed independent variables and their categories.

Given this setup, identifying cases that meet data requirements and are readily accessible becomes crucial. Gathering data from these identified cases and codifying it into values for the proposed versions of the dependent and independent variables presented earlier is essential. The dataset design must be structured to facilitate appropriate analysis using available statistical tools.

From a methodological standpoint, determining the number of cases studies and their codification should primarily enable statistical analysis (Moses & Knutsen, 2019, p. 69-93). If this is not feasible, adjusting the codifications and design to explore comparative methods introduced by John Stuart Mill, while acknowledging their potential and limitations, becomes necessary (Lijphart, 1971; Mill, 1872; Moses & Knutsen, 2019, p. 96-108). The crucial aspect is to codify variables into binary values and extract subsets of the dataset that may employ one or more of Mill's models for comparative analysis. This approach is rooted in the comparative analysis tradition, potentially utilizing a broader set of Mill's different comparative methods. Additionally, the collected dataset might prompt an assessment of whether the more advanced Qualitative Comparative Analysis (QCA) method can be utilized (Hancke, 2009, p. 77-83; Ragin, 2014). QCA is particularly suitable for 'medium-N data sets (10 to 50 cases)' and expands the potential for more complex analyses, exploring configurations of different factors at varying levels impacting outcomes (Hancke, 2009; Legewie, 2013).

The advantages of case selection from this design are clear: cases are well-defined in time and space, closely tied to real-world situations, and operationalize independent variables from complexity factors, maintaining a strong connection to the theory (Hancke, 2009). In comparative research, over-determination and selection bias are common weaknesses (Geddes, 1990; Lijphart,

1971). Over-determination occurs when the number of cases is equal to or fewer than the number of independent variables. In this study, the number of potential cases will greatly exceed the number of independent variables. Employing randomized subsets of cases, each exceeding the number of independent variables, will allow for a broad range of comparisons, meeting the over-determination requirement as well as the selection bias issue.



