

Honours Thesis

Game Theory and the Metaphor of Chess in the late Cold War Period



- o Student number: 6206468
- o Home address: Valeriaan 8
3417 RR Montfoort
- o Email address: T.j.m.vanhofwegen@students.uu.nl
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- o Thesis supervisor: Irina Marin (i.marin@uu.nl)
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Abstract

This thesis discusses how the game of chess has been used as a metaphor for the power politics between the United States of America and the Soviet Union during the Cold War, particularly the period of the Reagan Doctrine (1985-1989). By looking at chess in relation to its visual, symbolic and political meanings, as well in relation to game theory and the key concepts of polarity and power politics, it argues that, although the 'chess game metaphor' has been used during the Cold War as a presentation for the international relations between the two superpowers in both cultural and political endeavors, the allegory obscures many nuances of the Cold War.

Acknowledgment

This thesis has been written roughly from November 2019 to March 2020. It was a long journey, and in the end my own ambition and enthusiasm got the better of me. The fact that I did three other courses at the same time can partly be attributed to this, but in many ways, I should have kept my time-management and planning more in check. Despite this, I enjoyed every moment of writing this thesis, and the subject is still captivating to me. Hopefully, I have managed to capture some of my excitement on paper.

First and foremost, I want to thank my supervisor, Irina Marin, for her help during the whole process of writing my thesis. Especially during the Christmas Holidays, when I hit a rough patch in my writing process, she was there to provide helpful feedback to me, which encouraged me to keep going and find a new way of approaching the subject. In retrospect, I should have kept in contact with her more; nevertheless, her regular check-ups whether everything was going all right did help me to not lose track of my process and find my motivation.

Secondly, I would like to thank my parents and sisters, for keeping me motivated and providing helpful advice. My twin sister Benthe especially has helped me tremendously in structuring and finding the focus of my thesis.

Unfortunately, I have not kept in contact that much with the second reader that was assigned to me by the Humanities Honours Programme, Catherina Langenhuizen. Still, I want to thank her for her support nonetheless, and I hope I will be able to peer-review her thesis some day soon.

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Introduction

*'Trump plays political chess but Democrats stick with checkers'*¹, *'Kashmir Checkmate: Amit Shah planned intricate political chess while his opponents were busy playing tic-tac-toe'*², *'Boris Johnson's unwinnable chess match is nearing its endgame'*³: these are just some news headlines from 2019 which compare certain political moves and tactics to elements of chess, or the game as a whole. The use of chess-related metaphors to describe politics based primarily on the use of power, such as either military and economic strength, is not a recent phenomenon. Since it was developed in sixth century India⁴, chess has always been deeply connected to politics. The game, which is played between two opponents on a black-and-white checkered board, even incorporates political elements of its own, as the game itself represents a 'battle' between two kingdoms. In order to win the game, each player has to use a certain strategy and tactics to outplay the other. It is not only the nature of the game which lends itself well for the political metaphor, though. Not only figuratively, but also literally, chess has been used by historical actors in political events. Perhaps the most famous example of a political event heavily influenced by the game of chess was the chess match between the American grand master Bobby Fischer and his Russian challenger Boris Spassky in 1972 in Reykjavik, Iceland. In light of the Cold War, the heavily anticipated match between an American and a Russian chess player was not seen as merely a sports event, but also regarded as a face-off between the two superpowers, especially since the Soviet Union had remained unchallenged in chess for decades. In the end, Fischer emerged victorious and became world chess champion, a move some have seen as a foreshadowing of the post-Cold War Western supremacy.

It is from the Fischer-Spassky match and the musical *Chess* (1986) that the idea developed to write a Honours thesis (15 ECTS), in which the pillars of academic depth and interdisciplinary breadth will be combined, about the link between chess and US-USSR relations during the Cold War. Particularly of interest was a possible connection between the game and the metaphor of chess and Cold War politics by researching various documents, such as transcripts of speeches, policy documents and high-level meetings that unintentionally or purposefully describe or refer to the relation between the two superpowers in terms of games, polarity or power. Special attention is paid to documents which explicitly refer to chess. Apart from that, in the last two chapters, newspaper cartoons, as well as stills from video clips and films will be analyzed on their use of either elements derived from game theory or the chess game metaphor. As main theoretical framework, game theory, which was originally a mathematical theory developed by John von Neumann and Oskar Morgenstern in 1944, will be used. In their book, *Theory of Games and Economic Behavior*, von Neumann and Morgenstern argued that it is ultimately the choices of people ('the decision-making means'), in other words, their strategies, that determine the outcome of an event or phenomenon, rather than pure chance. A strategy can be defined as the 'complete description of how a player intends to play a game, from beginning to end.'⁵ The

¹ Shermichael Singleton, 'Trump plays political chess but democrats stick with checkers', retrieved from <https://thehill.com/opinion/campaign/464406-trump-plays-political-chess-but-democrats-stick-with-checkers>, published April 4, 2019, accessed on November, 11, 2019. Last refreshed in 2019.

² Abhijit Iyer-Mitra, 'Kashmir Checkmate: Kashmir Checkmate: Amit Shah planned intricate political chess while his opponents were busy playing tic-tac-toe', retrieved from <https://www.dailyo.in/politics/article-370-revoked-kashmir-amit-shah-mehbooba-mufti-omar-abdullah/story/1/31768.html>, published July 5, 2019, accessed on November 23, 2019. Last refreshed in 2019.

³ Anand Wenon and Alan Wager, 'Boris Johnson's unwinnable chess match is nearing its endgame', retrieved from <https://www.theguardian.com/commentisfree/2019/sep/30/boris-johnson-brexit-election>, published September 30, 2019, accessed on November 23, 2019. Last refreshed in 2019.

⁴ Domic Lawson, 'Has chess got anything to do with war?', retrieved from <https://www.bbc.com/news/magazine-32542306>, published May 3, 2015, accessed on November 23, 2019. Last refreshed in 2019.

⁵ Martin Shubik, 'The Rules of the Game: Extensive and Strategic Forms', in: *Game Theory in the Social Sciences. Concepts and Solutions* (Fifth Edition, Cambridge and London, 1989), pp. 34.

'game', then, has been defined as 'any set of circumstances that has a result dependent on the actions of two or decision-makers, or players'.⁶ Although originally applied to economics, game theory has since been applied to various other academic fields, such as international relations. In this thesis, the focus will be on political game theory, that is, the aspects of game theory which have found its way in the field of international relations. Furthermore, although game theory encompasses games which involve only one actor or situations in which the players are not able to communicate or negotiate with one another at all (the so-called N-games), in relation to the relationship between the United States and the Soviet Union during the Cold War period, this thesis will only discuss two-player games with the assumption that despite the tension and animosity, the two parties were at all times able to connect with one another. Fairly early on in the Cold War, game theory has been used by scholars and analysts in order to describe and make sense of the international relations between the United States and the Soviet Union, a topic which will be explored in chapter one of this thesis. The earliest academic article on game theory seems to be a paper by Lloyd Shapley and Martin Shubik, 'A method of evaluating the distribution of power in a committee system' in the *American Political Science Review*, in 1954.⁷ However, as game theory emerged from the field of economics, most of these scholars are not historians, but economic theorists and political scientists. A couple of names are Martin Shubik (1926-2018), Howard Raiffa (1924-2016), William Riker (1920-1993), and Vernon Smith (1927). Although not a historian but a journalist, John McDonald's *Strategy in Business, Poker and War* (1950) was influential in adapting game theory to political uses. In this book, McDonald argued that the three areas of poker, business and war were tied to each other by their uses of game theory.⁸ Recent historians who have discussed game theory and its place in history itself are Robert Leonard's *Von Neumann, Morgenstern, and the Creation of Game Theory: from Chess to Social Science, 1900-1960* (2010), Giorgio Israel's and Ana Gasca's Millán's *The World As a Mathematical Game: John von Neumann and Twentieth Century Science* (2009), and *The World the Game Theorists Made by Paul Erickson and How Reason Almost Lost Its Mind* (2013) by Paul Erickson and others.⁹

In addition to two player game theory, this thesis will also use polarity and power politics as key concepts. As polarity and power politics were very prevalent theories in the academic world during the Cold War, they are equally important in order to accurately explain the Cold War. Furthermore, as both polarity and power politics focus on the actions of at least two actors, they tie in well with the two-players game theory. The general meaning of polarity is 'the presence or manifestation of two opposite or contrasting principles or tendencies'.¹⁰ In this thesis, polarity refers to the theory of Kenneth Waltz in his book *Theory of International Relations* (1979). In this theory, Waltz claims that a single variable, which is the amount of polarity, can explain the amount of instability and war in the world.¹¹ Polars, in Waltz's theory, are defined as blocs of

⁶ Adam Hayes, 'Game Theory', retrieved from <https://www.investopedia.com/terms/g/gametheory.asp>, accessed on February 4, 2020. Last updated June 25, 2019.

⁷ Pierre Allan and Christian Schmidt, '1. Introduction', in: Pierre Allan and Christian Schmidt (eds.), *Game Theory and International Relations* (Cambridge, 1994), pp. 1.

⁸ Steven Belletto, 'The Game Theory Narrative and the Myth of the National Security State', in: *American Quarterly*, Vol. 61, No. 2 (June, 2009), retrieved from https://www.jstor.org/stable/pdf/27734992.pdf?casa_token=t4Js9KDYy-MAAAAA:AL5WuERP22vZRblQqg_FsMf2GD_PWrnYDwgbDWj_IIPCFAe6hRP8PpsuD6Wux6dISQZAQ_E1plx_aN2MEUWYchxhSx_94Ob6BJwEVB9gpUBiF6se4YCes, accessed on December 24, 2019, pp. 336.

⁹ E. Roy Weintraub, 'Game Theory and Cold War Rationality: A Review Essay', in: *CHOPE Working Paper*, No. 2016-19 (2016), Duke University, Center for the History of Political Economy (CHOPE), Durham, NC, retrieved from <https://www.econstor.eu/bitstream/10419/149746/1/chope-wp-2016-19.pdf>, accessed on January 13, 2020, pp. 4.

¹⁰ Merriam Webster, 'Polarity', retrieved from <https://www.dictionary.com/browse/polarity>, accessed on December 1, 2019. Last refreshed in 2019.

¹¹ Ted Hopf, 'Polarity, The Offense Defense Balance, and War', in: *The American Political Science Review*, Vol. 85, No. 2 (Jun., 1991), retrieved from

states that exert power in the international system.¹² In Waltz's theory of polarity, there are three systems possible: multipolarity (in which several blocs hold equal power), bipolarity (in which two states control most of the power over the rest of the world) and unipolarity (in which one state dominates the rest of the world).¹³ In the theory of polarity, it is generally believed that a multipolar system was in place from roughly 1816 to 1945, replaced by a bipolar system from 1946 to 1989 and a unipolar system from 1990 onwards.¹⁴ In this thesis, the theory of polarity, especially bipolarity, will be used as a guiding point in understanding the Cold War dynamics between the United States and the Soviet Union. Finally, the concept of power politics will be used to analyze the political and military actions of both the United States of America and the Soviet Union during the late Cold War. The concept of power in international relations, which can encompass elements such as 'geography, natural resources, industrial capacity, military preparedness, population, national character, national morale, the quality of diplomacy, and the quality of government'¹⁵ is mostly associated with the work of German-born, American political scientist Hans Morgenthau (1904 – 1980), especially his work *Politics Among Nations: The Struggle for Power and Peace* (1948). In *Politics Among Nations: The Struggle for Power and Peace*, Morgenthau argues against what he calls the misconception of the idea that there can be a 'balance of power', or a 'social equilibrium' between nations.¹⁶ Instead, he states that in international politics, nations will seek to dominate one another, and that statesmen of nations will first and foremost think, as well as act 'in terms of interest defined as power.'¹⁷ In this thesis, power politics mainly will be used in the late Cold War-discussions on nuclear weapons.

From this, the main research question of this thesis, '*To what extent can the metaphor of power politics as resembling a game of chess be accurately used to describe the polarity between the United States and the Soviet Union during the period of the Reagan Doctrine?*' was developed. In the four chapters of the thesis, the main research question is broken down to four sub-questions, which each deal with an aspect of the research question. In the first chapter, game theory, the main theoretical framework of the whole thesis, will be further discussed in relation to the aforementioned concepts of power politics and polarity, all of which were prominent in international relations theories that were developed and elaborated on during the Cold War. In the end, the role of chess in game theory will be analyzed. In the second chapter, the three key concepts of game theory, power politics and polarity will be applied to the late Cold War period, exemplified in this thesis by the Reagan Doctrine of 1985. The Reagan Doctrine of 1985-1989,

<https://www.jstor.org/stable/pdf/1963170.pdf?refreqid=excelsior%3A658e2980d79b761de39532dbb1c3196e>, accessed on November 30, 2019, pp. 475.

¹² Karen A. Mingst and Ivan M. Arreguin-Toft, 'Chapter 4: The International System', in: *Essentials of International Relations* (Online Fifth Edition), retrieved from <https://www.norton.com/college/polisci/essentials-of-international-relations5/ch/04/summary.aspx>, accessed on December 1, 2019.

¹³ Alida Tomja, 'Polarity and International System Consequences', in: *Interdisciplinary Journal of Research and Development*, Vol.1, No.1 (2014), retrieved from <https://www.uamd.edu/al/new/wp-content/uploads/2015/01/A.Tomja-9.pdf>, accessed on November 30, 2019, pp. 57.

¹⁴ Idem, pp. 58.

¹⁵ Francis P. Sempa, 'Hans Morgenthau and the Balance of Power in Asia', retrieved from <https://thediplomat.com/2015/05/hans-morgenthau-and-the-balance-of-power-in-asia/>, published May 25, 2015, accessed on March 27, 2020. Last refreshed in 2020.

¹⁶ Hans J. Morgenthau, with revisions by Kenneth W. Thompson and W. David Clinton, 'The Balance of Power', in: *Politics Among Nations. The Struggle For Power and Peace* (1948, Seventh Edition), retrieved from

[https://sca.district70.org/ourpages/auto/2014/4/24/50263602/Morgenthau Politics%20Among%20Nations.pdf](https://sca.district70.org/ourpages/auto/2014/4/24/50263602/Morgenthau%20Politics%20Among%20Nations.pdf), accessed on March 8, 2020, pp. 179.

¹⁷ Jaap W. Nobel, 'Morgenthau's Struggle with Power: The Theory of Power Politics and the Cold War', in: *Review of International Studies*, Vol. 21, No. 1 (Jan., 1995), retrieved from <https://www.jstor.org/stable/pdf/20097396.pdf?refreqid=excelsior%3Ac722d7a8c9707759b4642f04cf20467b>, accessed on March 29, 2020, pp. 64.

which argued that anti-communist movements and guerillas in Africa, Asia and Latin America had to be supported by the United States in order to decrease the overall global influence of Communism, marked simultaneously a radical shift from the more lenient attitude the United States had taken towards the Soviet Union since 1962 as well as a return to earlier Cold War stances. By relating the late Cold War period to the other phases in the Cold War which preceded it, especially that of Détente, it does seek to explore whether certain aspects of game theory, polarity and power politics played a role in Reagan's tougher standpoint regarding the relationship with the Soviet Union. In the third chapter, chess as a metaphor in a political, cultural and social sense will be explored by analyzing some examples of chess metaphors in media used during the Cold War, especially the late Cold War. Finally, in the fourth and last chapter, the musical *Chess* will be used as a cultural case-study of the chess game metaphor being taken figuratively and literally to criticize and satirize the Reagan Doctrine. The hypothesis of the research was that likely, various political and cultural examples of chess metaphors for the Cold War would be found. However, the hypothesis also assumed that, ultimately, the black-and-white board game would prove to be an insufficient allegory for the Cold War period, for example by obscuring the position and agency of the Non-Alignment (NAM).

On three points, this thesis hopes to add something new to this existing literature. First, the thesis will specifically focus on how game theory has been used in the period of the Reagan Doctrine (1985-1988), instead of focusing on how game theory has been used by historians and other actors throughout the whole Cold War period. Furthermore, by not only looking into the abstract concepts of game theory, but also by assessing the game of chess as a concrete example of this theory, this thesis will deconstruct a metaphor often used in media and politics. Finally, by studying various media sources, some of which have been neglected as objects of study so far, alongside with academic literature, this thesis will have a more distinct cultural emphasis on the Cold War than most Cold War Historians have done so far.

Chapter 1 The Games That People Play: How Game Theory Evolved From Mathematics and Economics to An Instrument of International Relations

*All reality is a game. Physics at its most fundamental, the very fabric of our universe, results directly from the interaction of certain fairly simple rules, and chance; the same description may be applied to the best, most elegant and both intellectually and aesthetically satisfying games. By being unknowable, by resulting from events which, at the sub-atomic level, cannot be fully predicted, the future remains malleable, and retains the possibility of change, the hope of coming to prevail; victory, to use an unfashionable word. In this, the future is a game; time is one of the rules. – Ian M. Banks, *The Player of Games* (1988) ¹⁸*

In this quote from the science-fiction novel *The Player of Games*, the real world is compared to a game, with rules as well as chances. However, even though these rules and chances exist, as certain events cannot be predicted, the precise outcome of the future is unpredictable and thus subject to change. Although *The Player of Games* is a work of fiction, the notion that an outcome of a situation is influenced by chance, as well as by events, has been used by real-life analysts, most notably in game theory. With the first aspects of game theory, such as on bargaining and strategy, being developed in the 1920s and 1930s by mathematicians such as Fredrik Zeuthen and Émile Borel ¹⁹, the theory, defined as ‘... a theoretical framework for conceiving social situations among competing players [...] the science of strategy, or at least the optimal decision-making of independent and competing actors in a strategic setting’ ²⁰ found wide-spread attention in 1944 when the Austrian-born American mathematician Oskar Morgenstern (1902-1977) and his Hungarian counterpart John von Neumann (1903-1957) published their widely influential book *Theory of Games and Economic Behavior*. ²¹ In *Theory of Games and Economic Behavior*, Morgenstern and von Neumann dismissed the use of mathematical models as used in the physical sciences as means to explain economics. While mathematics may work to explain static systems, Morgenstern and Neumann argued that economy is not static, but constantly moving and evolving. Thus, a better comparison of economical behavior is that of a game, in which ‘players’ observe each other’s ‘moves’. ²²

In this chapter, the central question is ‘How has game theory since its development by Neumann and Morgenstern been used in international relations during the Cold War?’ To answer this question, a brief history and explanation of political game theory, with the focus on two-player games, will be given. Although game theory is a very mathematical theory, the focus will be on the tangible concepts derived from game theory which found their way into the field of international relations during the Cold War, most notably Mutual Assured Destruction (MAD). These concepts of Cold War scientists and scholars will then be related to the theories of polarity and power politics, which have also been used during the Cold War. In the end, the game of chess will be related to both the origins and the aspects of game theory.

¹⁸ Goodreads, ‘The Player of Games Quotes’, retrieved from <https://www.goodreads.com/work/quotes/1494157-the-player-of-games>, accessed on March 1, 2020. Last refreshed in 2020.

¹⁹ Paul Walker, ‘An Outline of the History of Game Theory’, retrieved from <http://euler.fd.cvut.cz/predmety/teorie/her/histf.html>, published April 1, 1995, accessed on March 27, 2020.

²⁰ Adam Hayes, ‘Game Theory’, retrieved from <https://www.investopedia.com/terms/g/gametheory.asp>, accessed on December 24, 2019. Last updated June 25, 2019.

²¹ Idem.

²² Morton D. Davis and Steven J. Brams, ‘Game Theory’, retrieved from <https://www.britannica.com/science/game-theory#ref386138>, accessed on December 12, 2019. Last updated October 18, 2018.

Basic Aspects of Two-Player Games in Political Game Theory and the Connection with Power Politics and Polarity

Originally, game theory is a form of applied mathematics, in which mathematical models show the interdependency, the decisions and the outcomes of certain strategies pursued by the decision-makers or 'players'.²³ The theoretical scope of this thesis does not lend itself to look into the workings of these models; however, it is possible to explain three basic key tenets of game theory without the mathematical components that usually come with them. The first basic key tenet of game theory is that of the game itself. A 'game' in game theory refers to any set of circumstances that has a result dependent on the actions of two or more decisions.²⁴ The players form the second most important aspect of game theory. Without players, a game is not possible, and vice versa. Most game theorists assume that each of the players has three characteristics which allow them to engage in the game. First, the player must have an array of resources. Secondly, the player must have some knowledge of alternative courses of actions in the game. Finally, a player will have some preferences regarding the possible outcomes of the game.²⁵ In other words, in game theory, the players will behave in rational ways, have well-defined goals and will exercise a certain freedom of choice, albeit within certain, predetermined limits.²⁶ Lastly, the third basic key tenet of game theory is that of strategy. The meaning of strategy in game theory can best be described as that of a 'complete description of how a player intends to play a game, from beginning to end.'²⁷ For two players in a game, there are two possibilities as to how the game will play out for them. Either the game is a constant-sum or zero-sum game, or it has a variable sum game. The 'sum' in two-player games refers to the total amount of change in benefit between two players. In a constant-sum game, one person's gain is equivalent to another's loss. In a variable-sum game, on the other hand, the sum differs depending on the strategies the players may employ.²⁸

Although at first they do not seem to be connected to one another, it is precisely the concept of a 'sum' and the role of strategies by political actors that tie in well with both Hans Morgenthau's theory of 'power politics' and Kenneth's Waltz's ideas of 'polarity', especially when applied to the Cold War period. First and foremost, there were two major 'players' during the Cold War, namely the United States and the Soviet Union, as well as their allies. Like players in game theory, the two powers had an array of resources, most notably and infamously nuclear weapons. Furthermore, both had some knowledge and preferences as to what the outcome of the ideological war between respectively a Capitalist West and a Communist East should be, that is, a victory of the one ideology over the other. In other words, the Cold War then could be seen as a zero-sum game, although throughout the whole period, the United States and the Soviet Union also often sought rapprochement and changed their strategies accordingly. Still, the crude distinction between respectively a Capitalist West and Communist East, which was often used during the Cold War despite the existence of the Non-Aligned Movement (NAM) or 'Third Bloc',

²³ Morton D. Davis and Steven J. Brams, 'Game theory', retrieved from <https://www.britannica.com/science/game-theory>, accessed on March 27, 2020. Last updated January 10, 2020.

²⁴ Daniel McNulty, 'The Basics of Game Theory', retrieved from <https://www.investopedia.com/articles/financial-theory/08/game-theory-basics.asp>, accessed on March 1, 2020. Last updated November 13, 2019.

²⁵ Martin Shubik, 'Decision Makers', in: *Game Theory in the Social Sciences. Concepts and Solutions* (Fifth Edition, Cambridge and London, 1989), pp. 16.

²⁶ Idem.

²⁷ Idem, 'The Rules of the Game: Extensive and Strategic Forms', in: *Game Theory in the Social Sciences. Concepts and Solutions* (Fifth Edition, Cambridge and London, 1989), pp. 34.

²⁸ Morton D. Davis and Steven J. Brams, 'Game Theory', retrieved from <https://www.britannica.com/science/game-theory#ref386138>, accessed on December 25, 2019. Last updated January 10, 2020.

also shows evidence to the idea that the Cold War period was one of bipolarity, in which the United States and the Soviet Union controlled and dominated the rest of the world. Finally, in terms of power politics, it can be concluded that both superpowers constantly sought to challenge one another, and not just by showing off their nuclear capacities. In the aftermath of the bombings of Hiroshima and Nagasaki, it was precisely the fear of the eruption of a 'hot war' that prompted scientists to find a way to control the outbreak of a new war. In institutions such as that of the American governmental think tank Research And Development corporation (RAND), game theory emerged as one of many attractive options.²⁹

Applications of Game Theory during the Cold War

Although recent scholars such as Barry O' Neill have argued that the study of game theory in RAND and other military and defense institutions, such as the Institute for Defense Analyses (IDA), the Office of Naval Research (ONR) and the Weapons Systems Evaluation Group (WSEG)³⁰ might not have had as much of an important influence on military and nuclear strategy as previously sketched³¹ (such as by David Hounshell³², Janet Farrell Bodie³³ and even RAND³⁴ itself), it is a fact that in the United States game theory, from its origins as an economic method, was quickly adapted for non-economic purposes, such as political science, psychology, and conflict.³⁵ Within RAND, there was also caution about to what extent game theory could be used for military purposes. In a report published in March 1950, Colonel Oliver G. Haywood warned that game theory was not to be used haphazardly since the 'everyday usage of some of the terms of game theory is frequently ambiguous' and the result of 'bridging the wide gap' between 'practical doctrine and mathematical theory' may not be 'entirely satisfactory', for:

²⁹ Steven Belletto, 'The Game Theory Narrative and the Myth of the National Security State', in: *American Quarterly*, Vol. 61, No. 2 (June, 2009), retrieved from https://www.jstor.org/stable/pdf/27734992.pdf?casa_token=t4Js9KDYy-MAAAAA:AL5Wuerp22vZRblQqg_FsMf2GD_PWrnYDwgbDWj_IIPCFAe6hRP8PpsuD6Wux6dISQZAO_E1plx_aN2MEUWYchxhSx_94Ob6BJwEVB9gpUBiF6se4Yces, accessed on December 24, 12, 2019, pp. 335.

³⁰ Harald Hagemann, Vadim Kufenko and Danila Raskov, 'Game theory modeling for the Cold War on both sides of the Iron Curtain' in: *History of the Human Sciences*, Vol. 29 (4-5) (2016), retrieved from <https://journals-sagepub-com.proxy.library.uu.nl/doi/pdf/10.1177/0952695116666012>, accessed on February 25, 2020, pp. 100.

³¹ Barry O' Neill, 'International Relations Applications of Game Theory: The Myth That Game Theory Shaped Nuclear Strategy', in: *A Survey on Game Theories of Peace and War*, York Centre for International and Strategic Studies Occasional Paper, No. 9 (March 1990), retrieved from <https://yorkspace.library.yorku.ca/xmlui/bitstream/handle/10315/1425/YCI0083.pdf?sequence=1&isAllowed=y>, accessed December 26, 2019, pp. 2. It must be noted that Von Neumann was involved in the Manhattan Project which eventually developed the atom bombs which were used on Hiroshima and Nagasaki, and from 1948 would work as a RAND consultant.

³² David Hounshell, 'The Cold War, RAND, and the Generation of Knowledge, 1946-1962', in: *Historical Studies in the Physical and Biological Sciences*, Vol. 27, No. 2 (1997), retrieved from <https://www-jstor-org.proxy.library.uu.nl/stable/pdf/27757779.pdf?refreqid=excelsior%3Aaa1146c50f50f1ef101c12c2f08f8e41>, accessed on March 27, 2020, pp. 237-267.

³³ Janet Farrell Brodie, 'Learning Secrecy in the Early Cold War: The RAND Corporation', in: *Diplomatic History*, Volume 35, Issue 4 (September 2011), retrieved from <https://academic-oup-com.proxy.library.uu.nl/dh/article/35/4/643/426300>, accessed on March 28, 2020, pp. 643-670.

³⁴ Austin Long, *Deterrence. From Cold War to Long War. Lessons from Six Decades of RAND Research* (Santa Monica/Arlington/Pittsburgh, 2008), retrieved from <https://apps.dtic.mil/dtic/tr/fulltext/u2/a489540.pdf>, accessed on March 27, 2020.

³⁵ The last three words of this sentence are derived from the RAND website, which states that 'For more than six decades, RAND researchers have used game theory to explore economics, political science, psychology, and conflict.' RAND, 'Game Theory', retrieved from <https://www.rand.org/topics/game-theory.html>, accessed on March 27, 2020. Site last refreshed in 2020.

Military men are not told how to use game theory in military planning, nor are mathematicians furnished a full understanding and appreciation of factors involved in military decisions. ³⁶

Despite Haywood's careful cautions, game theory in the United States did lead to the establishment of new 'arms race' models, which sought to interpret the nuclear arms race between the United States and the Soviet Union. The most important arms model which emerged from the study of game theory was the predator-prey model, also called the Lotka-Volterra model. The predator-prey model, derived from the series of equations with the same name that is used to study the effects of species interactions on the population dynamics of both species in biological studies³⁷, was used for various simulation games regarding the arms race, in which, for example, the change in arsenal in one country depended on the behavior regarding arsenal of the other country. ³⁸ In contrast, in the Soviet Union, the serious study of game theory and its possible applications on political and military matters only took place from the 1960s onwards, with the Eastern equivalent of RAND, the Institute of System Analysis of the Russian Academy of Sciences (ISA) founded in 1976. ³⁹ The gap between the evolution of game theory between the East and West has been explained by pointing to both the influence of the Iron Curtain and the language bias, which made exchange of ideas difficult. As a result, recognition of Soviet game theory and game theorists from a Western point of view is rare. ⁴⁰ The earlier arrival and importance placed on game theory in the Western bloc made it possible that three tangible concepts that were to be used in military and political plans and policies, namely the Prisoner Dilemma, the Chicken Game and Mutual Assured Destruction (MAD), were first studied and elaborated on by Western Scholars.

Concepts derived from game theory during the Cold War

As detailed before, in the early stage of the Cold War, scientists mainly used game theory in order to set up stimulations which would determine in what kind of situations the United States and the Soviet Union would start to reduce or enlarge their stock of atomic weapons. Broadly, four possible outcomes of the nuclear arms race, or 'game', were recognized, namely:

- 1.) Mutual arms reductions;
- 2.) US armament and Soviet reductions;
- 3.) Soviet armament and US reductions;
- 4.) Buildup of nuclear weapons on both sides. ⁴¹

Except for the first scenario, in which the strategy to accomplish the goal – the reduction of weapons by formal agreement – was quite straightforward, the concepts of the Prisoner Dilemma, the Chicken Game and Mutual Assured Destruction each sought to explore the psychological mindsets behind the three other scenarios. The Prisoner Dilemma imagines a situation in which two prisoners are not able to communicate with one another and thus do not

³⁶ Colonel Oliver G. Haywood, 'Introduction', in: *Military Doctrine of Decision and The Von Neumann Theory of Games*, retrieved from

https://www.rand.org/content/dam/rand/pubs/research_memoranda/2006/RM528.pdf, accessed on March 1, 2020, pp. 2.

³⁷ John N. Thompson and Eric Post, 'Lotka-Volterra equations', in: *Population Ecology*, retrieved from <https://www.britannica.com/science/population-ecology/Species-interactions-and-population-growth#ref1135236>, accessed on March 28, 2020. Last updated November 30, 2017.

³⁸ Harald Hagemann, Vadim Kufenko and Danila Raskov, 'Game theory modeling for the Cold War on both sides of the Iron Curtain' in: *History of the Human Sciences*, Vol. 29 (4-5) (2016), retrieved from <https://journals-sagepub-com.proxy.library.uu.nl/doi/pdf/10.1177/0952695116666012>, pp. 102-103.

³⁹ Idem, pp. 105.

⁴⁰ Idem, pp. 104.

⁴¹ S. Plous, 'The Nuclear Arms Race: Prisoner's Dilemma or Perceptual Dilemma?', in: *Journal of Peace Research*, Vol. 30, No. 2 (May, 1993), retrieved from <https://www.jstor.org/stable/pdf/425197.pdf?refreqid=excelsior%3Abf7eda6ce793d94800b8de11214c7d3f>, accessed March 28, 2020, pp. 163 – 164.

know whether the other actor has decided to act yet. In their own best interest, for the prisoners individually, the best option would be the pursue their own aims. The dilemma is that if the actors decide to take the same action at the same time, the outcome will be the worst of all. Applied to the nuclear arms race, in which the two prisoners are replaced by the actors of the US and the USSR, the preferred situation of both superpowers would be to arm themselves, while waiting for their opponents to disarm. As in the normal Prisoner Dilemma, both sides do not know to what extent the other power has armed itself. The worst outcome in this case would be if both superpowers assumed that the other is increasing its armament and as a response would do the same, increasing the risk of nuclear proliferation.⁴²

The Chicken Game is different from the Prisoner Dilemma in that it takes the perception of defeat (being seen as a 'chicken' by backing off in a critical situation) in the eyes of the political actors into account, rather than the element of non-communication. In the nuclear arms race, from the perspective of a Chicken Game, it is believed that both parties, who are both concerned with a loss on their own side, would eventually seek cooperation. The Cuban Missile Crisis of 1962 can possibly be seen as a Chicken Game in which Kennedy and Khrushchev eventually realized the consequences of an outbreak of nuclear war not only on both of their sides, but also on the rest of the world.⁴³

Of all three concepts, Mutual Assured Destruction (MAD) has found widespread appeal outside of the academic world. Therefore, more than the Prisoner Dilemma and the Chicken Game, it will be further discussed in this thesis. The policy of MAD, which originated in the United States, is that the country must keep on increasing the amount of nuclear weapons to keep up with the Soviet Union, even if after a devastating first-strike attack has taken place. The irony of MAD is that in this scenario, there is never enough armament that will guarantee obliteration of the enemy. The result is an endless nuclear arms race on both sides, in which each weapon of one side has to match that of the other side.⁴⁴ The fear for MAD was very much palpable during the Cold War, both in public opinion and at the highest political and diplomatic levels. Fortunately, in the end, MAD only came to fruition in theory and not in practice. The worlds of the terrifying philosophy of MAD on one hand and the much more innocent game of chess seem to be far removed from another, but there are a few connections between them, one being John von Neumann, who invented game theory in the first place.

Chess and Game Theory

Until his death in 1957, von Neumann, whom after the Cold War emerged as an passionate anticommunist, was of the opinion that the United States would eventually emerge victorious in the Cold War. This victory, according to von Neumann, would not be achieved by nuclear attacks, by superior technology. In his position as a RAND advisor, von Neumann put this belief into practice by developing the very concept of MAD, which presented what would happen if buildup of nuclear armament in both the United States and the Soviet Union was pursued. The connection between MAD and von Neumann to the game of chess is that the latter a minor, but important role in the development of game theory in the first place. It was namely in von Neumann's and Morgenstern's *Theory of Games and Economic Behavior* that chess was used a key paradigm to discuss games with perfect information, that is, games in which all moves and

⁴² Idem.

⁴³ James F. Pasley, 'Chicken Pax Atomica: The Cold War Stability of Nuclear Deterrence', in: *Journal of International and Area Studies*, Vol. 15, No. 2 (2008), retrieved from <http://space.snu.ac.kr/bitstream/10371/96466/1/2.Chicken-Pax-Atomica-The-Cold-War-Stability-of-Nuclear-Deterrence-James-F-Pasley.pdf>, accessed on March 29, 2020, pp. 24 – 25.

⁴⁴ Ben Bova, 'Replace MAD with mutually assured survival', retrieved from [file:///C:/Users/Thirz/Downloads/Replace_MAD_with_mutual_assure%20\(1\).pdf](file:///C:/Users/Thirz/Downloads/Replace_MAD_with_mutual_assure%20(1).pdf), in: *Science '84* (Vol. 5, July-August 1984), accessed on March 29, 2020, pp. 1.

actions are known at all times to all players involved.⁴⁵ The connection between chess and mathematical theory has been established before von Neumann, such as in 1913 by the German mathematician Ernst Zermelo, whom in his *On an Application of Set Theory to the Theory of the Game of Chess* (1963), discussed how in two-person games such as chess the players have strictly opposing interests.⁴⁶ Apart from chess serving as an inspiration for the development of game theory, the structure and rules of chess have found their way into the theory of two-player games. For that, it is important to once go back to the three key tenets of game theory (resources, alternative courses of actions/goals and preferences on the outcomes) which have been discussed in the first paragraph of this chapter. The resources needed for chess are the black-and-white checkered board (64 squares) and an array of chess pieces (16 for each of the players). Of all the chess pieces, which represent either human figures (kings, bishops, queens), animals (knights)⁴⁷ or buildings (rooks/castles), the kings are the most important pieces, which positions during the game, which is usually played in three stages (opening, middle game and endgame) need to be protected by the other pieces. Although there are almost several ways in which a player can start, continue and end a game (strategies), the ultimate goal that will result in a victory (the most preferred outcome), is always the same, namely directly attacking the opponent's king in a way that he is not able to escape its check (checkmating).⁴⁸ The victory of one player will automatically result in the defeat of the other player (the least preferred outcome); however, in six situations, a match can end in a tie by the mutual agreement of both players to establish a draw.⁴⁹

Still, despite the role of chess in both the development of chess and the fact that the workings of chess fit well within a game-theoretical framework, the 'fun and amusement' that one may derive from chess cannot completely be equated with the study of human interaction in game theory.⁵⁰ Despite the great symbolism and significance that is sometimes attached to the game of chess (more about that in Chapter 3), ultimately, the consequences of a victory or loss in chess for the rest of the world are not that far-reaching. The same cannot be said for a policy shift as big as that of the Reagan Doctrine, which possible use of game-theoretical concepts will be discussed in the next chapter.

⁴⁵ Daniel Johnson, 'The Machine Age', in: *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (London 2007), pp. 224.

⁴⁶ Ulrich Schwalbe and Paul Walker, 'Zermelo and the Early History of Game Theory', retrieved from <http://abel.math.harvard.edu/~elkies/FS23j.03/zermelo.pdf>, accessed on December 12, 2019, pp. 3.

⁴⁷ Strangely enough, in chess, the knights are represented as horses.

⁴⁸ Cambridge Dictionary, 'Checkmate', retrieved from <https://dictionary.cambridge.org/dictionary/english/checkmate>, accessed on March 30, 2020. Site last refreshed in 2020.

⁴⁹ In official tournaments, chess matches can also end if one of the players resigns the match. This will result in an automatic victory for the other player.

⁵⁰ Martin Shubik, 'Models and Their Uses', in: *Game Theory in the Social Sciences. Concepts and Solutions* (Fifth Edition, Cambridge and London, 1989), pp. 7.

Chapter 2 Defying Détente: Game Theory, Polarity and Power Politics in the Reagan Doctrine

We cannot play innocents abroad in a world that's not innocent; nor can we be passive when freedom is under siege. Without resources, diplomacy cannot succeed. – Ronald Reagan, *State of the Union Speech, February 6, 1985* ⁵¹

It was certainly not Ronald Reagan's intention that the State of the Union speech, delivered on the 6th of February, 1985, would serve as the start of a new American policy towards the Soviet Union.⁵² At first, the speech seemed like nothing out of the ordinary. Apart from the themes usually addressed in State of the Union speeches, such as current economic numbers and tax reforms, the President took time to discuss matters he himself held close to heart, such as developments in space, abortion and protection of victims of crime. Even the paragraph in which the President urged the United States to 'stand by its [our] democratic allies' and 'to defy Soviet-supported aggression' ⁵³ did not seem out of character for Reagan, who had voiced the same sentiment on other occasions before. ⁵⁴ Two years before, he had described the Soviet Union as an 'evil empire'. ⁵⁵ That the later Reagan Doctrine derived from this speech, however, would have a major impact on ending the Cold War, seemed very unlikely.

In this chapter, the periods of Détente and the Reagan Doctrine (1985) will be analyzed in terms of game theory, polarity and power politics. First, a brief timeline of the early Cold War will be provided, with jumps to the periods of Détente and the late Cold War. Then, the transition from Détente to what Daniel Cordle has called the 'Nuclear Eighties' under Reagan will be discussed. ⁵⁶ This will be followed by an analysis of the State of the Union speech which is said to be the start of the Reagan Doctrine. In the end, the dual character of the Reagan Doctrine as being both a continuation and discontinuation of prior foreign doctrines of US presidents will briefly be discussed. Throughout the chapter, several primary sources featuring Reagan and key members of his administration, will be used in order to find out to what extent Waltz's polarity theory and two-actor game theory explain the interactions between the United States and the Soviet Union at the highest diplomatic level.

⁵¹ Ronald Reagan, 'Address Before a Joint Session of the Congress on the State of the Union', retrieved from <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-5>, accessed on December 16, 2019. Dated February 6, 1985.

⁵² Chester Pach, 'The Reagan Doctrine: Principle, Pragmatism and Policy', in: *Presidential Studies Quarterly* 36, no. 1 (March, 2006), retrieved from https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1741-5705.2006.00288.x?casa_token=ABA10b8-1VQAAAAA:by3u3NOvNzEFCJnGj1N7ckYOPhmpRBKxUjPPwSr5tygb6FdoJrUPd0L12rFwJPubLirGDN_p9GHBWGaU, accessed on December 16, 2019, pp. 75.

⁵³ Ronald Reagan, 'Address Before a Joint Session of the Congress on the State of the Union', retrieved from <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-5>, accessed on December 16, 2019. Dated February 6, 1985.

⁵⁴ Chester Pach, 'The Reagan Doctrine: Principle, Pragmatism and Policy', in: *Presidential Studies Quarterly* 36, no. 1 (March, 2006), retrieved from https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1741-5705.2006.00288.x?casa_token=ABA10b8-1VQAAAAA:by3u3NOvNzEFCJnGj1N7ckYOPhmpRBKxUjPPwSr5tygb6FdoJrUPd0L12rFwJPubLirGDN_p9GHBWGaU, accessed on December 16, 2019, pp. 75.

⁵⁵ President Ronald Reagan's 'Evil Empire Speech on the National Association of Evangelicals', retrieved from <http://chnm.gmu.edu/1989/items/show/64>, accessed on December 25, 2019.

⁵⁶ Daniel Cordle, *Late Cold War Literature and Culture. The Nuclear 1980s* (Palgrave Macmillan, London, 2017), e-book retrieved from <https://utrechtuniversity-on-worldcat-org.proxy.library.uu.nl/search?databaseList=&queryString=daniel+cordle#/oclc/975223293>, accessed on September 21, 2019.

From Potsdam Conference to the Nuclear Missile Crisis: The Early Cold War period (1945-1962)

It is still disputed among historians as to when the period of ideological warfare between the United States and the Soviet Union, as well as their respective allies, started, and what factors played a role in its emergence. Some historians, such as Denna Frank Fleming in his book *The Cold War and Its Origins, 1917-1960* (1961)⁵⁷ and more recently Ronald E. Powaski's *The Cold War: The United States and the Soviet Union, 1917-1991* (1998)⁵⁸, have traced the origins of the Cold War back to the Russian Revolution of 1917, in which the Communist Red Army fought against the White Army, the latter being supported by powers such as the United Kingdom. Other historians, such as Walter Lafeber, insist that the first tensions between the two countries came to light during the various conferences that took place during the Second World War, such as Yalta.⁵⁹ In this thesis, the Potsdam Conference of 1945 is taken as the starting point of the Cold War. Although the eventual rupture between the East and the West after the Second World War may have been long in the making, it was after Roosevelt's death and Churchill's replacement by Clement Attlee at Potsdam that the fragile equilibrium which had held the unlikely allies together during the war finally fell away and that the ideological differences became unbridgeable. Regardless, four phases of the Cold War can be recognized, namely the start of the Cold War, the period of peaceful coexistence, Détente, and the late Cold War. The first two phases of the Cold War will be briefly summarized here as background to the periods of Détente and the late Cold War, which are discussed more thoroughly in this thesis.

At the start of the Cold War, with a world in ruins, both the Eastern and Western spheres were not delineated yet, except in the divided countries of Germany and Austria and the city of Berlin. As a result, the United States and the Soviet Union tried to influence the recovering countries in order to align them to their ideologies. For the United States, the economy recovery program of the Marshall Plan in 1947 and the foundation of the military alliance of the North Atlantic Treaty (NATO) in 1949 became important to bind the countries of Western Europe to their capitalist bloc. The Soviet Union responded by pressuring the Eastern European countries to refuse the Marshall Plan and by in 1955, during the second phase of the Cold War, introduced the Warsaw Pact, a military alliance of communist countries. Two important events during this phase set the tone for this Cold War, namely the Berlin Airlift (1948-1949), in which the Soviet Union ordered a blockade of divided Berlin as a response to the decision of the United States and the United Kingdom to introduce the strong D-mark as a new currency in their respective occupied zones, and the Korean War (1950-1953), which saw an American-led United Nations coalition in the southern parts of Korea fight against the Soviet-supported Northern parts of the country. As in Korea, the United States and the Soviet Union did not directly confront one another and the fighting did not take place on their own territories: they only fought by 'proxy'. The so-called 'proxy wars' would remain an important characteristic of the whole Cold War, most notably during the Vietnam War (1955-1975) and the war in Angola (1975-2002). Thus, the Cold War never turned 'hot'. Stalin's death in 1953 lessened the tensions between the United States and the Soviet Union for a brief period of time, with Stalin's successor, Nikita Khrushchev, trying to respect the boundaries between the two sides of the Iron Curtain by declaring on the Twentieth

⁵⁷ Vincent V. Thursby, 'The Cold War and Its Origins, 1917-1960. by Denna Frank Fleming', in: *The Journal of Politics*, Vol. 24, No. 3 (Aug., 1962), retrieved from <https://www-jstor-org.proxy.library.uu.nl/stable/pdf/2127709.pdf?refreqid=excelsior%3Af54c8a0dd44b93f11e7f822a1921baeb>, accessed March 22, 2020, pp. 586-588.

⁵⁸ Norman E. Saul, 'The Cold War: The United States and the Soviet Union, 1917-1991 by Ronald E. Powaski' in: *The International History Review*, Vol. 21, No. 3 (Sep., 1999), retrieved from <https://www-jstor-org.proxy.library.uu.nl/stable/pdf/40109122.pdf?refreqid=excelsior%3Aa07f38fa36bca5424635a77fcce8f7ce>, accessed March 22, 2020, pp. 779-780.

⁵⁹ Walter Lafeber, 'Chapter 1: Open Doors, Iron Curtains (1941-1945)', in: *America, Russia, and the Cold War, 1945-2000* (International Edition, 9th Edition, New York, 2002), pp. 9.

Congress of the Communist Party in 1956 that from now onwards, there would be peaceful coexistence between 'states with different social systems'.⁶⁰ However, the brutality used by the Soviet army during the Hungarian Uprising in the same year, which somewhat ironically had been caused by Khrushchev's process of 'destalinization', showed that although the Soviet Union was relaxing its stance towards the West, it was not willing to give up their power in their satellite states of Eastern Europe that easily. Furthermore, the communist, Soviet-supported takeover of Cuba by Fidel Castro in 1959, basically in the backyard of the United States, and the discovery of Soviet nuclear missiles on the Caribbean island in October 1962 also signaled that the peaceful coexistence proposed by Khrushchev was an illusion from the start. After thirteen days of terse negotiations, President John F. Kennedy and Khrushchev managed to avoid near annihilation of the world. Both superpowers realized fully that the conflict could have easily resulted in a full-scale nuclear war. Therefore, under Kennedy, Khrushchev and their successors, attempts were made in order to reduce the mutual mistrust between the United States and the Soviet Union, which prompted the start of the third phase of the Cold War, *Détente* ('relaxation'). Although characterized by increasing communication and decreasing conflicts on both sides, as exemplified by the joint agreements of SALT I and II on the reduction of nuclear missiles between 1972 and 1979, the Cold War was by no means over.

Tensions in the Détente and the emergence of Ronald Reagan

By 1979, the Soviet-Afghan War and the Iranian Revolution had left cracks in the fragile relationship the United States and the Soviet Union had tried to build since 1962, if not sooner. An exchange of letters between President Carter and Soviet leader Brezhnev in 1977, show deep dissatisfaction with the negotiations known as SALT II. Addressed February 25, 1977, Brezhnev criticizes what he calls the 'hopeless proposal' of 'withdrawing the whole question of cruise missiles from the agreement', stating that agreeing to the proposal would mean that while one channel of the strategic arms race would be blocked, another would be opened.⁶¹ In response, Carter first criticized the 'moderately sharp tone' of Brezhnev's letter and stating that 'differences between our countries are deep enough', before finally addressing the issues raised in Brezhnev's previous letter. His tone then becomes much more conciliatory, stating that with a 'mutual good will', as well as 'determination', 'patience' and 'decisiveness', they would be able to reach an agreement.⁶² Only two years later, Carter's own determination, patience and decisiveness, as well as the faith of the American people in him, had waned, mainly due to the occupation of the American embassy in Tehran from November 4, 1979 onwards, which would only be resolved after 444 days⁶³, as well as an ongoing energy crisis.⁶⁴ In 1980, he was challenged on the Republican side by former actor Ronald Reagan, whose four policy themes - reducing taxes and deficits, rebuilding American military power, confronting communism all over the world and restoring American patriotism - were in sharp contrast to Carter's more

⁶⁰ The Editors of Encyclopaedia Britannica, 'Twentieth Congress of the Communist Party of the Soviet Union, 1956', retrieved from <https://www.britannica.com/event/Twentieth-Congress-of-the-Communist-Party-of-the-Soviet-Union#ref38352>, accessed on March 22, 2020. Last updated February 7, 2020.

⁶¹ Wilson Center Digital Archive, 'Letter Secretary Brezhnev to President Carter', retrieved from <https://digitalarchive.wilsoncenter.org/document/110446>, accessed on December 25, 2019. Dated February 25, 1977.

⁶² National Security Archive, 'V-23 Letter From President Carter to Premier Brezhnev, March 5, 1977', retrieved from https://nsarchive2.gwu.edu/carterbrezhnev/docs_salt_ii/V-23%20Letter%20from%20President%20Carter%20to%20Premier%20Brezhnev.%20March%205.%201977.pdf, accessed December 25, 2019. Dated March 5, 1977.

⁶³ CNN Library, 'Iran Hostage Crisis Fast Facts', retrieved from <https://edition.cnn.com/2013/09/15/world/meast/iran-hostage-crisis-fast-facts/index.html>, accessed on March 28, 2020. Last updated October 30, 2019.

⁶⁴ Edward Mair, 'Jimmy Carter's unfairly mocked presidency deserves another look', retrieved from <https://theconversation.com/jimmy-carters-unfairly-mocked-presidency-deserves-another-look-65983>, published October 25, 2016, accessed on March 28, 2020.

moralistic outlook.⁶⁵ Especially Reagan's sharp anti-communism, in which he explicitly drew on older concepts such as the domino theory⁶⁶, while rejecting the 'soft power' concepts of containment and Détente were notable departures from Carter's presidency, whom had hoped that the rectification of various economic and arms control agreements with the Soviet Union would lessen their historical antagonism.⁶⁷ In a presidential debate in 1981, Reagan was quick to call out Carter for his optimism regarding the long-term consequences of the agreements that had been signed under Détente, claiming the United States had been 'outnegotiated for quite a long time' and that the Soviet Union had gone forward with the 'biggest military buildup in the history of man.'⁶⁸ When Reagan was accused by Carter that he would try to 'scrap' the accords, the former claimed to have been misunderstood, defending himself by saying that he was merely trying to go 'back into negotiations' in order to achieve not only arms limitation but also a reduction of nuclear weapons altogether, 'to the point that neither one of us represents a threat to the other.'⁶⁹ Reagan eventually emerged victorious over Carter, receiving 51% of the popular vote but a majority from the electoral college.⁷⁰ His hard stance on opposing the Soviet Union, a revival of old tactics employed in the early Cold War, seemed to pay off in the end, and he wasted no time in confronting one of Carter's foreign demons, namely the Sandinista regime in Nicaragua.

The actual start of the Reagan Doctrine? The War in Nicaragua (1978-1989)

Although the Reagan Doctrine is often dated from the State of the Union Speech that Reagan gave in 1985, it can be argued that the origins of the Reagan Doctrine can be found in the Nicaraguan War, which started in 1978 and would last eleven years. The war between the Marxist-Leninist Sandinista guerrillas, quietly backed by the Soviet Union, and the subsequently US-backed Contras, proved to be one of the last great proxy-wars of the Cold War. Even before he was elected as Presidential nominee, Reagan was very much interested in Nicaragua, when as early as March 1979, he insinuated that the troubles in Nicaragua bore a 'Cuban label' and stated that most of the Rebels were 'Cuban-trained, Cuban-armed and dedicated to creating another Communist hemisphere'.⁷¹ With hemisphere, Reagan seemingly indicated that the lines between the Eastern and Western spheres were, at least in Central America, not clean-cut yet, and that he was not intending to remain silent on what he felt was a communist intrusion in the own American backyard. On the Republican Platform of 1980, Reagan seemingly invoked the domino theory once again, stating that he, apart from the 'Marxist Sandinista takeover of Nicaragua', 'deplored' the 'Marxist attempt' to 'destabilize' the neighboring countries of Salvador, Guatemala and Honduras, and criticized the military aid program the Carter Administration had provided to the Nicaraguan government two years prior.⁷² When Reagan was inaugurated as president on

⁶⁵ Idem.

⁶⁶ The domino theory emerged in the 1950s and argued that the emergence of communism would quickly lead to communist takeovers in neighboring states. The whole quote in which Reagan referred to the domino theory was '*Let's not delude ourselves. The Soviet Union underlies all the unrest that is going on. If they weren't engaged in this game of dominoes, there wouldn't be any hot spots in the world*', as detailed in Walter Lafeber, 'Chapter 12: From Cold War to Old War: Reagan and Gorbachev (1977-1989)', in: *America, Russia, and the Cold War, 1945-2000* (International Edition, 9th Edition, New York, 2002), pp. 316.

⁶⁷ Robert A. Strong, 'Jimmy Carter Foreign Affairs', retrieved from <https://millercenter.org/president/carter/foreign-affairs>, accessed on March 28, 2020. Site last refreshed in 2020.

⁶⁸ Reagan Library, '1980 Ronald Reagan/Jimmy Carter Presidential Debate', retrieved from <https://www.reaganlibrary.gov/10-28-80debate>, accessed on December 26, 2019.

⁶⁹ Idem.

⁷⁰ Walter Lafeber, 'Chapter 12: From Cold War to Old War: Reagan and Gorbachev (1977-1989)', in: *America, Russia, and the Cold War, 1945-2000* (International Edition, 9th Edition, New York, 2002), pp. 315.

⁷¹ E. Bradford Burns, 'Obsessed with Nicaragua', in: *At War in Nicaragua. The Reagan Doctrine and the Politics of Nostalgia* (New York, 1987), pp. 22.

⁷² Idem, pp. 23.

January 20, 1981, his Secretary of State, George Schulz, seemingly foreshadowed Reagan's future intentions towards Nicaragua, when he stated that the United States should 'go beyond passive defense to consider means of active prevention' and that the country 'must be willing to use military force.'⁷³ Despite this strong statement, the Reagan Administration took their time in directly confronting Nicaragua, starting by terminating all financial aid and access to loans from the United States in 1981, and later by closing Nicaraguan contact to financial sources from the International Monetary Fund, the World Bank and the Inter-American Development Bank.⁷⁴ It was the fact that Reagan desperately needed to sway public opinion that prevented him from explicitly stating his actual goals towards Nicaragua before the State of the Union Speech of February 6, 1985. For those who had followed Reagan's rhetoric closely, his announcement that from now on, the United States should stand with all their 'democratic allies' and should not 'break faith' with those 'risking their lives' to 'defy Soviet-supported aggression' did not come as a surprise.⁷⁵

Game theory, polarity and power politics in the State of the Union speech

As stated in the introduction of this chapter, the direct condemnation of the Soviet Union in relation to Nicaragua only is a minor element in the original State of the Union speech. Seeing how Reagan had already taken several steps towards an all-right direct confrontation with Soviet aggression in Central America, the State of the Union speech should perhaps no longer be regarded as the start of the Reagan Doctrine, but merely as a formal and public announcement of its existence. Although the State of the Union speech does not contain any explicit references to game theory, polarity or power politics, nor to the game of chess, Reagan seems to have used the basic principles of game theory – game, players and strategy – in his speech. The 'game' in Reagan's speech, is America's role in the world, and the player it is facing is the Soviet Union. The game and the strategy is maybe most notable when Reagan draws a parallel between the economic successes the United States and some Third World countries have endured in the last four years by stating that 'America's economic success is freedom's success', and that 'it can be repeated a hundred times in a hundred different nations.' This economic success, Reagan argues, have been due to 'free press, free speech, and freedom to worship, vote, and create wealth', which are all Western and specifically American values. The strategy towards the Soviet Union, then, is to counter Communism in both a figurative sense (the belief in the American values of 'faith and freedom'), and in a literal sense (supporting and providing aid to 'all democratic forces' in the world). Although he does not state so implicitly, by repeatedly stressing the words 'freedom', 'faith' and 'democracy', as well as frequently referring to America's historic role as 'leader of the free world', Reagan seems to suggest that the Cold War is and has been a zero-sum game, in which the West will prevail and has prevailed before. It is when Reagan expresses the desire that the United States should stand by all its 'democratic allies' and must not 'break faith' with people who are 'risking their lives' for democracy, that Reagan fully unleashes how the American way is the only right way. Explicitly citing Afghanistan and Nicaragua as examples, he contrasts 'Soviet-supported aggression' to the natural rights of freedom and faith which are inherent to the United States. In the case of Nicaragua, he goes even further, calling the Sandinista regime 'a dictatorship', supported by a 'full Cuban-Soviet bloc', which not only persecutes people and the church and 'denies a free press', but also 'arms and provides bases for Communist terrorists attacking neighboring states.' The legitimacy that Reagan offers for the support of 'freedom fighters' is that is not only 'self-defense' and 'totally consistent with the OAS⁷⁶ and U.N. Charters', but also tied to the security of the United States itself. Despite Reagan's

⁷³ Idem, pp. 25.

⁷⁴ Idem, pp. 30.

⁷⁵ Ronald Reagan, 'Address Before a Joint Session of the Congress on the State of the Union', retrieved from <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-5>, accessed on December 16, 2019. Dated February 6, 1985.

⁷⁶ OAS is the abbreviation of the Organization of American States, a coalition of all the 35 countries of North, Central and South America, which was founded in 1948.

attempts to place this policy change into a larger, international perspective, the announcement was quickly seen by some as an attempt to reinforce America's position in the rest of the world. The borders of the Eastern and Western spheres that had been developed and guarded during the early Cold War, the period of peaceful existence and Détente, were questioned by Reagan again. As a result, tensions between the United States and the Soviet Union, reinforced by renewed nuclear buildup flared up as well, setting the tone for the 'Nuclear Eighties'.

So far, chess has not come up in this chapter. What then does the Reagan Doctrine have in common with the game of chess? Arguably, not much. However, like a chess player, Reagan had a clear strategy as to how the world order set out by his predecessors should be changed. That the moves he made - publicly calling out the Soviet Union and questioning the East and West divide - turned out to be successful in the long run, was a victory he and the rest of the world could not have predicted.

Chapter 3 Beyond Playing Games: The Political and Cultural Use of Chess Metaphors To Make Sense of Late Cold War Dynamics

*The game of chess is not merely an idle amusement. Several very valuable qualities of the mind, useful in the course of human life, are to be acquired or strengthened by it... For Life is a kind of Chess, in which we have often points to gain, and competitors or adversaries to contend with. – Benjamin Franklin, 1779*⁷⁷

More than any other board game, the game of chess seems to have been associated with meanings that go beyond the game itself. Over time, chess has been related to virtues such as focus and attention, as well as beauty, status, collective memory, consumption and competition.⁷⁸ Furthermore, as exemplified by Benjamin Franklin in the quote at the begin of this chapter, chess is not merely an ‘idle amusement’. Rather, it can also be seen as a fight, an art, a sport, a life or even war.⁷⁹ Requiring intelligence to come up with winning strategies, chess has also lent itself well for comparisons with political and military endeavors.⁸⁰ Although cultural depictions of chess as metaphor for world politics can be traced back as far as the Middle Ages, it seems that during the Cold War, chess metaphors became even more important. The ideological struggle between the United States and the Soviet Union increasingly was seen as being a chess game itself, with the World Chess Championship of 1972 between Bobby Fischer and Boris Spassky seen as a literal outing of said metaphor.

In this chapter, the various uses and metaphors attached to chess during the Cold War will be analyzed. The game of chess will be briefly explained in relation to the political and symbolic meanings that have been attached to chess over time, focusing on how chess was perceived during the Cold War. The World Chess Championship between Bobby Fischer and Boris Spassky will then be used as a case-study to show how chess and politics were interlinked during the Cold War. Finally, some examples of how chess in relation to US-USSR politics has been used in various cultural endeavors, such as cartoons, films and music, will also be given. The images used can be found at the end of this chapter. In the end, the possibility of using the game of chess as a metaphor for the international relations between the two superpowers during the late Cold War will be explored.

Symbolic and Political Meanings of Chess Over Time

In his article *Symbolism of Chess* (1969), Titus Burckhardt traces the symbolism of chess back to its origins in 6th century India. Originally, the game was played on a board that corresponded with the *Vāstu-mandalas* or the diagrams which constitute the basic layouts of a Hindu temple or a city. Burckhardt further notes that the diagram also symbolizes the existence of a ‘field of action’ or combat between the two divine powers recognized in Hinduism, namely the devas (gods or angels) against the asuras (titans or demons), or a battle between good and evil. Under the Persians and the Arabic peoples, as well as in Medieval and Renaissance Europe, some rules, aspects and thus also the symbolisms attached to the game started to change. Perhaps the most

⁷⁷ Founders Online, “The Morals of Chess”, [before 28 June 1779], retrieved from <https://founders.archives.gov/documents/Franklin/01-29-02-0608>, accessed on November 11, 2019. Originally published in *The Columbian Magazine*, i (December, 1786), 159–61; incomplete copy, American Philosophical Society.

⁷⁸ Gary Alan Fine, ‘Players and Pawns. How Chess Builds Community and Culture’, retrieved from https://www.press.uchicago.edu/books/excerpt/2015/Fine_Players_Pawns.html, accessed on December 25, 2019. Site last refreshed unknown.

⁷⁹ Idem.

⁸⁰ Daniel Johnson, ‘Cold war chess’, retrieved from <https://www.prospectmagazine.co.uk/magazine/coldwarchess>, published on June 19, 2005, accessed on January 12, 2020. Site last refreshed unknown.

important change due to European and Arabic influences was that the queen and the two bishops (in the original game, respectively the 'lady' or 'counsellor', and the war elephants) gained a greater mobility in the game.⁸¹ In Medieval and Renaissance Europe, chess also started to represent something more than a war, with Jenny A. Adams arguing that the use of chess in literary texts and political treatises in the late Medieval period showed anxieties about political organization, civic community, economic exchange, and individual autonomy. Furthermore, Adams states that chess in this period was also seen as a model of an ideal, civic order, based on both contractual obligation and exchange.⁸² The game was played by both men and women, and despite its reputation as a 'noble activity', literary references to lower-class chess players seem to suggest that it was not merely meant for aristocracy, and references to chess in Hebrew works from the Middle Age also show that chess was not only a part of Christian culture.⁸³

On a metaphorical level, several meanings can be attached to the game of chess. In a comparative study of chess metaphors in English and Serbian, Biljana Mistic Ilic argues that comparisons of the game of chess to real life can be 'mapped' in five different ways. First, life itself can correspond to chess, such as in the quote of Benjamin Franklin which started off this chapter. Secondly, complex life situations in which humans interact with one another may draw comparisons to chess. Thirdly, the players in those complex life situations may resemble chess players and thus be referred in chess player terms, such as players, masters and grandmasters. Fourth, elements of complex life situations can have the same elements of a game of chess. Words that may be used then are, for example, the three stages of a chess game, namely opening, middle game and endgame. Finally, the goal to solve a complex life situation in one's favor could have the same intention of a chess player winning, losing or drawing a game.⁸⁴ Furthermore, Ilic notes several terms derived from chess that have been used as metaphors, such as checkmate, stalemate and gambit, and takes the chessboard and the positions of the players on it into account.⁸⁵ Visually, the black and white colour scheme of the chessboard can also resemble a conflict between good and bad, which harks back to the ancient Indian idea of chess as a struggle between the devas and asuras. Lastly, the positions and the names of the players in chess are important for the chess metaphor to work. Most notably, while the king is the most powerful piece in the game and the aim of chess is centered around the capturing the opponent's king, the piece itself only has limited space to move. Metaphorically, referring to someone as a 'king' in the terms of chess would thus be fitting for someone who is an important, but vulnerable and not very active participant in an event.⁸⁶ On the complete opposite end of the spectrum, referring to certain actors as 'pawns', which in the game are the smallest and least significant chess pieces of all, would for Ilic be fitting for those 'who are not control' of a situation and who are 'not considered to important', but therefore be very likely to be 'used and manipulated'.⁸⁷ Even the spectacle of watching a chess match can have various meanings attached to it, with Gary Alan Fine and Harvey Young even going as far by arguing that the meaning of chess is not so much

⁸¹ Titus Burckhardt, 'The Symbolism of Chess', in: *Studies in Comparative Religion*, Vol. 3, No. 2. (Spring, 1969), retrieved from <http://www.studiesincomparativereligion.com/uploads/ArticlePDFs/93.pdf>, accessed on February 23, 2020, pp. 1.

⁸² Jenny A. Adams, 'Introduction: Chess in the Medieval World', in: *In Power Play. The Literature and Politics of Chess in the Late Middle Ages*, retrieved from <https://ebookcentral.proquest.com/lib/uunl/reader.action?docID=3442075&ppg=12>, accessed on February 23, 2020, pp. 1.

⁸³ Idem, pp. 3.

⁸⁴ Biljana Mistic Ilic, 'Chess-related Metaphors – Gens una sumus', in: *Facta Universitatis: Series Linguistics and Literature* (December 2008), retrieved from https://www.researchgate.net/profile/Biljana_Mistic-Ilic/publication/47565295_Chess-related_Metaphors_-_Gens_una_sumus/links/592e83e1aca272fc55badbae/Chess-related-Metaphors-Gens-una-sumus.pdf, accessed on February 23, 2020, pp. 17-18.

⁸⁵ Idem, pp. 19-21.

⁸⁶ Idem, pp. 21.

⁸⁷ Idem.

made up through the physical actions of the two players themselves, or the movements the players make on the board, but rather through the interpretations that the audience attach to the performance.⁸⁸ This seems especially true with the World Chess Championship between Bobby Fischer and Boris Spassky in 1972, in which the confrontation between an American and a Soviet player came to be seen as a metaphor for the Cold War.

Significance of Chess during the Cold War: The 1972 World Chess Championship

In *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (2007), Daniel Johnson indicates a multitude of reasons as to why chess and in particular the 1972 World Chess Championship in Reykavik proved to be a good metaphor for the Cold War period. Although taking place in the period of Détente, in which, as Johnson states, the threat of nuclear war had receded just 'sufficiently' enough, the 'intrinsically' harmless chessboard became a projection and battlefield for the animosities and fears which had preceded in the period before.⁸⁹ Furthermore, Johnson states that chess was exemplary for Cold War culture, encompassing elements of 'abstract purism' on an artistic level, as well as 'incipient paranoia' and 'sublimated homicide' on respective sporting and scientific levels.⁹⁰ Johnson even refers to game theory when he states that the 'great match' represented the 'radical dualism' of the Cold War into a zero-sum game', adding that it 'refined and concentrated the complexities of the global conflict' within 'the narrow confines of a chequered board on a remote island.'⁹¹ Apart from its Cold War setting, there were other reasons as to why the chess match between Fischer and Spassky was widely seen as representative for the international relations between the United States and the Soviet Union, however. First of all, there was the importance that the political actors behind Fischer and Spassky, as well as the two men attached to the match. A staunch anti-Communist (despite his mother being a Communist, and the fact that he himself was once suspected by the FBI of being one)⁹², Fischer seemingly reveled in being seen as an asset used to counter the Soviet Union, stating in one interview that while it is always suggested that 'world leaders should fight it out hand to hand', in his match with Spassky, he was doing something like that, albeit 'not with bombs, but battling it out over the board.'⁹³ Fischer was supported by higher powers than himself in his fight against what he called the 'lying, cheating, hypocritical Russians'⁹⁴ when he was given a personal letter by President Nixon⁹⁵ and was called by Nixon's advisor Henry Kissinger before the match.⁹⁶ In contrast, his opponent Spassky detested the

⁸⁸ Gary Alan Fine and Harvey Young, 'Still Thrills: The Drama of Chess', in: *TDR: The Drama Review*, Vol. 58, No. 2 (Summer 2014), retrieved from https://muse.jhu.edu/article/545174/pdf?casa_token=pp1UHLmzxgQAAAAA:iEcgrYGlbmNUm-9X9i5zvLZtgk7PnQqu9dbjmg9vr4ZOAzGgsTweHkaf6eFhhfuDkoc8qAtsjg, accessed on September 21, 2019, pp. 88.

⁸⁹ Daniel Johnson, 'An Achilles Without An Achilles Heel', in: *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (London, 2007), pp. 173.

⁹⁰ Idem, pp. 174.

⁹¹ Idem.

⁹² Charles Laurence, 'FBI targeted chess genius Bobby Fischer and his mother', retrieved from <https://www.telegraph.co.uk/education/3304339/FBI-targeted-chess-genius-Bobby-Fischer-and-his-mother.html>, published November 24, 2002, accessed on March 28, 2020. Site last refreshed in 2020.

⁹³ Daniel Johnson, 'An Achilles Without An Achilles Heel', in: *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (London, 2007), pp. 148.

⁹⁴ The Independent, 'Match of the Century', retrieved from <https://www.independent.co.uk/arts-entertainment/books/features/match-of-the-century-74551.html>, published January 21, 2004, accessed on March 27, 2020. Site last refreshed in 2020.

⁹⁵ Daniel Johnson, 'An Achilles Without An Achilles Heel', in: *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (London, 2007), pp. 168-169.

⁹⁶ Idem, pp. 191-192.

politicization of the chess match.⁹⁷ Spassky dealt with another problem though. Although not a Communist, Spassky was still seen by the Soviet Union as the person to uphold the long-reigning supremacy of the state-run Chess Section, which had been founded in 1924. The Chess Section, which later was also nicknamed ‘the Soviet Chess School’, had sought to spread chess over the Soviet population.⁹⁸ From the 1930s on, chess increasingly became to be seen by the Chess Section not merely as a learning tool, but as a force of mobilization. As a result, it started to emphasize the role of chess matches played at the highest level, resulting in formalized tournaments and training that professionalized the sport.⁹⁹ Because of this, on a global level, Soviet chess players remained unchallenged from 1948 to 1972.¹⁰⁰ The eventual victory of the American Fischer over the Russian Spassky thus inflicted a severe blow to Russian confidence in chess. Fischer’s triumph was seen by the American side as more than a historical achievement in sports. When Fischer was received with pomp and circumstance in New York City, Borough President Sebastian Leone declared that ‘history will undoubtedly recall that Brooklyn’s Bobby Fischer was the first American representative who ever sat down to face the Soviets across the table who didn’t lose his shirt’.¹⁰¹ On the Soviet side, the reception was much more coolly. When Spassky returned home, he was taken to the Sports Committee, where one member remarked that Spassky had forgotten that he was a sportsman, but in a ‘red shirt’, and that by Spassky’s ‘unsatisfactory performance’, the prestige of the whole Soviet state had suffered.¹⁰² The unique combination of the Cold War setting with the contrasting characters of Fischer and Spassky and the respective American and Soviet perspectives to the match indeed made Reykavik the ‘Match of the Century’, but in a cultural sense, the link between the Cold War and chess had been established much earlier.

A Few Examples of the Chess Game Metaphor in Cold War media

In his article ‘Representation and Recoding: Interdisciplinary Perspectives on Cold War Cultures’, Siegfried Weichlein argues that Cold War culture was not only deeply rooted in its position as a Cold War product, but also self-reflexive, in the sense that it was simultaneously able to reflect on the Cold War and could recode its own meaning and position as a Cold War creation in new ways.¹⁰³ It seems that this was the case with the chess game metaphor as well. Not only was chess by the ongoing world chess championships in a literal sense present during the Cold War – although the existence of those only seems to have become widely well-known to

⁹⁷ Vincent Dowd, ‘Spassky vs Fischer: How the chess battle became a theatre event’, retrieved from <https://www.bbc.com/news/entertainment-arts-50599525>, published December 5, 2019, accessed on March 27, 2020. Site last refreshed in 2020.

⁹⁸ Seth Bernstein, ‘Valedictorians of the Soviet School: Professionalization and the Impact of War in Soviet Chess’, in: *Kritika: Explorations in Russian and Eurasian History*, Vol. 13, No. 2 (Spring 2012, New Series), retrieved from https://muse.jhu.edu/article/476302/pdf?casa_token=ok9VAksB1mgAAAAA:ll293jsU2byPc7N5qnaBVExeoogfXFVmvB5_FlgsoSBkuIWthwmPUzPHjxVOnKH7rwH6WYTtbw0, accessed on February 23, 2020, pp. 396.

⁹⁹ Idem, pp. 400-403.

¹⁰⁰ Daniel Johnson, ‘Introduction’, in: *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (London, 2007), pp. xv.

¹⁰¹ John L. Hess, ‘City Says ‘Hail’ to Bobby Fischer’, retrieved from <https://www.nytimes.com/1972/09/23/archives/city-says-hail-to-bobby-fischer-champion-gets-gold-medal-and-makes.html>, published September 23, 1972 (digitized version), accessed on February 28, 2020. Site last refreshed in 2020.

¹⁰² Daniel Johnson, ‘The Death of Hector’, in: *White King and Red Queen. How the Cold War Was Fought on the Chessboard* (London, 2007), pp. 212.

¹⁰³ Siegfried Weichlein, ‘Representation and Recoding: Interdisciplinary Perspectives on Cold War Cultures’, in: *The Cold War: Historiography, Memory, Representation* (2017), edited by Konrad H. Jarausch, et. Al (2017), retrieved from http://doc.ero.ch/record/288923/files/Weichlein_Representation_and_Recoding-Interdisciplinary_Perspectives_on_Cold_War_Cultures.pdf, accessed on September 21, 2019, pp. 23.

the general public during the Fischer-Spassky match – it was also used in cartoons, films, music and other media. Therefore, the use of chess as a metaphor for the Cold War as used during the Cold War, fits well with Weichlein’s theory of representation and recoding. It seems that during the Cold War, the chess metaphor was mainly used in situations with high stakes, such as during the Cuban Missile Crisis of 1962 (depicted in Figures 5, 6, 7 and 8). However, it was in use throughout the whole Cold War period, as shown by the cartoon depicting Truman and Stalin in 1948 (Figure 4) and all the cartoons of the World Chess Championship of 1972 (Figures 1, 2 and 3). Although the cartoons all pit the United States and the Soviet Union against one another, they do differ from one another as to which of the two will emerge victorious. While some cartoons point to respectively the United States (Figure 3) or the Soviet Union as the stronger side in the conflict (Figures 5 and 7), others portray the superpowers as equals (Figure 4 and 8) or as anonymous players (Figure 6). Thus, while the cartoons use the same kind of metaphor, the games and the stakes they represent differ.

The chess game metaphor was not the only sports metaphor for the Cold War used in media, however, with the rivalry between the United States and the Soviet Union also being linked to the game of poker, or to a boxing or an arm wrestling match. Especially the latter metaphors of boxing and wrestling have come to rival chess as a metaphor in late Cold War media. Notable examples include the video clip of the song *Two Tribes* (1984) by British pop group Frankie Goes to Hollywood, which depicts imitators resembling the American president Ronald Reagan and Soviet Leader Chernenko in a boxing match that eventually results in the destruction of the whole world¹⁰⁴ (Figures 16) and the film *Rocky IV* (1985), which is centred on a fight between Italian-American boxer Rocky Balboa (Sylvester Stallone) and his Soviet opponent Ivan Drago (Dolph Lundgren) (Figure 14), as well as several political cartoons (Figure 15). Whether the more aggressive stance Reagan took towards the Soviet Union played a part in the shift from chess to boxing is deserving of a study of its own, but the change is notable. However, the metaphor of chess seems to be the metaphor with the longest range, appearing in cartoons, films, music and even a musical (the latter of which will be further analyzed in the next chapter). Furthermore, the chess metaphor in relation to the Cold War seemed to have a more broad worldwide appeal than that of the boxing and wrestling metaphor, with the political cartoons in this thesis already representing artists from Iceland (Figure 1 and 2), United States (Figure 3 and 7), Wales (Figure 4), Great Britain (Figure 5), Sweden (Figure 6), South Africa (Figure 8) and Sweden (Figure 9).¹⁰⁵

Although there are numerous films which have used chess in one way or another, Cold War films which have used chess in relation to the ongoing Cold War seem to be relatively scarce. It is only the opening scene of the James Bond movie *‘From Russia With Love’* (1963, Figure 11) which seems to be both representing actual Cold War culture in its setting of a chess tournament and the nationalities of the players, respectively a Canadian (MacAdams) and a Czechoslovakian (Kronsteen). Although the Cold War dynamics would have been obvious if it had taken place between an American and a Soviet player, it nevertheless represents a clash between an Eastern and a Western nation. The fact that during the match Kronsteen receives a message that he is required to attend a meeting of SPECTRE, a fictional, global terrorist organization in the James Bond series¹⁰⁶, also shows that the chess championship, at least for the Soviet side, is not just pleasure.¹⁰⁷ Only a short scene in the film and not a recurring motif in the film, the opening is

¹⁰⁴ A full but unfortunately low-resolution version of the video clip can be found on <https://www.youtube.com/watch?v=SXWVpcyfp0w>.

¹⁰⁵ I am aware that this is a fairly bold claim to make, seeing as I have only the examples are incorporated in this thesis to support it. Furthermore, as the thesis focuses on the chess metaphor, I could not research the ‘boxing’ or ‘arm wrestling’ metaphors as thoroughly. Perhaps in another paper, I could delve more into other sport metaphors.

¹⁰⁶ In the James Bond books, SPECTRE is an apolitical organization. However, in *From Russia with Love*, SPECTRE is clearly more aligned with Communism.

¹⁰⁷ The scene in question can be found on <https://www.youtube.com/watch?v=mB25sTdXkM0>.

still significant in that it sets the scene for the rest of the film, which revolves around a cat and mouse game between the Soviet Union, SPECTRE and Great Britain in the city of Istanbul.

The tensions between the United States and the Soviet Union during the Cold War also inspired numerous artists to express their fears and concerns regarding the power politics between the two superstates in their music. Although other events during the Cold War, such as the Vietnam War, had led to a string of songs written about the Cold Dynamics, with the renewed nuclear buildup in the late 70s and 80s, the themes of anxiety seemed to become even more prominent.¹⁰⁸ While some songs sought to go beyond the general bipolar narrative by pointing out the similarities between the two blocs (Sting's *Russians*, 1985), other songs explicitly chose to criticize one side of the political fence (Genesis's *Land of Confusion* from 1986, which features Reagan as a puppet, is one famous example) or both of them (the aforementioned *Two Tribes* by Frankie Goes to Hollywood). Regardless of the perspectives taken in the song, quite a few Cold War songs present a game theory narrative to the conflict, with the mutual assured destruction of the world by nuclear proliferation as worst possible outcome. Whether this mutual assured destruction will be accomplished due to clean-cut strategies or just human errors differs in each of the songs, and the exploration of this goes beyond the scope of this paper, but it is in the territory of late Cold War music that we also find an example of the chess game metaphor in the song 'American-Soviets' (1985) by the German group CCCP. The synthpop song, which starts off with a fictional phone call between 'Gorbachev' and 'Reagan', compares the Cold War dynamics to a chess game, in which the two leaders in their daily match try to play out one another by sending their weapons into space. Although the interaction between 'Gorbachev' and 'Reagan' at the start of the song seems rather cordial, the narrator in the song mentions that their 'daily chess game' has real-life consequences for the rest of the world, as becomes clear in the lines:

*'They both send their weapons into space/Their people's problems they seem to displace/The arms-race is what they can't negotiate/Why ain't it chess about what they debate?' 'What went wrong on the Gulf of Iran?/Why did the Russians invade Afghanistan?/Why not save the money for the armaments/And be chess-partners in the tournament?'*¹⁰⁹

Chess in the song has a dual role, in the sense that, while very influential events of the Cold War (such as the Iranian Revolution and the Soviet-Afghan War) are minimized and almost satirized as being just pawns in a 'game', it is also presented as being a solution for the ongoing arms race (*'be chess-partners in the tournament'*). Apart from the song, CCCP also fully immersed the single cover (Figure 12) and video clip that came with it in the chess game metaphor (Figure 13). The inclusion of Iran and Afghanistan as 'pawns' in song reveals something that the other cultural examples of the chess game metaphors have often obscured so far, namely those who felt the consequences of the rivalry the most: the rest of the world.

Chess as Metaphor For the Cold War?

The exclusion of the mostly Third World countries over which the rivalry between the United States and the Soviet Union was played out is one argument against the use of chess as metaphor for the Cold War. While some cartoons do acknowledge the actual places of action, such as Cuba and West Berlin (Figures 3 and 8), it is often only a small part of the whole picture, overshadowed by the two superpowers. Although the representations may be in line with how the general population perceived the Cold War, it is not completely accurate. Nor is the use of chess as political metaphor in accordance with the rules of the game. Remarkably, in 1961, it

¹⁰⁸ Chris Gerard, 'Flashback: Cold War Songs of the '80s', retrieved from <https://www.metroweekly.com/2014/03/flashback-cold-war-songs-of-th/>, published on March 2, 2014, accessed on March 29, 2020. Site last refreshed in 2019.

¹⁰⁹ Genius, 'American – Soviets', retrieved from <https://genius.com/Ccc-p-american-soviets-lyrics>, accessed on January 13, 2019. Site last refreshed in 2020.

was one of the inventors of game theory, Oskar Morgenstern, who decried comparisons of the Cold War to chess in the New York Times. While Morgenstern acknowledged chess as a 'formidable game' of 'almost unbelievable complexity', it did lack the 'salient features of the political and military struggles' to which it was compared due to several reasons. The first reason Morgenstern presented was that chess is a game of complete information, in that both opponents have 'no unknown cards or means' at their disposals that they cannot see or know about. All the moves made are presented out in the open, meaning, Morgenstern adds, that there are also no possibilities of bluffing or opportunities to deceive one another. To Morgenstern, this made chess different from 'political reality', where:

[...] *the threatening nation has to weigh the cost not only to its enemies, but to itself, where deceit is certainly not unheard of, and where chance intervenes, suddenly favoring first one side, then another.* ¹¹⁰

Morgenstern then suggested that the Cold War was more akin to poker, in which the three strategic elements of being able to weigh the costs on both sides, deceit and chance were present. ¹¹¹ Morgenstern's sentiments are echoed by Sam Tanenhaus, who suggested in 2014 in an opinion piece on Obama's strategy towards Ukraine for the complete retirement of the chess metaphor in relation to the Cold War altogether. Tanenhaus maintains that many decisions made during the Cold War which are now remembered for their 'farsighted, tactical brilliance' were denounced back then as 'weak willed', citing the public outcry in 1956 on Eisenhower's wait-and-see attitude towards the Hungarian Revolution as one example. Already during the Cold War, there was less incentive towards 'outright confrontation' than to caution, with even the Cuban Missile Crisis being resolved by secret bargains rather than military action in the end. With these caution, Tanenhaus argued came '*adjustment, compromise, improvisation and at times retreat.*' Thus, unlike chess, he describes the Cold War 'less a carefully structured game between masters than a frightening high-wire act, with leaders on both sides aware that a single misstep could plunge them into the abyss.' ¹¹² Instead of the strategic essence of chess, it seems that the attractiveness of chess as a metaphor for the Cold War was more due to its simple black-and-white aesthetic, which could easily be equated to good/evil and victory/loss dichotomies. This, of course, still conceals the third possibility of a draw in chess (as detailed in Chapter 1), which ends a match in a tie. At the same time, this black-and-white, bipolar, perception of the Cold War and chess has also been challenged and explored in the musical *Chess*, which will be discussed in the next chapter.

¹¹⁰ Oskar Morgenstern, 'The Cold War Is Cold Poker', retrieved from <http://www.u.arizona.edu/~volgy/poker.htm>, accessed on February 23, 2020. Originally published in *The New York Times* on February 5, 1961: subscribers of the New York Times can access the full text of the article in its original form on <https://www.nytimes.com/1961/02/05/archives/the-cold-war-is-cold-poker-the-diplomatic-conflict-between.html>.

¹¹¹ Idem.

¹¹² Sam Tanenhaus, 'A history lesson that needs relearning', retrieved from <http://www.nytimes.com/2014/03/02/sunday-review/a-history-lesson-that-needs-relearning.html?ref=opinion&r=0>, published on March 1, 2014, accessed on February 23, 2020. Site last refreshed in 2020.

Images

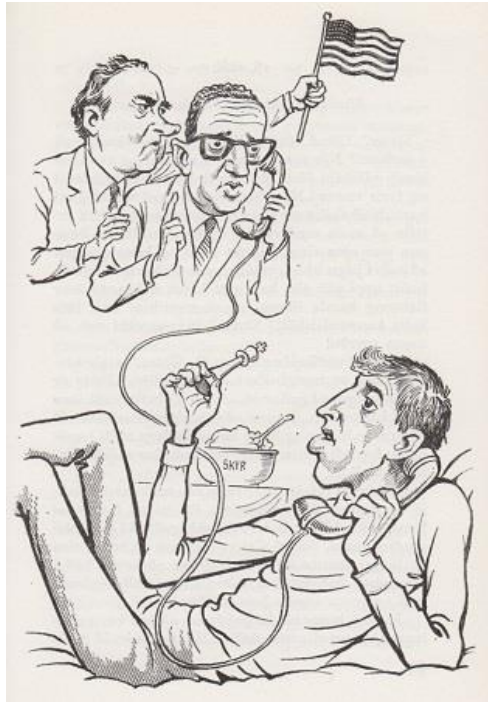


Figure 1 Fischer depicted as being in a telephone conversation with American president Richard Nixon and his security advisor Henry Kissinger in a cartoon by Guðmundur Daniélsson, 1972.



Figure 2 Fischer and Spassky engaged in their chess match, with two others (with the man with the glasses possibly depicting the referee, Lothar Schmid) cautiously watching from behind the curtains.



Figure 3 An unusual alliance: Richard Nixon's policy on China taken together with Bobby Fischer's victory over Boris Spassky as being a 'Rough Year for the Russians'.



Figure 4 An early depiction of the chess game metaphor: Stalin and Truman playing chess.

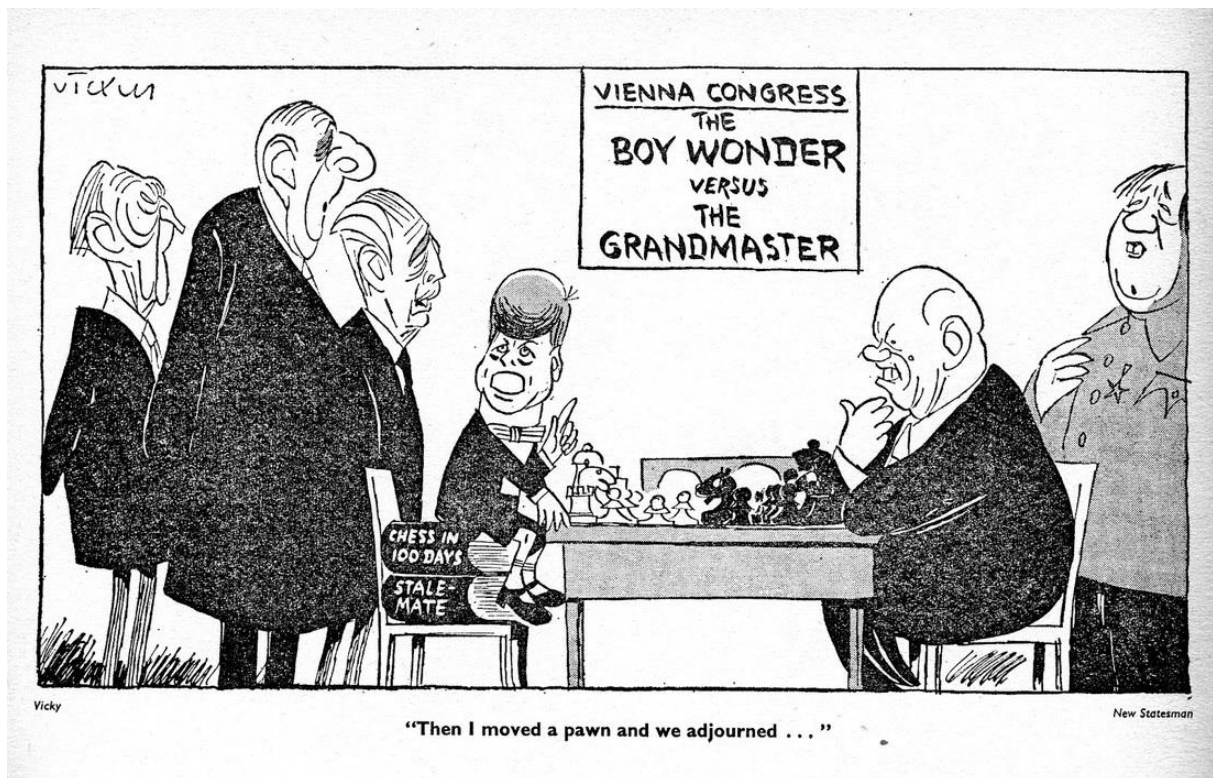


Figure 5 Kennedy and Krushchev in a chess match which represents the Cuban Missile Crisis.



Anders in Svenska Dagbladet, Stockholm

"And the next move?"

Figure 6 The Cuban Missile Crisis on the chessboard, in which the faces of Kennedy and Khrushchev are remarkably absent.



Figure 7 A gleeful Khrushchev against an undecided Kennedy, in which the chess pieces are nuclear missiles.



Figure 8 Cartoon of the Cuban Missile Crisis, as well as West Berlin. This cartoon does feature checkers instead of chess.



Figure 9 Screen still from the opening of the James Bond Movie 'From Russia with Love'.

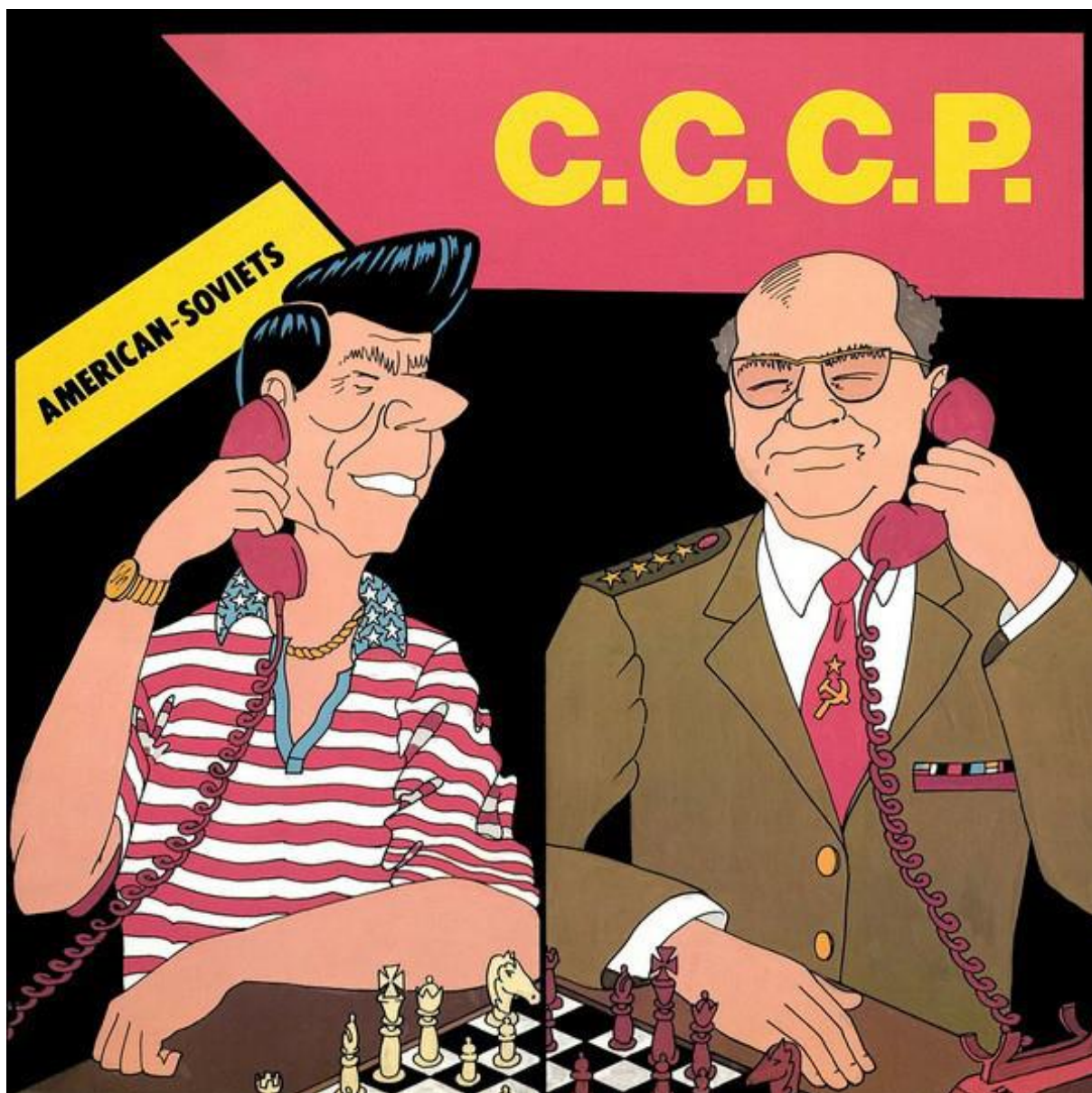


Figure 10 Cover of the single 'American-Soviets'.



Figure 11 Screen Still from the video clip of 'American-Soviets'.



Figure 12 Screen still from 'Rocky IV', in which American boxer Rocky Balboa (Sylvester Stallone, left) faces off against Soviet boxer Ivan Drago (Dolph Lundgren).



Figure 13 A smiling Reagan and Gorbachev – at least on television.



Figure 14 Screen still from 'Two Tribes', depicting Reagan and Chernenko fighting one another.

Chapter 4 A Model of Decorum and Tranquility: The Application and Criticism of Game Theory and the Reagan Doctrine in *Chess*

'Each game of chess means there's one less variation left to be played/Each day got through means one or two/Less mistakes remain to be made.' – The Arbiter in *'The Story of Chess'*, song from the musical *Chess* (1986) ¹¹³

With these words, the musical *Chess*, centered on the love triangle between a British-Hungarian woman, an American chess player and a Russian chess player during the Cold War, opened on West End in 1986. Despite boasting an impressive, versatile score composed by former ABBA members Benny Andersson and Björn Ullvae and well-known British lyricist Tim Rice, a talented cast and the fact that a few songs such as 'I Know Him So Well' and the disco-laden 'One Night in Bangkok' had become hits on the regular pop charts two years before, *Chess* has never managed to overcome its status as a cult musical and enter regular pop culture status. Perhaps the mixed reception for the original London Stage production of *Chess*, varying from 'gift-wrapped and gorgeous' and 'a fine piece of work that shows the dinosaur mega-musical evolving into an intelligent form of life', to 'lacking a true sense of theatre' and 'having little connection with observable reality or dramatic sense' has played a role in this. ¹¹⁴ Despite these reactions, it is worthwhile to look at *Chess* as a Cold War phenomenon for its setting during the period of the Reagan Doctrine, when the importance of chess had waned but tensions between the superpowers were rife.

In this chapter, the cultural significance and meaning of the musical *Chess* will be discussed by relating its plot, characters and lyrics to the Reagan Doctrine.¹¹⁵ A full plot summary of the musical can be found in the Attachments at the end of this thesis. First, the literal and figurative use of chess in the musical will be analyzed by focusing on both the staging and the book ¹¹⁶ of the musical. Then, *Chess* will be analyzed on its references to game theory, polarity and power politics, as well as its satirization of the Reagan Doctrine. Finally, the possible academic significance of *Chess* as a cultural product depicting the late Cold War will be explored.

¹¹³ Tim Rice, Bjorn Ullvae and Benny Andersson, 'You and I/The Story of Chess', *Original Chess Concept Album* (1984), retrieved from <https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9J?si=0iW9uQwJTymdVUf7G0HwJw>. Although most shows of *Chess* start with the song 'The Story of Chess', on the original concept album the song can be heard at the end in the song 'Epilogue: You and I/The Story of Chess', from 3:53 to 7:22, after which the duet 'You and I' resumes.

¹¹⁴ William Hartson, 'Checkmate', in: *Chess: The Making of a Musical* (London, 1986), pp. 48.

¹¹⁵ As the plot and soundtrack of *Chess* have been revised several times in subsequent productions, with certain plot points and songs (and lyrics) being added, rewritten or omitted, I have chosen to focus on the book of the original West End stage production from 1986. However, as no recording of the original West End Cast Album was made available, the Original Concept Album that was released in 1984 will be used in reference to the lyrics of the songs, while for references to the staging, the images from William Hartson's book *Chess: The Making of a Musical* (London, 1986) and bootlegs of the more contemporary filmed *Chess in Concert*, which took place in 2008, starring Josh Groban as Anatoly, Idina Menzel as Florence and Adam Pascal as Freddy.

¹¹⁶ The book is the name for the script in a musical. Different from scripts for other works of art, such as film, most of the time, the book of a musical does not only contain the spoken dialogues, but also seeks to integrate the musical numbers and dances into the plot. *Chess* started as a concept album, in which not all plot points were fully developed yet; however, for its premiere on West End, a complete book was written by Tim Rice. For a concise overview of the different kinds of musicals and the role of a book in them, see: Musical Stages, 'Different Types of Musical', retrieved from <http://www.musicalstages.co.uk/different-types-musical/>, accessed on March 30, 2020. Site last refreshed in 2020.

The Story of Chess: Historical Accuracies and Inspirations behind the musical

In *Chess, The Making of the Musical*, Rice explains why he chose chess as a metaphor for the Cold War:

'Chess is something which brings otherwise ordinary people together in East-West Confrontation.'

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In the same book, the inspirations of the musical are traced back to two main events, namely the Cuban Missile Crisis of 1962 and the chess match between Bobby Fischer and Boris Spassky in 1972.¹¹⁸ The personalities of Fischer and Spassky found their way into the musical, with Fischer's impulsive and sometimes even explosive nature as well as the latter's open disdain of Communism and the Soviet Union, being strongly mirrored in his fictional counterpart Freddie Trumper. His fictional Soviet counterpart, Anatoly Sergievsky, was not only based on Spassky, but also on Viktor Korchnoi (1931), especially the plot point in which Sergievsky, like Korchnoi did in 1976, defected to the West. In 1981, Rice also went to Merano, Italy, where the world chess championship between Korchnoi and Anatoly Karpov took place that year. This provided Rice with the inspiration to let the first act of the musical take place in the Tyrolean town.¹¹⁹ Rice also met chess players such as Anatoly Karpov in person while the latter stayed in England in 1983 and 1984, and by observing Karpov's second¹²⁰ Vladimir and the huge Soviet delegation in Merano, Rice found a basis for the *Chess* characters in the Soviet camp, such as Molokov.¹²¹ However, *Chess* is certainly not meant to be historically accurate. For starters, there has never been an official chess tournament in Bangkok.

¹¹⁷ William Hartson, 'The Rice Gambit', in: *Chess: The Making of a Musical* (London, 1986), pp. 15.

¹¹⁸ Idem, 'The Chessmen', in: *Chess: The Making of a Musical* (London, 1986), pp. 10-12.

¹¹⁹ Idem, 'The Rice Gambit', in: *Chess: The Making of a Musical* (London, 1986), pp. 15.

¹²⁰ In chess, seconds, who are often former Grandmasters or World Chess Champions research their player's opponent thoroughly, analyzing previous games in which the opponent won. If possible, they come up with new ideas to tackle the opponent. Despite the title, the most well-known chess players usually have more than one second. Interestingly, the function of second is derived from the seconds that had to present in 'gentleman duels', which were relatively common in the Western world until the late 19th century. For more information on the role and importance of seconds in chess championships, see PTI, 'World Chess Championship: Role of the 'seconds'', retrieved from <https://www.thehindu.com/sport/other-sports/world-chess-championship-role-of-the-seconds/article5313784.ece>, published November 4, 2013, accessed on March 29, 2020, last updated May 26, 2016, as well as Jaideep Unudurti, 'Support teams in chess - All The King's Men', retrieved from <https://en.chessbase.com/post/support-teams-in-che-all-the-king-s-men>, published October 21, 2009, accessed on March 29, 2020, site last refreshed in 2017.

¹²¹ William Hartson, 'The Rice Gambit', in: *Chess: The Making of a Musical* (London, 1986), pp. 15.

The Game: The Literal and Figurative Presence of Chess in the musical

From the start, chess is both literally and figuratively present in the musical. Usually, a black-and-white-motif is used in the staging, and during the two chess games which actually take place on stage, a physical chess board is usually present. During the instrumental pieces of the show, in which the matches between Sergievsky and Trumper take place, the dancers also usually wear black and white clothes.¹²² Apart from the staging, the lyrics of the show often make references to chess. The opening song, 'The Story of Chess', tells the story of how chess emerged in India to become the game that is known today, and the climatic song of Act 2, 'Endgame', explicitly refers to the final stage in a chess match, reciting the names of various previous chess champions, such as Paul Morphy, Wilhelm Steinitz, Emanuel Lasker, Jose Capablanca and Max Euwe.¹²³ On a metaphorical level, chess also means something different to each of the characters. To both Freddie and Anatoly, chess is their life, and both men, at least in the first act of the play react bitterly to anyone who is stating otherwise. However, throughout the musical, it becomes clear that the Soviet side, minus Anatoly, also see chess as a war, a fact not only acknowledged by themselves, but also by the staunchly anti-communist Freddie, who states to Florence that the Soviets are 'playing with pawns/just like Poland'.¹²⁴ For de Courcey and Molokov, respectively the American director of Global Television which broadcasts both championships and Anatoly's second in the first act, chess and politics are interchangeable with one another; however, their reasons as to why they think so are different. While de Courcey mainly seems to take pleasure in getting views and stirring up controversy, Molokov also has to uphold the reputation of the famous Soviet chess school, and cannot afford to lose the match. Meanwhile, Florence, arguably the biggest loser at the end of the play, is caught in the middle.

Elements of Game Theory and the Reagan Doctrine in Chess

As stated before, it is somewhat unclear as in which period *Chess* is supposed to take place. For a play which satirizes and criticizes the Reagan Doctrine, any references to president Reagan, Gorbachev or any other political actor of the late Cold War are remarkably exempt from the play. Furthermore, unlike other late Cold War media products it does not contain any reference to nuclear fear, which is opposed to Daniel Cordle's insistence that:

*'The whole topography of the decade, comprising cultural, social, geopolitical, domestic political, economic, technological and scientific features, was both shaped by and shaped nuclear preoccupations.'*¹²⁵

Nor does *Chess* contain any references to events that marked the end of Détente and the start of the nuclear eighties, such as the war in Afghanistan (1979) and the war in Nicaragua, the

¹²² An example of this staging can be seen in this scene recorded of *Chess in Concert*, which shows the black-and-white staging in particular, can be found on Youtube: <https://www.youtube.com/watch?v=KgbIMLCicLA&list=PL2B2E7BEF76DA50FD&index=5> (especially 0:46 – 3:56).

¹²³ Remarkably, even Spassky, Fischer and Karpov are mentioned in the song, meaning that the real-life chess match between Fischer and Spassky must have taken place in this universe as well. Tim Rice, Bjorn Ullvae and Benny Andersson, 'Endgame', from: *Original Chess Concept Album* (1984), retrieved from <https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9J?si=0iW9uQwJTymdVUf7G0HwJw>,

¹²⁴ Tim Rice, Bjorn Ullvae and Benny Andersson, 'The American and Florence/Nobody's Side', from: *Original Chess Concept Album* (1984), retrieved from <https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9J?si=0iW9uQwJTymdVUf7G0HwJw>, from 1:03-1:08.

¹²⁵ Daniel Cordle, 'Protect-Protest: Introducing the Nuclear 1980s', in: *Late Cold War Culture and Literature* (Palgrave Macmillan, London, 2017), e-book retrieved from https://link.springer-com.proxy.library.uu.nl/chapter/10.1057/978-1-137-51308-3_1, accessed on September 21, 2020, pp. 1.

countries explicitly mentioned by Reagan in his State of the Union speech. Still, both the American and the Russian sides are extremely suspicious of one another. In one song, the characters even stress that right at the moment of the play, 'these are dangerous and difficult times'.¹²⁶ As to why exactly the climate is dangerous and difficult is not explained, but the scene suggests that the carefully orchestrated equilibrium is in fact fragile, and that behind the scenes, people from within are working to bring it down. Moreover, various characters in *Chess* liken their lives to a 'game', in which one has to pick a 'side'. In the quartet 'A Model of Decorum and Tranquility', sung between Florence, Molokov, the Arbiter and Anatoly, chess is explicitly seen as a model for the political problems, being described as 'a battleground for rival ideologies/to slug it out with glee.'¹²⁷

Of all characters in the play, it seems that Florence is the least willing of all to do so. This becomes especially clear in a scene between Florence and Molokov, who clearly have known each other for some time. While Florence is willing to keep politics out of the tournament, Molokov berates her for her non-cooperation:

Florence: Easy. You stop playing politics and you start playing chess.

*Molokov: - you would refrain from cheap political jibes at a time when cooperation between us is vital. Besides, I thought you would be reluctant to criticise fellow Eastern Europeans.*¹²⁸

However, at the same time, she, too, like the other characters has to acknowledge that she is part of a larger frame, such as when she sings:

*'Everybody's playing the game/But nobody's rules are the same/Nobody's on nobody's side/Better learn to go it alone/Recognize you're out on your own/Nobody's on nobody's side'*¹²⁹

Bipolarity and power politics are very much present in *Chess*. Especially in the song 'Dangerous and Difficult Times', sung from the Soviet side led by Molokov, the difference between the United States and the Soviet Union is stressed multiple times by stating that it is 'the US versus USSR'.¹³⁰ Although at the end of the song, Molokov admits that the tournament may have some good influence on the US-Soviet relations, it is clear that this will only happen on one condition, namely that the other party loses:

*'The value of events like this need not be stressed/When East and West/Can meet as brothers, ease the tension over drinks/Through sporting links/As long as your man sinks.'*¹³¹

¹²⁶ Tim Rice, Bjorn Ullvae and Benny Andersson, 'Opening Ceremony', from: *Original Chess Concept Album* (1984), retrieved from

<https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9j?si=0iW9uQwJTymdVUf7G0HwJw>, 2:51-2:53.

¹²⁷ Tim Rice, Bjorn Ullvae and Benny Andersson, 'Quartet' (A Model of Decorum and Tranquility), from: *Original Chess Concept Album* (1984), retrieved from

<https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9j?si=0iW9uQwJTymdVUf7G0HwJw>, 2:01 – 2:14.

¹²⁸ Tim Rice, 'London Production Script of *Chess*' (1986), retrieved from

<http://www.angelfire.com/musicals/peabody444/chesslon.htm>, accessed on September 21, 2019.

¹²⁹ Tim Rice, Bjorn Ullvae and Benny Andersson, 'The American and Florence/Nobody's Side', *Original Chess Concept Album* (1984), retrieved from

<https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9j?si=0iW9uQwJTymdVUf7G0HwJw>, 2:46-3:08.

¹³⁰ Tim Rice, Bjorn Ullvae and Benny Andersson, 'Opening Ceremony', from: *Original Chess Concept Album* (1984), retrieved from

<https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9j?si=0iW9uQwJTymdVUf7G0HwJw>, 2:37-4:33.

¹³¹ Idem, 4:21-4:33.

However, despite the strong words, behind the scenes, the Americans (as portrayed in the musical by the Courcey) and Soviets (as portrayed by Molokov) work together for their own benefit. The stress on bipolarity becomes even more clear due to the almost exclusive focus on the relations between the United States and the Soviet Union. Although the play does not take place in either the United States or the Soviet Union, but in Italy and Thailand, the latter two countries merely serve as a dioramic background for the real conflict between the two superpowers. The only person who seems to be impartial is the Arbiter, whose nationality is seemingly deliberately left ambiguous. His no-nonsense attitude to the Cold War dynamics can be seen multiple times in the show, most notably during the song 'Opening Ceremony', in which he declares to both Freddie and Anatoly:

*'This is not the start of World War Three/No political ploys/I think both your constitutions are terrific so/Now you know, be good boys.'*¹³²

Like in game theory, the characters in *Chess* often also seem to deal in absolutes. It is either winning or losing, with the latter being the least preferred option. Especially the Soviet side is candid about their intentions regarding the chess match between Fischer and Spassky, when they state that:

*'It really doesn't matter who comes out on top/Who gets the chop - No one's way of life is threatened by a flop - But we're gonna smash their bastard/Make him wanna change his name/Take him to the cleaners and devastate him/Wipe him out, humiliate him/We don't want the whole world saying/They can't even win a game/We have never reckoned/On coming second/There's no use in losing'*¹³³

The Cold War in *Chess* is presented a bipolar zero-sum game, in which chess is an all powerful and surrounding mechanism, in which politics are intertwined. The focus is not to reflect on the global political context of the Cold War. Rather, it offers an exaggeration of the sentiment that was alive during the late Cold War.

¹³² Idem, 1:34-1:45.

¹³³ Idem, 3:21-3:57.

Conclusion

The answer to the question at the front of this thesis, namely 'to what extent can the metaphor of power politics as resembling a game of chess be accurately used to describe the polarity between the United States and the Soviet Union during the period of the Reagan Doctrine', is very much layered. First, it requires an explanation of terms such as power politics, polarity and the Reagan Doctrine. Secondly, the concept of a metaphor and the application of metaphors by both political and cultural actors has to be researched. Finally, the metaphor of power politics being like a game of chess, the assumption of which forms the backbone of this thesis, then has to be applied to chess, which requires a basic explanation of the rules and workings of the board game. In order to accurately address each of these components, game theory was used as the main theoretical framework throughout all the four chapters of this thesis, which each sought to answer a part of the research question.

The first chapter explicitly focused on political game theory, tracing how game theory from its conception by Von Neumann and Morgenstern was studied to be used for military and economic purposes during the Cold War. The chapter also discussed whether there are possible connections between game theory and chess, and to what extent chess and game theory correspond to one another, as well as to the respective concepts of polarity and power politics. From this chapter, three conclusions can be drawn. First, it has found that fairly quickly from its origins, game theory was quickly adapted by scientists and scholars as a way to study the Cold War on both the Western and Soviet sides, although the former took on the study of game theory much earlier than the latter. Several notions, such as the Prisoner Dilemma, the Chicken Game and Mutual Assured Destruction (MAD), have been derived, whether directly and indirectly, from the study of game theory. Secondly, the chapter also established that there are two connections between chess and game theory, with chess not only having had an importance on the the development of game theory, but also by the shared stress on strategy. Finally, chess and game theory can be linked to polarity and power politics in the concept of a 'zero-sum' game.

In the second chapter, the Reagan Doctrine of the late 1980s was analyzed in terms of game theory, polarity and power politics, with the State of the Union Speech of 1985 taken as the initial starting point of the policy. However, by studying the Reagan Doctrine, a new argument, which places the origins of the Reagan Doctrine as early as 1979, emerged. Therefore, the State of the Union speech must not be seen so much as the start of the Reagan Doctrine, but merely as the formal and public formalization of an already existing policy. In the analysis of the State of the Union Speech and other documents of the Reagan Doctrine, no explicit references to game theory were found, except for the notion of Mutual Assured Destruction (MAD), which Reagan himself strongly opposed. In contrast, the implicit, but obvious allusions to polarity and power politics Reagan used in regards to the US-USSR relationship was a strong break with the more diplomatic rhetoric his predecessors had professed.

In the third chapter, the chess game metaphor was explained in terms of visual, symbolic and political meanings that have been attached to the game in the histories of both the United States and the Soviet Union. The main conclusion drawn from this chapter is that there is not one metaphor that can be attached to chess. Rather, there is a plethora of symbolic, visual and political meanings and metaphors that can be attached to chess, which has been mirrored in the use of chess metaphors in art and media. During the Cold War, the metaphor of the Cold War as being one global chess game seems to have become especially important during the periods of the Cuban Missile Crisis and Détente, with in the latter period the World Chess Championship between Bobby Fischer and Boris Spassky being of particular notice. Still, the link between chess and superpower politics remained during the whole Cold War, although alternatives such as boxing and poker were in use as well. Ultimately, however, although chess, in its black-and-white presentation of the Cold War lends itself well for simplified representations of Cold War

conflicts, it is less applicable when it is used in comparisons of strategy, for the static nature of chess does not reflect the much more improvised rather than calculated nature of the Cold War.

In the fourth chapter, game theory, the Reagan Doctrine and chess metaphors came together in the analysis of the plot, lyrics and staging of the musical *Chess*. It found that although the play was written and staged in the late eighties, it does not contain explicit criticisms of the Reagan Doctrine. Rather, it seems to pan the anxious and unnuanced political climate which had emerged under the Reagan administration by presenting how bipolar notions ultimately results in innocent victims finding themselves being played. The chapter argues that *Chess* is an unique, underused source in the studies of Cold War culture in that its use of the chess game metaphor reflects both on the literal presence of chess during the Cold War while simultaneously presenting the period itself as a chess game.

The answer to the question to what extent chess can serve as an accurate metaphor for the polarity between the United States and the Soviet Union during the late Cold War is that the metaphor ultimately comes up short both in the visual-symbolic and literal meanings attached to the game. By its construction as a two-player game and its visual representation of black versus white, it fails to include the agency of the countries over which the power politics between the two superpowers were played out. Furthermore, by stressing the strategical elements of chess over the infinite ways the game can be played, the metaphor also falsely presents the Cold War as a merely tactical game. This while in reality, more often than not, the delicate balance of power between the two super states was only upheld by the elements of chance and luck – elements which are absent in the game of chess. As the chess game metaphor has enjoyed a fair amount of popularity during the Cold War, it is not necessary to do away with it in the study of Cold War history; however, scholars should always be cautious and question the use of metaphors and analogies, especially those which, like chess, have become so omnipresent that they are often taken for granted.

There are two topics raised in this thesis that are left somewhat unattended and are deserving of theses of their own. First and foremost, although the thesis touches upon several uses of the chess game metaphor during the Cold War, due to the scope of the paper, it ultimately cannot address how far the reach of the use of the chess game metaphor was during the Cold War, as well as whether the use of the chess game metaphor changed according to country. A quantitative research of chess metaphors could perhaps assess whether the chess game metaphor was as all-reaching as this thesis often seems to imply. Secondly, while chapter 3 briefly touches upon the observation that especially during the 1980s, the boxing match metaphor for the Cold War gained some momentum and suggests that this may be linked to the more aggressive stance the United States under Reagan took against the Soviet Union, it does not adequately address what new insights this metaphor for the Cold War offers in comparison to chess. Further research into the use of sports-metaphors for the Cold War is needed to prove whether this suggestion raised in this thesis is right. On a final note, as a historical thesis, there was no space to evaluate the uses of chess metaphors today. This shows that research on chess has not entered the phase of endgame yet. There is still a world to win there.

Bibliography

Note: In the bibliography, the sources are sorted to their appearance in the chapters in which they are used. The images and primary sources are separately noted.

Images

Title Page

- Anonymous, 'Precipice', retrieved from <https://store.steampowered.com/app/951670/Precipice/>, accessed on March 1, 2020. The original image has been cropped by me.

Chapter 3

- **Figure 1:** Guðmundur Daníelsson, 'Untitled' (1972), retrieved from <https://www.chesshistory.com/winter/extra/spasskyfischer.html>, accessed on February 25, 2020.
- **Figure 2:** Guðmundur Daníelsson, 'Untitled' (1972), retrieved from <https://www.chesshistory.com/winter/extra/spasskyfischer.html>, accessed on February 25, 2020.
- **Figure 3:** Bill Maudlin, 'Rough Year for the Russians' (1971) retrieved from <https://www.pritzkermilitary.org/explore/museum/digital-collection/view/oclc/1062364761>, accessed on March 25, 2020.
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Attachments

Attachment 1: Plot Summary of *Chess* (1986)

Plot Summary

The plot of *Chess* takes place over two years. In the script of *Chess*, it is left ambiguous as in which two years *Chess* is supposed to take place. However, the fact that the match between Fischer and Spassky is the last match mentioned in the song 'Endgame' suggests that the play takes place at least after 1972.¹³⁴ On the other hand, Freddie's lines 'On the people (referring to the Soviets) who ran/Mindlessly over your (Florence's) childhood/Don't let them fool you for/Thirty years on they're the same', which is followed by a repetition of the lyric '1956/Budapest is rising' in the song 'The American and Florence/Nobody's Side', would place the musical in 1986 – the same year that the musical was staged for the first time.¹³⁵ Whether this line was intentional to remind the audience that they were still in a Cold War, serves as a future prediction on the outcome of the Cold War or is a mistake of inconsistency from Rice's side is not known.¹³⁶

Prologue

The Original West End Play starts with a song on the history of chess, detailing how the game developed from a fight between two Hindu kings into the board game that we know today. The mysterious and all-knowing Arbiter, who serves both the narrator and as president of the International Chess Federation as one of the lead characters of the play, announces with that the next Chess World Championship between the American chess player Frederick 'Freddie' Trumper and the Russian Anatoly Sergievsky, will take place in Merano, Italy.

Act 1

While the citizens of Merano welcome the audience to the town in the Tyrol mountains, a disgruntled Freddie and his second in arms, the beautiful Hungarian-born Florence Vassy, arrive on the scene. From the start, it is heavily implied that the two share a bond that goes beyond their professional relationship; however, soon, it also becomes clear that their relationship is all but smooth sailing. In one of the first scenes, in which Freddie is questioned on the upcoming match, Florence is left to tamper Freddie's impulsive nature without getting any respect from the latter in return. Meanwhile, Anatoly is warned by his second, Alexander Molokov, of Freddie's insanity, which the former refuses to believe is the case. When Molokov tries to stress how to the Soviet Union the chess tournament is much more than a sports event, Anatoly angrily dismisses him. However, during the opening ceremony and the subsequent match, it becomes clear that Molokov's opinion about the championship being more than just a sports tournament

¹³⁴ The match between Fischer and Spassky is mentioned by the ensemble from 3:46 to 3:49. Bjorn Ullvae, Benny Andersson and Tim Rice, 'Endgame', from: *Original Chess Concept Album* (1984), retrieved from <https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9J?si=0iW9uQwJTymdVUf7G0HwJw>.

¹³⁵ Tim Rice, Bjorn Ullvae and Benny Andersson, 'The American and Florence/Nobody's Side', from: *Original Chess Concept Album* (1984), retrieved from <https://open.spotify.com/album/6WdkjtZxUq9uBc2lVQjY9J?si=0iW9uQwJTymdVUf7G0HwJw>, 0:32 – 0:54.

¹³⁶ Meanwhile, *Chess in Concert*, which was held in 2008 and has been seen by Tim Rice, who attended the premiere, as the official version of the musical ('I think at last, we're getting it right', 0:47, <https://www.youtube.com/watch?v=j7NhOb1CbHs&list=PL2B2E7BEF76DA50FD>), firmly places the play in 1979 and 1980, as can be seen in the following clips: https://www.youtube.com/watch?v=U_4AXI30wHA&list=PL2B2E7BEF76DA50FD&index=2 (0:03) and https://www.youtube.com/watch?v=U_4AXI30wHA&list=PL2B2E7BEF76DA50FD&index=2 (4:22).

is prevailing over Anatoly', when during the match, Freddie suddenly throws the chess board to the floor and leaves. Florence, together with the Arbiter, Anatoly and Molokov, is left to negotiate on Freddie's behalf that it was foul play on the Soviet part. It later becomes clear that Freddie's departure was a deliberate move to extract more sponsorship from Walter de Courcey, the American owner of Global Television, the media company (which seems to almost exclusively report on the match during the musical). When Florence manages to track down Freddie and confront him on his behavior, Freddie angrily accuses her of betraying her own Hungarian background by fraternizing with the Soviets. It is revealed to the audience that Florence's father disappeared during the Hungarian Revolution of 1956 and never returned, implying that he was either captured or killed by Soviet troops. Being painfully reminded of the absence of her father and having endured Freddie's frantic nature for far too long, Florence vows to leave Freddie for once and for all, and leaves for the meeting scheduled between Anatoly and Freddie to resolve their differences. With Freddie having left to renegotiate his financial terms with Global Television, Florence and Anatoly, for the first time, are left to their own. Although they are unsure of the other's intentions, it becomes clear that the two are slowly getting attracted to each other; however, Freddie's return cuts any romantic action short, and the three return to the tournament to resume the match. Now longer supported by Florence's love, Freddie puts no real effort in winning the match anymore, leaving Anatoly the winner. Anatoly takes no time to enjoy his victory however, for he, with Florence's aid, defects to the British embassy soon after. De Courcey is informed of the scandal and does not hesitate to inform the rest of the press, leaving Anatoly to deal with reporters. When asked by one whether this means he will leave his homeland behind forever, he replies that he will never leave the Soviet Union behind, as it will stay in his heart wherever he goes.

Act 2

Act 2 takes place in Bangkok, Thailand. One year after the last World Chess Championship, Anatoly is set to defend his position as world champion. As Freddie has quit playing chess after his defeat, now working as a commentator for Global Television under de Courcey's tutelage, Anatoly will now face a new opponent, Leonid Viigand, a new Soviet chess player whose chess-playing style has been likened to that of a machine. It becomes clear that after his defection, Anatoly and Florence have entered a romantic relationship and live in London together, where Anatoly has been granted political asylum. Their troubles, however, are far from over, as they worry what strategies Molokov, who, despite having Viigand as his new poster boy, still feels betrayed by Anatoly's defection, will use to break the two of them up and to let Viigand win the match. Molokov's tactic comes in the form of Anatoly's estranged wife, Svetlana, whom has been asked by Molokov to come to Bangkok in order to convince her husband to deliberately lose the match and return to the Soviet Union. Already suspicious of Svetlana's intentions, Anatoly is further embarrassed when he loses his temper during a tense, live interview with Freddie. Meanwhile, de Courcey, who in secret works together with Molokov, tells Florence that her father is still alive but imprisoned in the Soviet Union, and that if she manages to convince Anatoly to lose the match, the Soviet Union might let her father go. Florence is not convinced, but the news manages to flare new hope in her. Anatoly, however, manages to stand his ground, and doing so, estranges himself from Florence. Even the coordinated effort of de Courcey and Molokov to use Freddie, who is still bitter over his loss of his match to Anatoly as well as Florence's love to the latter, as their last resort, does not persuade Anatoly to change his ways. Meanwhile, Svetlana and Florence meet one another, and, in a surprising move, manage to bond over their shared, though troubled, love of Anatoly. It is then that Florence decides that it would be best for Anatoly to return to the Soviet Union. Anatoly, for the last time, is confronted by Freddie, who claims to have decided to put their past behind him. As a boon of his trust, Freddie tells Anatoly about a flaw in Viigand's chess-playing style, which, if used to his advantage, will

help Anatoly win. Deeply distrustful but curious, Anatoly decides to accept Freddie's boon. The match between Anatoly and Viigand ensues, with the two men clearly being a match to one another. During the match, both Svetlana and Florence voice their irritations towards Anatoly, which the latter dismisses, seeking instead to focus on his chess playing at the moment. He eventually wins the match against Viigand, but whether the final, deciding blow is due to Freddie's involvement remains unclear.

After the match, Anatoly and Florence, having realized that it would be best for Anatoly to to the Soviet Union, say their final goodbyes to one another. Anatoly soon defects back to his homeland, meaning, as de Courcey tells Florence, that her father will be released soon. In the end, however, de Courcey reveals they have no real way of knowing whether Florence's father is truly alive. It is then that Florence realizes that she too has been used for someone else's gain, and having lost her lover and her father all over again, breaks down, defeated.