

May 01, 2011

Chess: the preface to a technical resource for sociology

Michael W. Raphael
Northeastern University

Recommended Citation

Raphael, Michael W., "Chess: the preface to a technical resource for sociology" (2011). *Honors Junior/Senior Projects*. Paper 71.
<http://hdl.handle.net/2047/d20002589>

This work is available open access, hosted by Northeastern University.

NORTHEASTERN UNIVERSITY

DEPARTMENT OF SOCIOLOGY & ANTHROPOLOGY

CHES:
THE PREFACE TO
A TECHNICAL RESOURCE FOR SOCIOLOGY

MICHAEL W. RAPHAEL

2011

SENIOR HONORS THESIS

ADVISOR: MICHAEL E. BROWN, PH.D.

Submitted in Fulfillment of the Honors Program's

Junior/Senior Honors Project

© 2011
Michael W. Raphael
All Rights Reserved.

Please direct correspondence to:

Michael W. Raphael,
School of Criminology & Criminal Justice,
431 Churchill Hall,
360 Huntington Avenue, Boston, MA 02115
or michael.w.rafael@gmail.com.

This paper is dedicated to the memory of

Eric Lawrence Raphael

Who nurtured these ideas in their youth...

Chess: The Preface to a Technical Resource for Sociology

Michael W. Raphael
Northeastern University
April 2011

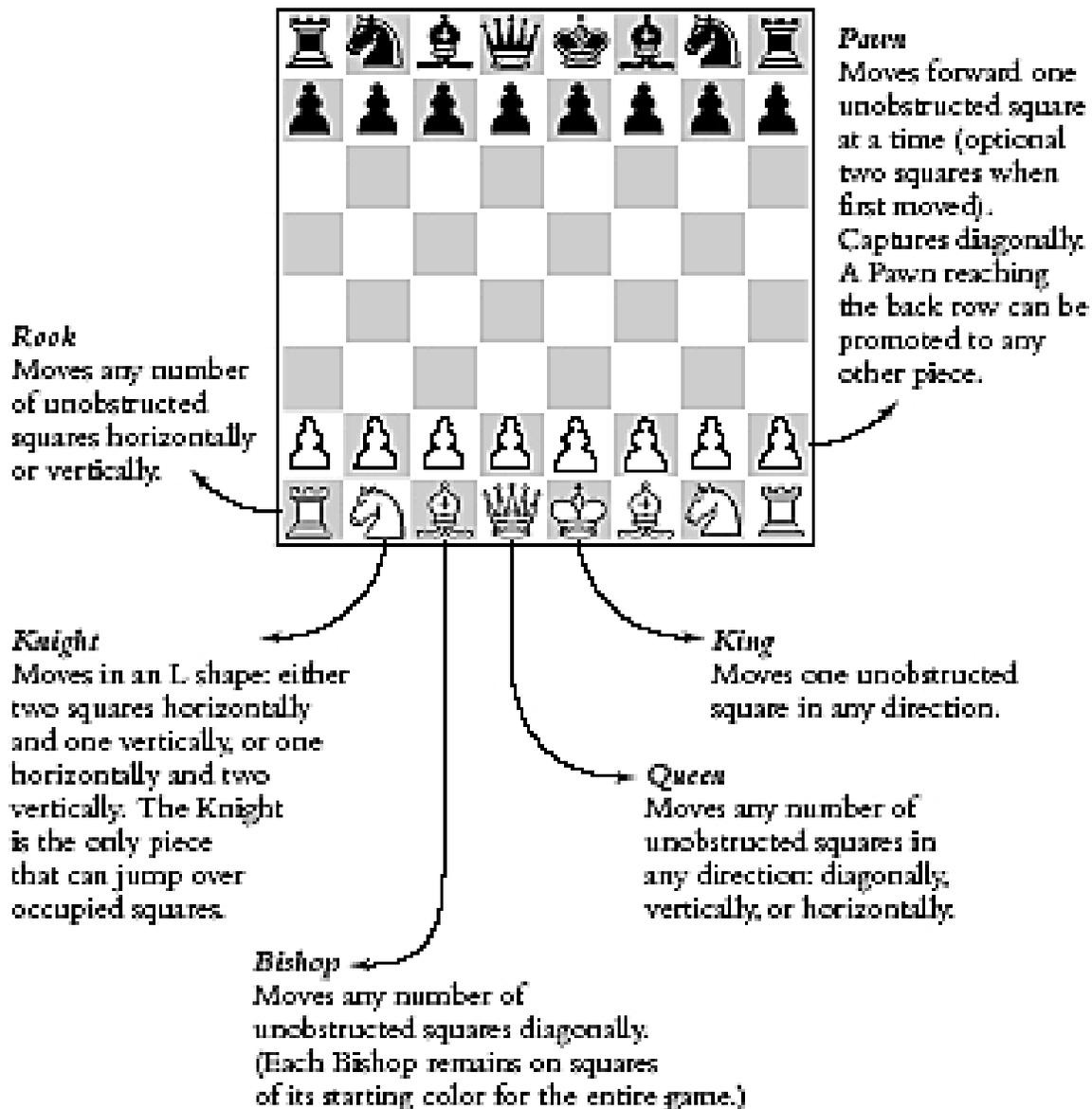
Abstract

The metaphorical applications of chess to life date back prior to the thirteenth century and are still operating in modern narratives across many disciplines. The definition of “chess” varies across these narratives – some of which are problematic for moving beyond the mere “chess” metaphor. Based on the authorities found in the John G. White Collection at the Cleveland Public Library, this thesis explores the problem of defining “chess” such that the sociological/phenomenological form of “chess” is developed and intelligible enough to show that it cannot be translated by a theory of games. Rather, it should be understood as a preface to the development of a social logic that can enlighten scholars about social interaction and social life in general.

Keywords

Chess; Cognitive Sociology; Phenomenology; Sociology; Four Principles of Chess; Force Dynamic; John G. White; Interaction Order;

Pieces and Moves



From Shenk, 2006; for more rule details, please see <http://tinyurl.com/rulesofchess>

Table of Contents

Introduction	1
Literature Review.....	2
The Method of Chess in Philosophy	6
Transcending Philosophers.....	8
<i>A Technical Resource</i>	9
Sociologies	10
<i>Dramaturgical Sociology</i>	11
<i>Cognitive & Semiotic Sociology</i>	12
The Problem of Defining “Chess”	13
The Mythological, Etymological & Genealogical Odyssey of ‘Chess’	14
The Problem of Cognitive Individualism & Cognitive Universalism in Defining “Chess”	21
<i>The Game Theoretical Case</i>	21
<i>The Rational Choice Theoretical Case</i>	22
<i>Addressing the Non-Social Thinker</i>	22
The Abstraction of “Chess”.....	24
<i>How Life Imitates Chess</i>	26
The Thought Experiment of Chess	27
The Perspective of the King	28
The Four Principles of Chess	30
<i>The Norms of Force</i>	31
The Four Principles of Chess Defined in the Social World.....	32
The Force Dynamic	33
Conclusion	35
Bibliography	37
Appendix A: Materials Consulted From J.G.W. Collection	43
Appendix B: <i>On the Morals of Chess</i> by Dr. Benjamin Franklin	46
Appendix C: What is Chess?	51
Appendix D: Anglo-Irish Politics: A Painting of the Game	55
Acknowledgements	57

Chess: The Preface to a Technical Resource for Sociology

Michael W. Raphael
Northeastern University
April 2011

Introduction

Chess is historically invoked to “allegorize life and morality” (Bingham, 1900) through the use of symbolism, analogy and metaphor. This practice is so widespread that it is tempting to conclude that the game, its rules and nomenclature arise within and are reflections of socio-histories and social life. The power of “chess” in its symbolic, analogical, or metaphorical form is acknowledged by intellectuals ranging from artists, poets, and historians to mathematicians, social scientists computer scientists, theologians and philosophers. Chess has given rise to breakthroughs in psychology and computer science and has contributed to our understanding of jurisprudence, anthropology, and game theory.

Curiously, the use of chess in its metaphorical/analogical form has become so frequent within philosophy that to invoke “chess” is now to participate in what has been coined as “the method of chess in philosophy.” However, this form presents the problem of defining or categorizing ‘chess’ beyond the limitations posed by its typical use as metaphor or analogy. If chess is perceived as a ‘game’, it cannot be a technical resource for analyzing social life since no reasonable person would willingly accept the idea that life is a ‘game.’ On the other hand, if such analogies and metaphors are allowed to extend beyond their rhetorical form, it is possible to see chess not as a game but as a sociological/phenomenological analytical scheme that adds a dimension to the social world itself. In that case the possibility is opened for it to be considered a

technical resource for sociology derived from an analytical logic inherent in chess. I will refer to this resource as a sociological/phenomenological form of analysis.

The aim of this thesis is to consider the problem of defining ‘chess’ such that the conception of the sociological/phenomenological form of chess is intelligible enough to show that this form is not translatable as a *theory of games* but should be understood as a social logic.

Literature Review

A close examination of the twentieth century literature, reveals considerable disagreement among authorities about whether chess is only a game, and should be consigned to the realm of symbolism, analogy and metaphor, or provides a possible foundation for a social logic that transcends “the mere chess metaphor.” (Pietarinen, 2008:132) However, even a review of earlier works and annotated bibliographies, during my visit to the John G. White Collection at the Cleveland Public Library¹ and by my subsequent research, suggests the existence of a considerable prima facie authority for ‘chess’ to go beyond mere metaphor.² The English literature is summarized by Mark N. Taylor, a professor of English at Berry College, the editor of Georgia Chess, and an expert on the subject of chess in literature. In the *Foreword* to Howard Goldowsky’s anthology of chess fiction, *Masters of Technique*, he describes the depth of the chess motif:

“Chess motifs are not isolated phenomena, nor is chess fiction the domain of an esoteric cult (as chess itself is sometimes misunderstood). Being social creatures, humans are inveterate game players, inevitably finding themselves--willingly or not---caught in zero sum competitions: we win, we lose, or we draw our way through interactions with our fellows. It is no surprise, then, that chess, the king of games, should have become the

¹ The John G. White Collection is the largest collection of literature in the world with more than 30,000 volumes of monographs, serials, and manuscripts on chess or containing chess-motifs.

² For a list of materials consulted at the collection, please refer to *Appendix A*. The visit to the archive involved extensive bibliographical work as well as reading documents and duplicating material from them. This was supported by a generous *Honors Undergraduate Research Award 2010-2011* from the Faculty Committees of the Northeastern University Honors Program.

game metaphor, *par excellence* by which writers explore through their fiction humanity's various social interactions and psychological states. Opposing players, their possible moves, and the good or bad resulting from their strategies comprise the stuff of narrative as well as of chess. All literary chess metaphors can be ordered into two basic motifs: chess as life and life as chess--the literal and figurative applications of chess to life. Persian literature has preserved the earliest chess metaphors, and by the thirteenth century we find in Europe the metaphorical applications of chess that are still operating in modern narratives. For example, breaking with the old state-as-body metaphor, Jacobus de Cessolis re-imagines the citizens of the state as the array of pieces on the board. Medieval authors developed the chess metaphors we use today, just as medieval players transformed the Persian game into the chess we play today." (Taylor, 2010: 9-10)

While Taylor's distinction between the literal and figurative applications of chess to life is not altogether clear, it seems that the former implies a different relationship between the metaphorical signifier (chess) in the figurative case from the latter. In other words, it may be that hidden beneath the widespread and long lasting historical use of the figurative motif is an intention somewhat different from the intention to represent dramatically. In other words, it may be that the figurative motif, by far the most common one, effectively gives rise to what I take him to mean by the 'literal motif.' For through the course of its use, and the progressive expansion of its range, and even the eventual obsession with it, the figurative motif becomes effectively descriptive – not as an analogy but as something more abstract that comprehends both the “game” of chess and life as such. What was once mere metaphor becomes a possible way in which the object, life, makes itself apparent as something capable of analysis. But now the fit of chess to life is not dependent on the shape, meaning, or moves of the pieces, nor on the rules of the game, but on something abstract of which those features merely indicate an instance. It does not follow from this that the figurative motif vanishes, only that it is now combined in ways I hope to show with the literal motif, creating a mode of analysis that is both analytical and literary, in effect, technical and humanist.

The thirteenth century priest Jacobus de Cessolis discussed this metaphor in *Liber de moribus hominum et officiis nobilium* (Book of the Manners of Men and the Offices of the

Nobility) or more commonly known as *The Book of Chess*. The significance of his observation is not found by examining it alone but in the context of the historical transition of the understanding of chess from game to allegory. This transition is documented by H.L. Williams in his translator's preface to de Cessolis, leading him to conclude that,

“The appeal of the [chess] morality, as of any good story, is timeless because allegory, finally, is not based merely on a likeness but on the true nature of a thing --- in this case, of life.” (Williams, 2008: vxii)

This is the point at which the figure of speech becomes a description.

Williams's point is that the connection of chess to life may have to do with the nature of life itself. Thomas H. Huxley, the finest comparative anatomist of the latter nineteenth century, in his short essay, *The Game of Life*, hinted at the same point:

“Suppose it were perfectly certain that the life and fortune of every one of us would, one day or another, depend upon his winning or losing a game of chess. Don't you think that we should all consider it to be a primary duty to learn at least the names and the moves of the pieces; to have a notion of a gambit, and a keen eye for all the means of giving and getting out of check? Do you not think that we should look with a disapprobation amounting to scorn, upon the father who allowed his son, or the state which allowed its members to grow up without knowing a pawn from a knight? Yet it is a very plain and elementary truth, that the life, the fortune, and the happiness of every one of us, and, more or less, of those who are connected with us, do depend up on our knowing something of the rules of a game infinitely more difficult and complicated than chess. It is a game which has been played for untold ages, ever man or woman of us being one of the two players in a game of his or her own. The chess-board is the world, the pieces are the phenomena of the universe, the rules of the game of what we call the laws of Nature. The player on the other side is hidden from us. We know that his play is always fair, just, and patient. But also we know, to our own cost, that he never overlooks a mistake, or makes the smallest allowance for ignorance. To the man who plays well, the highest stakes are paid, with that sort of overflowing generosity with which the strong shows of delight in strength. And one who plays ill is checkmated -- without haste, but without remorse. My metaphor will remind you of the famous picture in which Retzsch has depicted Satan playing at chess with a man for his soul. Substitute for the mocking fiend in that picture, a calm, strong angel who is playing with love, as we say, and would rather lose than win--and I should accept it as an image of human life.” (Huxley, 1868)

For the purpose of establishing the full authority for the *life as chess* motif, these

examples make a prima facie case for the idea of *chess as metaphor* but also for seeing how the figurative use of metaphor leads to the profound reversal to the 'literal.' It is important to

separate the inclusive meaning of Taylor's distinction from his later discussion of a pathological instance of a literal attitude in which the individual becomes obsessed with what, for a more balanced person, is either a metaphor or a way of looking at some part of the world. There he refers to the "inability to integrate passion for the game into the rest of life" (Taylor, 2010: 11) like the obsessive 'chess personality' of Marcel Duchamp; and one might add Bobby Fischer to that list, when he said that "Chess is life," meaning that chess is all that really matters. The point I am making here has nothing to do with the attitude of a player, pathological or not; it has to do with the apparent fact that the pure metaphor gives way, of its own accord and never entirely free of its own logic, to the literal motif – in the sense of being about the world, or an aspect of it, and not merely a representational figuration of it. Again, the point is that the literal is realized within the figurative but introduces something new, namely the possibility of knowing something about life through something about chess. The breadth and depth of the tradition of both motifs are discussed in a manuscript in process by Mark N. Taylor. This will feature approximately 2000 entries under the title "Chess and Chessic Motifs in English Prose Narrative Since 1700: An Annotated Bibliography."

Other nineteenth century sources I inspected on my visit to the White Collection include *The Chessboard of Life* by Thomas Bowden Green (1876); *Morals of Chess* by E. A. in Volume 19 of *The Asiatic Journal* (1825); selections from *The Chess & Checker Columns* of the *Glasgow Weekly Herald*, *Illustrated News of the World*, *Tri-Weekly Gleaner*, & *The New York Clipper*. All of these provide rich support for the figurative motif but they express ambivalence about the literal motif perhaps because there was as of yet no theory of chess general enough to justify turning the motif into a principle.

It was in the twentieth century, in the midst of the cold war, that the accession of the literal motif as I understand it was beginning to be taken seriously. For example, in the summer of 1972,

“The Soviet world chess champion, Boris Spassky, and his American challenger, Bobby Fischer, met in Reykjavik, Iceland, for the most notorious chess match of all time. Their showdown, played against the backdrop of superpower politics, held the world spellbound for two months with reports of psychological warfare, ultimatums, political intrigue, cliffhangers, and farce to rival a Marx Brothers film.” (Edmonds, 2005; Cf. Johnson, 2008)

This game seemed to concentrate real world events in a vision of chess that took its audience beyond the metaphor, the figurative motif, or at least pushed the metaphor beyond its normal limits.

Regardless of how one interprets the works collected in these sources, the literature exposes a gap between the idea that chess and life are complexly related and the idea that there is something about chess, other than its service as a metaphor, that can enlighten scholars about life in general. This thesis proposes to develop a way of filling the gap by simplifying the logic of chess in a way that recasts it as a technical resource for analyzing the social dimension of human affairs, thus prompting a return to the literal application of the chess metaphor and chess-life relationship within philosophy.

The Method of Chess in Philosophy

Philosophy Looks at Chess is a collection of essays exploring philosophical themes at work in the game of chess. (Hale, 2008) Bill Martin, a Professor of Philosophy at DePaul University, wrote a chapter entitled “The Difficult Ways of God and Caïssa” that discusses chess, theodicy, and determinism in the work of Hans-Georg Gadamer. Martin begins by saying that “There is something of an underground tradition of philosophers who have found chess to be useful in discussing philosophical problems.” (Martin, 2008: 89) Life, posing a major

philosophical problem, would seem like a good candidate for the continuation of this ‘underground tradition.’ Martin names this tradition “the method of chess in philosophy.” However, if this tradition is taken only as depicting “chess with how it is depicted in films or novels (and sometimes paintings)” meaning very poorly, chess would be better off without it, and so would life. Fortunately, Martin asks, “Does it matter if a philosopher ‘gets chess right?’” and answers ‘yes’ if the fit between the argument and analogy is ‘presumably very tight’. After all, it is notable that the collection was not titled, *Chess Looks at Philosophy*. However, if the

“Chess analogy is not entirely accurate in its portrayals of chess, there still might be some support for the more general philosophical argument. After all, analogies are only supposed to go so far. Still chess seems particularly well suited to making at least some kinds of arguments in philosophy. When chess is invoked one would hope that the philosopher gets things right. (Martin, 2008: 89-90)

Although Martin himself, along with several others in the volume, do not quite ‘get things right’, there is still a ‘romantic’ desire to provide “support for the more general philosophical argument,” that chess may be important to though it is not necessary for philosophy. A stronger version is nevertheless included in the same volume. Ahti-Veikko Pietarinen’s essay seeks “to uncover the complex network of thinkers who have given rise to the synergy of games and the philosophy of language.” He found that “thoughts on games and language are found in the writings of Charles S. Peirce, Edmund Husserl, Ferdinand de Saussure, Ludwig Wittgenstein, L. E. J. Brouwer, Paul Grice, and Jürgen Habermas” where “each has also used chess as an example to make his point.” Pietarinen asks, “Is the game metaphor in general, and the chess/language analogy in particular, worthy of serious philosophizing?” (Pietarinen, 2008: 120) He concludes that “over and above the chess analogy, language use unearths a rich frontier for strategic interactions, which has only recently started to be probed in full generality.” (Pietarinen, 2008: 132) Such a conclusion appears to present a proverbial “thumbs up,” though it is still the idea

that chess is fully understood as a zero-sum game. However, the following quotation suggests that Pietarinen remains ambivalent:

“Games as a comparison with language are no illustration of Vaihingerian philosophy, or something that was termed by Harré “the weakest of all forms of theory— the use of metaphor.” Nor is it any resort of theoreticians of science engaged in the process of trying to select the “candidate for reality” from among the multiplicity of models (Harré, 1961: 26). Nor should the game paradigm be confined to the loose metaphor of the “finite versus infinite games” we get to choose in social life (Carse, 1986).

What the allegory represents is a serious and deep-seated philosophical problem concerning the relationship between thought, language, and reality. All told, we have a concept that marries philosophical thinking with scientific methodology, such as the theory of games and rational decisions, linguistic pragmatics, logic and countless others. However, those disciplines have positively advanced beyond the mere chess metaphor. After all, from a game-theoretic perspective, chess is trivial. It is a two-player, non-cooperative, strictly competitive (save for the draw conventions), and finite-horizon (save for the stop rule) game of combinatorics, having no hidden information and no signaling or screening of moves.” (Pietarinen, 2008: 132)

One might admit that Pietarinen is correct in asserting the triviality of chess but only from the point of view of game theory, which pre-empts considering the realization of the ‘literal’ motif out of Taylor’s ‘figurative’ motif in regard to its more profound implications. Pietarinen’s list of philosophers who make use of chess in fact goes considerably beyond the game-theoretic perspective and the figurative motif, suggesting that what is at stake in the relation of chess to philosophy is more than the limited validity of the metaphor or analogy. It is how chess can be considered worthy of serious philosophizing, and by extension, of sociological theorizing. The tightness of fit between the argument and analogy is less the issue than whether or not there is a way of analyzing provided by chess that, independent of analogy, sheds light on human affairs that eludes other analyses.

Transcending Philosophers

It is evident from the arguments of Martin and Pietarinen on the limits of analogies and metaphors, that Martin is reasonable in asserting that metaphors “are only supposed to go so far”

and that it is reasonable for Pietarinen to concur in regard to the “method of chess in philosophy.” But the reasonableness of this point vanishes when the metaphor is shown to transcend its rhetorical form as a figure of speech, and is considered in its sociological/phenomenological form, according to a strong interpretation of the literal motif. With all due respect to Pietarinen, this is by no means a trivial matter. Such an interpretation would require researchers to re-examine the limitations of the weak, but still positive interpretation that holds that characterizing chess as a metaphor for life is not enough. For it has been often noted that “philosophy tends to ignore what sociology can bring to philosophical analysis, thus leading to reductionist conclusions about human affairs.” (Brown 2009, 2010) This thesis will not make that same mistake because, although rooted throughout in sociology, its argument is intended to suggest that chess can no longer be taken as a mere metaphor nor is it adequately represented by the ‘game paradigm’ described by Carse. For, the historical transition from game to allegory, and from the recognition that the literal motif arises in regard to the limits of the figurative motif from within the latter, has produced the possibility of a foundation for a social logic that may be considered as a paradigm in itself and thus as a technical resource for sociology.

A Technical Resource

A ‘technical resource’ is an analytical tool, or logic, used within a paradigm. By its technical nature, it “gets things right” otherwise producing an implausible result. Whereas Martin mentioned that the fit between the argument and analogy can be presumed to be ‘very tight,’ here, there is no such taken-for-granted presumption. If it is a tight fit, this is in regard to the rules/laws of chess: that is, in regard to the type of analysis chess makes possible when its game aspect is properly subordinated to its aspects of what Goffman calls the “interaction order.”

In Thomas S. Kuhn's *The Structure of Scientific Revolutions*, a paradigm is a 'habit of reasoning,' or the proverbial "box", in the adage "thinking outside the box." From this point of view, thinking inside the box is identified with, in the case at hand, normal "social" science. "Thinking outside the box" would be what Kuhn calls revolutionary "social" science. In that regard, the philosophers who think of chess as a mere metaphor and game theorists who think of life as a merely a game are stuck inside the very box whose constraints they nevertheless lament, and within the confines of the 64 squares. Kuhn delineates the difference between operating inside and outside of the box, and concludes that a paradigm clarifies (1) what is to be observed and scrutinized; (2) the kind of questions that are supposed to be asked and probed for answers in relation to this subject; (3) how these questions are to be structured; and (4) how the results of scientific investigations should be interpreted. (Kuhn, 1962) The answers to these questions will substantiate the paradigm emerging in the growth of an interest in chess as an analytical tool for sociology and in the light of a strong interpretation of the *chess as life* motif that ascends from Taylor's *life as chess* motif.

Sociologies

The remainder of this paper attempts to show that it is plausible to consider chess as a source of a general analytic beyond what is revealed by a survey of authoritative writings about chess and life. For if chess is a technical resource in that respect, it is of fundamental importance to clarify what sociology or sociologies it lends itself to. I want to focus on one set of possibilities, namely that chess lends itself to dramaturgical sociology, to cognitive sociology and to semiotic sociology. In what follows I intend only a *prima facie* case, with some hints about how this might be developed further given this preface.

Dramaturgical Sociology

Before describing what feature of chess fulfills the idea of an analysis, it is important to describe what I mean in this case by “dramaturgical sociology” and how it fits the idea of chess as an analysis. Dramaturgical sociology was shaped primarily through the work of Erving Goffman and through an interpretation of Goffman according to the relationship between his work and that of Emile Durkheim. In this respect, Goffman’s roots lie in Durkheim’s *The Elementary Forms of the Religious Life*. It seems that this is not typically acknowledged in the sociological literature, perhaps, because Goffman has been framed as a ‘symbolic interactionist’ in the tradition of George Herbert Mead, a tradition quite different from Durkheim. The influence of Durkheim is visible just below the surface of his ethnographic and theoretical work, where there are echoes of ‘social facts,’ ‘sacredness,’ and ‘profanity.’ (See his studies, *The Presentation of Self in Everyday Life*, *Asylums*, and *Stigma*.) Bringing the relationship between Goffman and Durkheim to the foreground is justified by the desire to avoid some convenient and misleading criticisms of Goffman when he is read the sort of symbolic interactionist for whom meanings and the self are prior to interaction. A more accurate, and respectful interpretation sees Goffman as expressing a phenomenology in which metaphors are not just representations but invocations of a universe for which what is, for one reality, a metaphor operates in another reality descriptively. It is in this sense that *nonmaterial social facts can be said to become “coercive” in that they operate within a universe that is the ground of their effects*. What is phenomenological about this is that it says that immediate experience is always grounded in a greater reality – the totality of which constrains subjects and is therefore “lived”. This is consistent with the definition of “phenomenology” offered by *The Stanford Encyclopedia of Philosophy* where “the discipline of phenomenology may be defined initially as the study of

structures of experience, or consciousness. Literally, phenomenology is the study of “phenomena”: appearances of things, or things as they appear in our experience, or the ways we experience things, thus the meanings things have in our experience.” There meanings derive from the relational aspect of experience, which, by its nature, are expansive and transcendental. (Smith, Summer 2009 Edition) For this interpretation of Goffman, phenomenology involves the constant re-synthesis of the experience of the framed but constantly threatened self. In this regard, it appears worthwhile mentioning that Goffman’s *Frame Analysis* may be read as an attempt to develop an analytical tool for analyzing “phenomena.” In chess, every move is a framing operation, the implications of which are momentous within what Goffman refers to as the “interaction order.”

Cognitive & Semiotic Sociology

Cognitive sociology is explicated by Eviatar Zerubavel in his 1999 work, *Social Mindscapes: An Invitation to Cognitive Sociology*. He says that people think “(a) as individuals, (b) as social beings, and (c) as human beings.” (Zerubavel, 1999: 5) This relies on a distinction between the *subjective mind* where the “individualistic” mind produces “the unmistakably non-universal mental ‘software’ we use when we think” and *objective mind* where the ‘universal,’ mind produces a remarkably detailed picture of how people are cognitively ‘hard wired.’” Thus, though “some aspects of our thinking are indeed either purely personal or absolutely universal, [the fact is that] many others are neither.” A synthesis of these two views arrives at an inter-subjective view of the mind. This entails the existence of an integrative social world that transcends both subjectivity and objectivity and “can therefore be commonly shared by entire thought communities.” Zerubavel argues that this explains the remarkably similar manner in which different individuals actually perceive the world and classify its elements, focus their

attention, reckon time, assign meaning, and remember thoughts or experiences. (Zerubavel, 1999: 3) Semiotic sociology is implicit in this view, to the extent to which it focuses on the manner in which meaning is assigned, representations are shared, and “signifying matter” circulates in advance of the assignment of particular meanings to words, images, and gestures. My account of chess as a paradigm draws on a dynamic interpretation of “inter-subjectivity,” “thought community,” and the assignment of meaning.

The Problem of Defining “Chess”³

To accept the definitions posited by dictionaries,⁴ game theorists, and even some world chess champions is to undermine the premise of this thesis. These definitions typically start with an assumption that chess is nothing more than a ‘game’ and reduce the course of the activity to game play. It is this understanding that justifies the application of game theory, rational choice theory, and psychological analyses of players’ thought processes or behavior. By taking a psychological approach to what is significantly a sociologically cognitive phenomenon, one is distracted from the non-game or extra-game aspects of chess and therefore from the possibility that it provides a technical resource for understanding human affairs. Thus, a proper definition of chess and its basic principles needs to take account of its inter-subjective aspects, including the semiotic elasticity of signs, if it is to help us understand how what appears from one point of view to be a mere metaphor appears from another to be phenomenological in its form. For standard definitions limit any general application of the idea of chess to its capacity to serve as a

³ See Appendix C: What is Chess? to understand the vast array of definitions and its problematic nature should be clearer.

⁴ The Oxford English Dictionary defines chess as “a game of skill played by two persons, on a checkered board divided into sixty-four squares; each player having a set of sixteen ‘men’, consisting of king, queen, two bishops, two knights, two castles or rooks, and eight pawns; the object of the game is to place the adversary’s king in checkmate.” (1989)

mere metaphor. In what follows, I will try to allow an expansive sense of chess to emerge from a discussion of its history. In the light of that, I will consider the theoretical aspects of this emergent sense.

The Mythological, Etymological & Genealogical Odyssey of “Chess”

The way a ‘signified’ concept is attached to its signifier varies in how narrowly the former is delineated and how open the latter is to a conceptual field. The history of the relationship between the term, ‘chess,’ and what it has variously represented is an odyssey akin to the journey Homer gave Odysseus. While the exact inventor of chess is lost to history, myths of its origin abound and are endlessly romanticized. David Shenk synthesizes this interaction of history and myth in *The Immortal Game: A History of Chess, or How 32 Carved Pieces on a Board Illuminated Our Understanding of War, Art, Science and the Human Brain*, first describing its mythology and then presenting the beginnings of the recognition that there is more to chess than a game:

“The annals of ancient poetry and weathered prose are filled with many evocative chess stories, stretched over 1,400 years. Over and over, chess was said to have been invented to explain the unexplainable, to make visible the purely abstract, to see simple truths in complex worlds. Pythagoras, the ancient mathematician heralded as the father of numbers, was supposed to have created the game to convey the abstract realities of mathematics. The Greek warrior Palamedes, commander of troops at the siege of Troy, purportedly invented chess as a demonstration of the art of battle positions. Moses, in his posture as Jewish sage, was said to have invented it as a part of an all—purpose educational package, along with astronomy, astrology and the alphabet. . . . Chess myths, in particular, tell us first that chess goes way, way back, and that it has always been regarded not just as a way to pass the time, but also as a powerful tool for explanation and understanding. While chess is ostensibly about war, it has for 1,400 years been deployed as a metaphor to explore everything from romantic love to economics. Historians routinely stumble across chess stories from nearly every culture and era—stories dealing with class consciousness, free will, political struggle, the frontiers of the mind, the mystery of the divine, the nature of competition, and, perhaps most fundamentally, the emergence of a world where brains often overcome brawn. One need not have any passion for the game itself to be utterly captivated by its centuries of compelling tales, and to appreciate its importance as a thought tool for an emerging

civilization. Chess is a teaching and learning instrument older than chalkboards, printed books, the compass, and the telescope. As a miniature reflection of society, it was also considered a moral guidepost. Yet another myth has chess invented to cure the cruelty of Evil Merodach, a vile Babylonian king from the sixth century B.C. who murdered his father King Nebuchadnezzar and then disposed of his body by chopping it into three hundred pieces and feeding the pieces to three hundred vultures.

Desperate to curb the brutality of his new leader, the wise man Xerxes created chess in order to instill virtues and transform him into a just and moral ruler: Here is how a king behaves toward his subjects, and here is how his grateful subjects defend their just king...

Separately, each chess myth conveys a thousand truths about a particular moment in time where a society longed to understand something difficult about its own past—the source of some idea or tool or tradition. Taken together, they document our quest to understand—and explain—abstraction and complexity in the world around us. The paradox of illuminating complexity is that it is inherently difficult to do so without erasing all of the nuance. As our developing civilization faced more intricate facts and ideas in the early Middle Ages, this was a fundamental challenge: to find a way to represent dense truths without washing out their essence.” (Shenk, 2006: 14-16)

Finally arriving at the oldest known myth, Shenk explores the justification for when, how and why chess was said to have been invented, positing that its known history points toward its actual origins:

“One story portrays two successive Indian kings, Hashran and Balhait. The first asked his sage to invent a game symbolizing man’s dependence on destiny and fate; he invented nard, the dice-based predecessor to backgammon. The subsequent monarch needed a game which would embrace his belief in free will and intelligence. “At this time chess was invented,” reads an ancient text, “which the King preferred to nard, because in this game skill always succeeds against ignorance. He made mathematical calculations on chess, and wrote a book on it.... He often played chess with the wise men of his court, and it was he who represented the pieces by the figures of men and animals, and assigned them grades and ranks.... ‘He also made of this game a kind of allegory of the heavenly bodies (the seven planets and the twelve zodiacal signs), and dedicated each piece to a star. The game of chess became a school of government and defense; it was consulted in time of war, when military tactics were about to be employed, to study the more or less rapid movements of troops.’ King Balhait’s wide-ranging list of the game’s uses has a connecting thread: chess as a demonstration device, a touchstone for abstract ideas.” (Shenk, 2006: 16)

This reference to “mathematical calculations” is especially noteworthy, as references to mathematics are pervasive in many of the oldest chess legends. A more widespread tale known as “The Doubling of the Squares,” tells of a king presented with an intriguing new sixty-four-

square board game by his court philosopher. The king is so delighted by chess that he invites the inventor to name his own reward. The wise philosopher replies,

Oh, I don't want much, replies the philosopher, pointing to the chess board. Just give me one grain of wheat for the first square of the board, two grains for the second square, four grains for the third square, and so on, doubling the number of grains for each successive square, up to the sixty-fourth square.

The king is shocked, and even insulted, by what seems like such a *modest* request. He doesn't realize that through the hidden power of geometric progression, his court philosopher has just requested 18,446,744,073,709,551,615 (eighteen quintillion) grains of wheat—more than exists on the entire planet! (Murray, 1913: 218)

Although this widely repeated story is of questionable authenticity, the facts of geometric progression are real and such mathematical concepts were, “useless unless they could be understood. The advancement of big ideas required not just clever inventors, but also great teachers and vivid presentation vehicles. That's apparently where chess came in: it used the highly accessible idea of war to convey far less concrete ideas. Chess was ... a customizable platform for poets, philosophers, and other intellectuals to explore and present a wide array of complex ideas in a visual and compelling way.” (Shenk, 2006: 17)

An interesting case in point illustrates just how widespread this tale's influence traveled. It is found in no other than Dante Alighieri's classic work, *Paradiso*, the third volume of *The Divine Comedy*:

And they so many were, their number makes,
More millions than the doubling of the chess; (Canto 28, Line 91)

Shenk later on summarizes H.J.R Murray's own journey in writing his definitive work *A History of Chess*, much of which is the source of Shenk's own summary. Murray traced the geographical expansion of chess through the growth of the Muslim empire following the prophet Muhammad's death in 632, as it expanded into Persia, Palestine, Syria, Iraq, Egypt, Nubia, Libya, Morocco, Cyprus, Sicily, and parts of Spain, Portugal, Turkey, Afghanistan, India,

and China. “By 900, Muslim armies controlled an uninterrupted stretch of land and sea from the Himalayas all the way across North Africa and into Spain.” Chess, of course, followed the empire’s expansion despite some legal efforts to curb such a spread. According to Murray, records suggest that in “1005 the Egyptian ruler al-Hakim tried to outlaw chess and ordered the burning of all chess sets in his territory. But it was too late to stop the game’s march across North Africa. Murray discovered references to Muslim players in Cairo, Tripoli, Sicily, Sijilmasa, Fez, Seville, and Cordoba.” (Shenk, 2006: 47)

As the story is told, chess may have enjoyed its European debut in 822, having been introduced to the Emir of Cordoba, Abd-al-Rahman II, by an outcast Persian Muslim musician nicknamed Ziriab who was forced to flee as a result of outshining his mentor, the legendary musician Ishaq, at the court of Harunar-Rashid. With his wives, children, and chess set in tow, Ziriab traveled across “North Africa, into Morocco, and finally across the Strait of Gibraltar into Muslim Spain. When he arrived in Cordoba, this unwilling ambassador from Baghdad brought an early glimpse of the Islamic enlightenment. Famous for the sounds of his gut-stringed lute, Ziriab also dazzled Emir Abd-al-Rahman II and friends with refinements in cooking, fashion, hygiene, home decor, and recreation. Baghdad’s favorite new board game of symbolic warfare was apparently an instant hit in Spain. The very next Emir, Mohammed I, was personally devoted to the game.” (Shenk, 2006: 48-49)

Meanwhile, chess moved into Italy via Sicily, and as almost always, was modified by that move. “Bands of Muslims from modern-day Spain, Tunisia, Libya, and Egypt attacked and eventually conquered Sicily in the ninth century [and] ... also tentatively occupied areas on the Italian mainland near Naples and Rome.” (Shenk, 2006: 49) Not long after this, as conquering progressed, the poet and expert chess player Muhammad ibn Ammar was said to have saved

the Islamic Kingdom of Seville from attack by winning a game of chess against the Christian King Alfonso VI of Leon and Castile. They played a chess game in lieu of clashing in a real war. (Gizycki, 1972: 15) Shenk, in recognition of this, noted that “Whether this was fact or legend, the mere suggestion of replacing bloody conflict with a board game contest foreshadowed a crucial advance in civilization: the replacement of violent struggle for resources with nonviolent competition.” The importance of these anecdotes is that they illustrate the means by which “scholars, spiritual figures, and even sovereigns exchanged a voluminous quantity of customs and knowledge” (2006: 49) and thus, the means of how chess arrived at its present form. Chess historian Richard Eales reports how

“it is a paradoxical but well-established fact that even in the period of the Crusades more new learning came to the West from the Muslim ‘enemy’ than through eastern Christian civilization. This was true not only of science and mathematics, some of which, like chess, originated in India, but also of classical literature. The Aristotelian texts which were to revolutionize European philosophy were first translated into Latin in the twelfth century from Arabic, and the main translating centers were in areas of cultural co-existence: Spain and Sicily, and to a lesser extent the Latin states founded in Palestine by the Crusaders” (Eales, 1985: 42)

Shenk emphasizes how the importance of this massive transfer of knowledge cannot be overstated. Through much of the twentieth century, historians have taught that Western civilization passed *directly* from Greece and Rome to Europe. It is now recognized that the Islamic Renaissance was a critical middle ground for much of the knowledge that would make the European Renaissance possible. Marilyn Yalom, author of *Birth of the Chess Queen: A History*, also notes how tracking chess’s migration is also a way of tracking the larger transmission of knowledge. Records show chess spreading to a Swiss monastery by 997 (Yalom, 2004: 16); to northern, Christian-controlled Spain by 1008 (1985: 43); to southern Germany by 1050; and to central Italy by 1061 (Murray, 1913: 418). “By the early twelfth century it was ubiquitous, so ensconced in the culture of medieval chivalry that it was listed as one of

seven essential skills for every knight (along with riding, swimming, archery, boxing, hawking, and verse writing)” (Yalom, 2004: 52).

To both Yalom and Shenk, and thus Murray, it was not surprising how the game came to acquire a few distinctive European modifications by then. The Elephant, an animal largely foreign to Europe, was replaced by the Bishop – except in France, where that piece became *le fou* (the jester or fool) – and the King’s Minister became the Queen. The board, which had been divided into sixty-four monochromatic squares, now saw the introduction of dark and light checkered squares – not out of any vital necessity, but simply to make movements easier for the eye to track. (Murray, 1913: 452) Consider how different and more difficult playing chess would be if one must keep track of a Bishop’s movements!?

Etymologically speaking, the game’s name shifted from the Sanskrit *chaturanga* to the Middle Persian *chatrang*, to an adaptation of the Arabic *shatranj* to the Latin *ludus scacorum* (“the game of the chessmen”), and from there to the Italian *scacchi*, the French *eschecs*, the German *schachspiel*, the Dutch *schaakspel*, the Icelandic *ska’ktafle*, the Polish *szachy*, and the English *chess*. (Op. cit.: 26, 400)

The genealogy of the game, however, is the realization of centuries “of tinkering by a large, decentralized group, a slow achievement of collective intelligence.” This slow achievement continued when *chatrang*, the first true incarnation of what is now called ‘chess’ emerged in Persia sometime during the fifth or sixth century.⁵ (Shenk, 2006: 17-18) *Chatrang* itself was a modified import from neighboring India, where an older, four-player version of the

⁵ It was a two-player war game with thirty-two pieces on a sixty-four-square board: sixteen emerald men on one end and sixteen ruby-red men on the other. Each army was equipped with one King, one Minister (where the Queen now sits), two Elephants (where the Bishops now sit), two Horses, two *Ruhks* (Persian for “chariot”), and eight Foot Soldiers. The object was to capture, trap, or isolate the opponent’s King.

game was known as chaturanga. David H. Li, author of *The Genealogy of Chess*, suggests that this itself may have been a much older import from neighboring China.

However, recent evidence is discussed by Gerhard Josten, a member of the *Initiative Group Königstein*, a world-wide group of chess historians, in an article “Chess – a living fossil.” On the basis of recent discoveries, Josten suggests that the genealogy of chess dates back even further to sometime between 50 B.C. and 200 A.D. in the Kushan Empire of Central Asia. Josten argues that an, “analysis of all variants of chess shows that its structure is based on three main elements. The element of hunt games is represented by the central figure, the element of variation of counters by the officers and the element of race games by the pawns. Based on this observation the first thesis proposed here is that chess was created through the unification of these three elements” – thus creating the ultimate game. (Josten, 2001) Games or related techniques, which certainly preceded the invention of chess and which contain these elements in an isolated form, can be found in the entire area along the Silk Road. The significance of this speaks to the game’s endurance, the question that puzzles Shenk – hence his subtitle: *How 32 Carved Pieces on a Board Illuminated Our Understanding of War, Art, Science and the Human Brain*. The answer is also existential to the human condition. Shenk writes that there is

“no doubt many other games were invented and transported by the same roving merchants [across the Silk Road]. But there was something different about chaturanga and chatrang. In a critical departure from previous board games from the region, these games contained no dice or other instruments of chance. Skill alone determined the outcome. [Murray answers his question with the following quotes,] ‘Understanding [is] the essential weapon’ proclaims the ancient Persian poem Chatrang-narnak (The book of chatrang), one of the oldest books mentioning the game. ‘Victory is obtained by the intellect.’ This was a war game, in other words, where ideas were more important and more powerful than luck or brute force” (Shenk, 2006: 17-18).

So through mythology, history, etymology and genealogy, the definition of chess evolved into an idea that relates directly to the human condition prior to the modern applications of chess

in game theory and rational choice theory and prior to psychological interest in the player's thought processes. As Taylor says, "Authors of historical chess novels endeavor to express how chess was variously understood against its Zeitgeist: to understand chess is to understand history." (Taylor, 2010: 11)

The Problem of Cognitive Individualism & Cognitive Universalism in Defining "Chess"

The significance of defining chess divorced from its perverse simplifications in game theory, rational choice theory, and the psychological analyses of the players' thought processes, lies in exposing the limits of cognitive individualism and cognitive universalism in trying to clarify the relationship of chess to life.

The Game Theoretical Case⁶

A game theoretical definition of 'chess' understands chess as,

"A perfect-information game. Relevant information defining the game state in chess includes: (1) the configuration of chess pieces on the board; (2) the number of moves made since a pawn was moved, or a piece has been captured; (3) the en-passant capturing opportunities in the current game state; (4) the castling options left to both players; and (5) previous configurations with their en-passant capturing opportunities and castling options. The information described here allows each player to determine the game state and its possible continuations, including en-passant capturing moves, castling moves, repetition of positions, and the status with respect to N-move rules. In practice, a player needs only three pieces of information: (1) the configuration of chess pieces; (2) the game score, i.e., all moves played since the start of the game; and (3) the official rules of chess. The combination of these three pieces of information allows a player to deduce all necessary information during a game." (Allis, 1994: 156)

This clearly assumes that people think as "(a) as individuals ... [or] (c) as human beings" (Zerubavel, 1999: 5), and that the "player" is defined by the act of deducing. This assumption

⁶ See the *Theory of Games and Economic Behavior* by John von Neumann and Oskar Morgenstern for a discussion of game theory and its quantitative foundations.

will henceforth be referred to as a description of ‘the non-social thinker.’ As such, it resolves the problem of the social dimension of chess play simply by stipulating its irrelevance.

The Rational Choice Theoretical Case⁷

A rational choice theoretical understanding sees chess as a game in which a player “considers all the possible moves, then the opponent’s possible counter moves to these moves, then its possible moves after these counter moves, and so on. [Yet,] no human brain, not even the brains of expert chess players, can compare the advantages and disadvantages of the available moves as quickly and as accurately as the computer. When human chess players try to imitate the decision-making strategies of machines, they actually degrade their decision-making ability.” (Devettere, 2009: 39) Devettere’s comment opens the possibility of seeing the player, in contrast with rational choice theory, as a social rather than a non-social thinker, and therefore according to the possibility that there is a dimension of chess that might be understood in terms of a sociologically informed phenomenology. It is important for this possibility that his qualification suggests that rational choice in itself precludes, simply by stipulation, the connection between chess and life that is requisite to investigating the analytical implications of the literal motif found in Taylor’s figurative one.

Addressing the Non-Social Thinker

It is here that one arrives at the need for a ‘cognitive sociology’ that is also phenomenological. In describing the faults of the individually subjective view of the mind to justify such a form of sociology, Zerubavel summarizes cognitive individualism as the “general vision of thinking on the image of a solitary thinker whose thoughts are a product of his or her own unique personal experience and idiosyncratic outlook on the world. In fact, if scientists were

⁷ See *Choice Theory: A Very Short Introduction* by Michael Allingham & Wikipedia for a discussion of rational choice theory and its quantitative foundations.

to study idiosyncratic thought patterns that apply only to particular individuals, we probably would not even consider their findings ‘scientific.’” (1999: 2) Describing the limitations of the objective view of the mind, Zerubavel writes:

“Cognitive universalism is clearly the dominant vision of the mind in modern cognitive science, much of which revolves around the search for the universal foundations of human cognition. Even psychologists, philosophers, linguists, and students of artificial intelligence who do not study the brain itself nonetheless claim to explore the way humans think. As evident from their general indifference to their research subjects’ biographical background, most cognitive scientists today assume a universal, human mind. It is certainly such universalistic sensitivity that allows cognitive scientists to unravel the universal foundations of human cognition. It is precisely their concern with our cognitive commonality that has helped neuroscientists, psychologists, linguists, and students of artificial intelligence to discover universal patterns in the way we form concepts, process information, activate mental ‘schemas,’ make decisions, solve problems, generate meaningful sentences from “deep” syntactic structures, access our memory, and move through the various stages of our cognitive development. Yet it is precisely this commitment to cognitive universalism that is also responsible for what is probably cognitive science’s most serious limitation. While it certainly helps cognitive scientists produce a remarkably detailed picture of how we are cognitively ‘hard wired,’ it also prevents them from addressing the unmistakably non-universal mental ‘software’ we use when we think.” (1999: 3)

This *unmistakably non-universal mental ‘software’* is inconsistent with game theory and rational choice theory because both assume “individual actors.” (Ross, Fall 2010; Hansson, Spring 2009)

It is this *non-universal mental ‘software’* that is accessed by the thought community of chess players when actors play the ‘game’ instance of ‘chess,’ and this is *why* any ‘psychological analysis of the players’ thought processes’ risks failing to grasp the social dimension of the players’ naturalistic decision-making process – the manner in which one arrives a decision where the understanding of this arrival process requires the consideration of what might be at work beyond technique and technical considerations (Cf. Garfinkel, 1967 for such descriptions.) My thesis posits that naturalistic decision-making is *not* conducted by the non-social thinker but by the *social thinker*, and that this is true about situations, like chess, that seem on the surface to be technical and radically individualized. The ‘social thinker’ is a ‘social being’ whose,

“Inter-subjective, social world is quite distinct from the subjective world of the individual as well as from the objective world of nature and logic. It is a world where time is reckoned according to neither the sun or the moon nor our own inner sense of duration but rather, in accordance with standard, conventional time-reckoning systems such as clock time and the calendar. It is a world where the conventional categories into which we force different "types" of books, films, and music are based on neither our own personal sensations nor any objective logical necessity. Such a world, of course, constitutes the distinctive domain of the sociology of the mind. The epistemological effort to refrain from attributing objectivity to that which is only inter-subjective has some important methodological implications. Since the social world is regarded as natural only by those who happen to inhabit it and therefore take it for granted, the more we can gain access to social worlds that are different from the one we have come to regard as a given the more we will be able to recognize the social nature of both. Thus, in marked contrast to the tendency among most psychologists, philosophers, linguists, and neuroscientists today to focus on our cognitive commonality as human beings, cognitive sociology tries to promote greater awareness of our cognitive diversity as social beings. The more we become aware of our cognitive differences as members of different thought communities, the less likely we are to follow the common ethnocentric tendency to regard the particular way in which we ourselves happen to process the world in our minds as based on some absolute standard of "logic" or "reason" and, thus, as naturally or logically inevitable.” (Zerubavel, 1999: 9-10)

An analysis of the thought community of chess players as ‘social thinkers’ should, therefore, shed light on how chess players think and make decisions because the ‘software running’ is collectively programmed by the thought community and not produced by any particular individual. Moreover, a close reading of chess-play reveals the same aspect of collectivity (Cf. Silman, 2010), and therefore should provide greater clarity about what chess may offer to the greater understanding of human affairs as intrinsically and thoroughly social.

The Abstraction of “Chess”

Richard Réti was one of the top players in the world during the 1910s & 1920s and winner of the ‘beauty prize’ at New York 1924 with his elegant destruction of Bogolyubov (a two-time contender for the World Championship). He wrote an influential and now classical book entitled, *Modern Ideas in Chess*, which was first translated into English in 1923 and published in that edition in the same year. It consists of 45 essays dealing with the evolution of

the game, its leading players and their ideas and contributions to their respective periods covering a 70 year stretch from 1852 to 1922. Réti concludes with an essay, entitled “Symbolism in Chess.” He writes:

“Chess is purely abstract. The board and the pieces are suitable figurative presentations of abstract chess, somewhat as in analytical geometry figurative analytical functions are represented by curves. And just as in mathematics the relations of quantities are represented without the aid of concrete objects, and quantities in the abstract are the real subject matter of mathematical science, so the idea underlying chess is to bring the methods of practical dealing into agreement with methods that have no ultimate objects in themselves.” (Réti, 1923: 179)

It is evident however that Réti does not mean that the abstraction of chess reduces it to a metaphor when extended to other affairs akin to “the method of chess in philosophy.” Réti’s use is closer to Vossen’s “idea” or “institution” of chess where she defines chess “by one specifically achievable state of affairs . . . and one set of rules that specifies the lusory and illusory moves for bringing about that state of affairs. As defined, this represents an idea only (or a set of ideas), not an activity and not a game, which necessarily involve action and participation. In that sense chess has become increasingly codified, regulated, and formalized over time, it provides the substance of the current institution of chess. Whether institutionalized or not, the idea of chess must always exist before or prior to any particular game of chess which involves this idea plus the participatory stance projected in the lusory attitude.” (Vossen, 2008: 202-203) Yet, more is required. What is implicit in Vossen’s discussion is how, unlike the method of chess within philosophy, where chess is used to illustrate a particular point or reduce an abstract idea to something simple, chess should be thought of in terms of its self-constituting method, not what it symbolizes about ‘art’, ‘psychology’ or ‘sociology’ or any other definite realm of activity. The method of chess is identified negatively by the critique of its use as metaphor and positively by showing how the figurative motif gives way to the literal motif – how metaphor gives rise to

description. This forces one to attend to the rules, tactics and strategies used in chess. These define chess as an abstract concept but also open up the aspect of chess that involves an intricate relationship between the individual as a member of a thought community and the community as an exemplary form of making sense of experience together (Cf. Goffman, Garfinkel, Schutz). What follows from this is that chess players play a game that is an ‘instance’ of Chess, where the latter is an abstraction with its own corresponding universe, with its own metaphysics and culture which continually evolves as the failure of the idea of it as metaphorical brings it to express its transcendence in a new form, one that reveals what is sociological and phenomenological about it. Granted, this universe is the product of a thought experiment; but a thought experiment, once undertaken, can be overlaid upon the social world, where through an embodiment of thought, the universe of Chess and the universe of chess merge in a social phenomenological form that is sustained dramaturgically throughout the course of interaction. It is sociological in that play is reflexive to the interactional aspect of playing; it is phenomenological in that the experience is reflexive to what is being accomplished in the course of playing and that the accomplishment expresses a universe in which what is done always refers to all that might be done (hence, a universe).

How Life Imitates Chess

On October 11, 2007, Garry Kasparov, a chess grandmaster and former world champion (1985-2000), gave a presentation at the World Business Forum at Radio City Music Hall in New York City on strategy and peak performance. His book, *How Life Imitates Chess: Making the Right Moves, From the Board to the Boardroom*, had just been released in the U.S. and it was the topic of the first question from the moderator. In the preface to a subsequent edition, Kasparov describes this encounter:

“So, Mr. Kasparov, how *does* life imitate chess?” I did not hesitate to answer, “It doesn’t!” This got a round of laughter, but I was making a serious point. This book is not about chess or about how learning chess or playing chess can make you a better decision-maker. Most of my life was dedicated to the game, and so it became the lens through which I observed the world and the workings of my own mind. The book, as I endeavored to explain to the Radio City audience, is about the tools chess gave me to analyze and improve my thinking and my decisions in *all* situations. ... This is not to say that chess does not have a great deal to offer. It teaches logic, patience, and planning, and it rewards those who learn to discipline their minds. Chess is also an excellent tool for examining the consequences of one’s actions and the decisions that led to them. This is the main reason my U.S.-based Kasparov Chess Foundation promotes the teaching of chess in classrooms across the country. ... While the game of chess can serve as a useful metaphor, this is more a literary device than a method of useful instruction. There are few such straightforward parallels in the book; while the lessons I learned from my chess career are universal, the game itself is not. ... So I was quite sincere when I answered bluntly that life does not imitate chess.” (Kasparov, 2008)

What follows from this, although not necessarily in the way Kasparov intended, is that life does not imitate chess because *life is chess*. Not from the standpoint of the player, since no reasonable person is willing to accept that life is a game; but, as Benjamin Franklin wrote, “life is a kind of chess”⁸ where, from the perspective of the King, chess defines the reality terms of the course of a state of affairs that is dialectically progressing and in it his sense is reflexive. This is why what is meant by the ‘abstraction of chess’ can only be understood starting from within the following thought experiment of Chess.

The Thought Experiment of Chess

Chess, as Shenk mentions, is a powerful reducing agent. “It can reduce a whole battlefield or city or planet down to sixty-four squares. And yet, within that simplistic frame, chess retains its active quality; like a snow globe, it shrinks things down, but retains its dynamic essence.” (Shenk, 2006: 56) Yet, the thought experiment of Chess does not reduce the abstractions it invokes but makes tangible the navigation of social life by specifying an analytical

⁸ See Appendix B for his full essay.

logic, inherent to chess, which in turn, via the thought experiment, is logically inherent in social life. To begin the thought experiment, consider the following ideas:

1. Simultaneous Exhibition: A display in which a single chess player (the exhibitor) plays multiple chess games at a time with a number of other players where the exhibitor is usually a master and the individual opponents are of varying playing strengths, and the exhibitor typically plays White in all the games. (Hooper, 1984: 311) Within the exhibition, the games progress at different rates in terms of board time (i.e. the length of the game measured in moves) as well as clock time (i.e. the length of the game measured in hours, minutes, seconds, etc.).
2. Blindfold Chess: Play is conducted via a mental model of the game and the positions of the pieces while moves are communicated via a recognized chess notation. . (Hooper, 1984: 36)
3. Blindfold Simultaneous Exhibition: A display in which the exhibitor plays via a mental model of the games while the opponents utilize boards and pieces in the standard fashion, but their moves are communicated verbally to the exhibitor. Yet, as both clock time and board time progress and fatigue begins to settle in upon the part of the exhibitor, the exhibitor may begin to confuse positions in the games that have progressed similarly and thus blunder.

Now to imagine a sequence of blindfold simultaneous exhibitions is to begin to capture the complexity of social life. To draw a dramaturgical parallel for analogy's sake, here is an actor managing his or her performances on multiple stages simultaneously where the actor does not have a full view of each stage. Now take this actor or exhibitor and consider their reality within the perspective of the King...

The Perspective of the King

Imagine a universe where, after there was darkness and light, there was a world solely constituted by 64 squares and 32 beings governed by a particular primordial metaphysics: the rules of chess. It is the purpose of these beings to proceed through the course of affairs directed by what is recognized as the 'King' until one of the Kings is in 'checkmate'. After checkmate the consciousness of all the beings except the Kings are wiped and reset by Caïssa, the goddess and creator of this universe. This cycle continues as the King carries the burden imposed on him by

Caïssa. It is the King's burden to survive each checkmate and to reflect, revere, and ponder on the loss of forces and friends accrued for the sake of thy name as, in accordance with Caïssa's will, he undergoes the journey towards wisdom – a wisdom composed of an understanding how to peacefully manage conflict, to have patience and tact, to embrace sociality, to understand the omniscient beauty of the chaos that both transcends the senses of darkness and light: the reflexivity of life itself. Upon such, Caïssa relieves the King of his immortality and allows him to embrace the wisdom of a final checkmate in which his consciousness is set free from its burden. This currently defines the reality in which the course of a state of affairs progresses in a universe of two Kings. The consciousness of the King through one course of affairs to the next reflects an awareness of history and the slow accumulation of knowledge over time. As it says in the poem, *Moving in the Rain*, from the perspective of the King whose entire army has fallen:

“They have rightly come for me;
Yet I am a move wiser now;
The rain has washed my former blurry vision;
Naturally, a new game is about to begin, yet this time, history will not repeat itself...”
(Raphael, 2009)

Yet, society and social life are far more complex than a single sequence of realities. Rather, one can imagine a number of simultaneous realities where in at least one reality, one has the primary consciousness of the King. This primary reality begins at birth and continues to undergo the course of a state of affairs reaching a situationally defined ‘checkmate’ in which the next sequential instance of reality begins such that the King maintains his continuity of consciousness from one instance of reality to the next.⁹ However, in these simultaneous realities, one is not

⁹ This in part arose as an answer to former world champion Anatoly Karpov's statement, “It is clear that chess is not a model for the military world, the business world, or the political world. Why? Because in chess, the pieces always start from the same positions. Consequently, each player's chances of winning are more or less the same. His skill and ability will make the difference. In the real world, however, it is extremely rare to find a balanced starting situation where the chances of winning for both parties are about equal.” (Karpov, 2006: 8) If one goes back far enough, there is a beginning and the complexities start there immediately.

necessarily in the consciousness of the King, although one can be King in more than the primary reality, but in the consciousness of another piece in another King's reality.¹⁰

To put it in terms outside of this phenomenology, social life is an array of arrays of interaction. These arrays of interaction may overlap and affect each other as the courses of affairs across the arrays are dialectically progressing both temporally and in complexity. This observation however is not altogether new to sociology. The relationship of the perspective of the King to the dialectic of his realities may be clarified by Goffman's *The Interaction Order*. In regard to the relationship between orders, he writes,

“the contained elements fit together more closely than with elements beyond the order; that exploring relations between orders is critical, a subject matter in its own right, and that such an inquiry presupposes a delineation of the several social orders in the first place; that isolating the interaction order provides a means and a reason to examine diverse societies comparatively, and our own historically.” (Goffman, 1983: 2)

For Goffman, an interaction order is a “domain of activity ... [that] is predicated on a large base of shared cognitive presuppositions, if not normative ones, and self-sustained restraints ... [that] comes into being historically, spreads and contracts in geographical distribution over time.”

(1983: 5) For all intents and purposes, the word ‘order’ can be understood as an ‘array’ as in the ‘initial array’ of the chessboard where the pieces are in their initial positions. The consciousness is both vested (situated) and transcendent (constantly de-situated).

The Four Principles of Chess¹¹

The problem posed to the layman's application of arrays of complex ideas¹² and theoretical frameworks is the very status of being ‘lay’. The layman however could easily be or become a

¹⁰ This is just a glimpse of the schematic complexities the phenomenology that the consciousness of the King entails. This phenomenology will be further developed at a later time when making a conclusive case.

¹¹ The discussion of these four principles is largely taken from *Social Life is a Kind of Chess: An Invitation to the Cognitive Sociology of Chess*, a manuscript of over 300 pages began in 2008 in which the task of turning a non-chess player into a practical user of the four principles in social life is undertaken.

chess player without losing that ‘lay’ quality and still begin to glean insight from the perspective of the King that would otherwise be unintelligible in the sense in which chess has been intelligible for centuries. However, until Yasser Seirawan, an International Grandmaster, wrote *Play Winning Chess*, there was no simple classification scheme that could encompass the vast complexities of chess theory. The four main principles of chess attempt to place chess theory in a simplified language which enables players to better grasp what sometimes can seem to be paradoxical ideas. These four principles are *force, space, time* and *pawn structure*.

From the perspective of the king, (1) force is broadly defined as the pieces and pawns also known as the *material* (and the strength thereof), that one player controls effectively as the King’s agent. (2) Space is the area of the board that one controls. (3) Time addresses the positional use of force as the order in which the King moves pieces. (4) Pawn structure is the topographic feature of the sixty-four-square board in its momentary form. Pawns together give structure or shape to the position by allowing or preventing attacks and defenses.

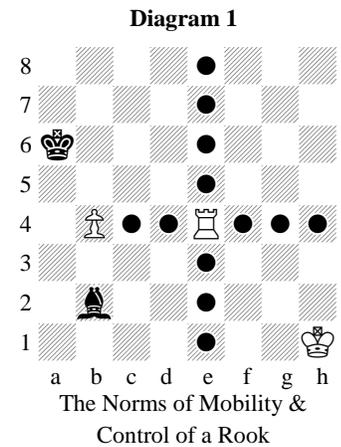
The Norms of Force

Force is the quality and quantity of material that operate according to norms of control and mobility. The quality of material is established by the relations of quantity of force and the quality and quantity of space, time, and pawn structure respectively.

Norms of mobility are static.
Norms of control are dynamic.

¹² I do not wish to call the “interaction order” a theory or framework....

Norms of mobility dictate how material actually moves while norms of control consider the regulation of space established by the nature of material mobility. Diagram 1, for example, illustrates the Rook's norms of mobility where the nature of the Rook's mobility is to move horizontally and vertically unobstructed as shown by the bulleted squares. (This Rook could never move to a4 because of White's b4 Pawn, if the b4 Pawn was



Black's, then the Rook could only capture it and not proceed to a4 this turn.) Diagram 1 also expresses the Rook's norms of control, for example, if it was Black to move, the norms would prevent Black's Bishop from occupying d4 or e5 without the risk of being captured in this position.

The Four Principles of Chess Defined in the Social World

Within the social world, the four principles are defined as follows: (1) Force is all of one's resources at a given moment. (2) Space is the degree of one's momentary control over one's interaction within one's environment and the resources available. (3) Time is the internal order in which force and space are applied within one's environment. (4) Pawn structure is the perception of one's environment as a momentary array. Environment includes all physical and social restrictions that apply to the interaction. Consider this proof described in my manuscript, *Social*

Life is a Kind of Chess:

- All forces are qualified by space.
- All forces are qualified by time.
- All forces have constraints.

Force equivocates to any object in the social world.

Space and Time act upon and are acted by such an object.

Pawn Structure acts as constraints of the medium through which force is applied.

Support for these four principles is found within *The Interaction Order*:

- “It is a fact of our human condition that, for most of us, our daily life is spent in the immediate presence of others; in other words, that whatever they are, our doings are likely to be, in the narrow sense, socially situated.” (Goffman, 1983: 2)
- The “domain of activity ... spreads and contracts in geographical distribution over time.” (Goffman, 1983: 5)
- “Behavioral settings that sustain an interaction order characteristically extending in space and time beyond any single social situation occurring in them (Goffman, 1983: 4)
- “The very brief span in space and time of the phenomenal side of many of these events facilitates recording (and replaying), and one has, of course, the comfort of being able to keep one's own eyes on particular instances throughout the full course of their occurrence.” (Goffman, 1983: 9) It is the very nature of chess that permits time to retain its order.
- “Whatever is distinctive to face-to-face interaction is likely to be relatively circumscribed in space and most certainly in time.” (Goffman, 1983: 13)

What is the thought experiment of Chess but the interaction of Kings face-to-face in a realm defined exclusively by such an existence, but as representing thing that transcends the game setting?

The Force Dynamic

In the play of chess, the position is analyzed and moves are understood in terms of the four principles and their elements in relation to each other. The relationship of these principles in relation to each other - the way force's norms of control alter space and pawn structure dynamically through time mediated by force's norms of mobility - produces a constant relationship analysis that I refer to as the *force dynamic* and that is fundamental to chess as a paradigm. Conducted from perspective of the King, this conceptual algorithm constantly analyses the phenomenological experience of the interaction of the four principles. In effect, the analysis follows the temporality of that experience: that is the sense in which it is a constant analysis and one which mediates and is mediated by its object. It is through the application of

this conceptual algorithm to one's perceptual lens that chess begins to take on its phenomenological form. The realization of this form is captured within the poem,

The Inescapable Way of Life:

"I cannot escape it;
It is everywhere;
It surrounds me as I

Walk;
Talk;
Sleep;
Eat;
Socialize;

I cannot stop playing it;
As I attempt to run from it, I cannot help but see
Squares on the street;
Clocks on the walls;
Pawns within my friends;
Knights within my family;
Bishops within my advisors;
Rooks within my drivers;
Queens within every single woman on the board;
A King within myself...

If I were to resign, just another game would begin;
As much as I want to escape this board, I cannot resign, for it is against my nature...
The game must be played...

I must centralize my pawns;
I must develop my Knights and Bishops;
I must charge my Rooks;
I must parade my Queen;
I must protect myself; and
I must destroy my opponents;

Because, at the root of it all, what is life but a beautiful game of chess?" (Raphael, 2009)

To go back to analogy for the moment, the four principles are like "the workings of the interaction order [which] can easily be viewed as the consequences of systems of enabling conventions, in the sense of the ground rules for a game, the provisions of a traffic code or the rules of syntax of a language." (Goffman, 1983: 5) Given this, "the obligation to provide

evidence of this relationship is the relationship. And this evidence is the stuff of interaction.”
(Goffman, 1983: 13)¹³

What is the force dynamic but an interface with the interaction order?

Conclusion

At the very least, this thesis provides a prima facie case that chess can no longer be viewed as just a game. Chess is now, from the perspective of the King, a lens onto the social world where Chess defines reality. It defines reality such that the course of a state of affairs is dialectically progressing via the force dynamic. This force dynamic is the social logic of Chess as a technical resource for sociology. After all, “the social conditions of every age have been symbolically explained upon the chessboard. It is a visible means of explaining unseen people, places, things and events.” (Bingham, 1900) “The vicissitudes of each so frequently proceed from the absence of reflection and prudence, of fortitude and perseverance, that our imagination is forcibly impressed with the resemblance ... and [may we] consider the different pieces employed in the game as typical of various characters met with in life.” (E.A., 1825) “And, whatever position we may be in, let us do our utmost to fulfill its duties and maintain our strength and honor ... through all the various phases of the game we may be called upon to play in, let our motto ever be -- to act on the square” (Green, 1876), when faced with “a practical problem such as we meet with in everyday life” (Réti, 1923: 179), with “the bent to sustain in regard to all elements of social life a spirit of unfettered, unsponsored inquiry, and the wisdom not to look elsewhere but ourselves and our discipline for this mandate” (Goffman, 1983: 17), of the force dynamic and its presence, “for [social] life is a kind of chess...” (Franklin, 1786)

¹³ To see a preliminary example of this applied to a series of current events, please refer to Appendix D.

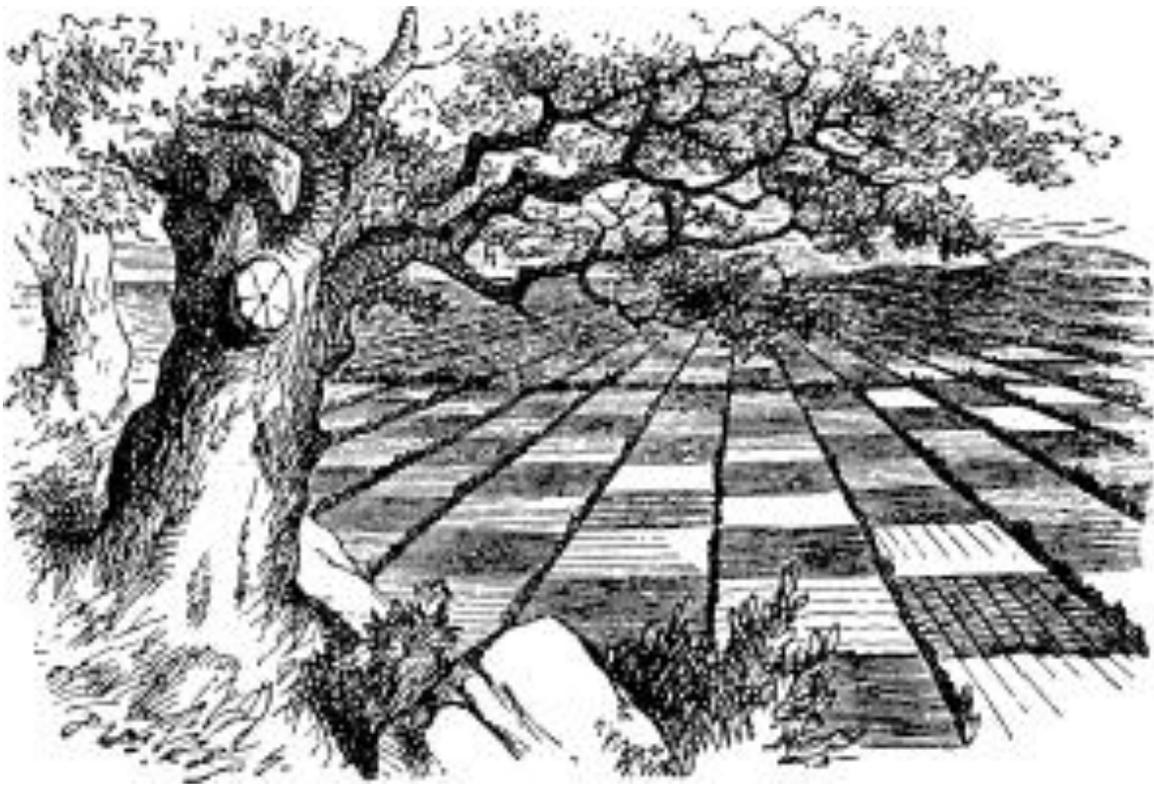


Illustration by John Tenniel,
From Lewis Carroll's *Through the Looking Glass and What Alice Found There*
Reprinted in Shenk, 2006.

Bibliography

- Alighieri, Dante. "Paradiso, Canto 28." in *The Divine Comedy*.
- Allis, Louis Victor. 1994. "Searching for Solutions in Games and Artificial Intelligence." Pp. 223
in *Department of Computer Science*. Maastricht, The Netherlands: University of
Limburg.
- Basalla, B. 2005. *Chess in the movies: TPI Wonderworks*.
- Bingham, Rev. Arles L. 1900. *Good News From the Chessboard*. Strongsville, Ohio.
- Brown, Michael E. 2009, 2010. "Conversations with Professor Michael E. Brown." edited by
Michael W. Raphael. Boston, MA.
- Carse, James P. 1986. *Finite and Infinite Games*. New York: Free Press.
- Devettere, RJ. 2009. *Practical Decision Making in Health Care Ethics: Cases and Concepts*:
Georgetown University Press.
- Downes, Stephen M. 1993. "Socializing Naturalized Philosophy of Science." *Philosophy of
Science* 60:452-468.
- Durkheim, Émile. 1965. *The Elementary Forms of the Religious Life*. New York: Free Press.
- Durkheim, Emile, and Steven Lukes. 1982. *The Rules of Sociological Method*. New York: Free
Press.
- E.A. 1825. "Morals of Chess." in *The Asiatic journal and monthly register for British and
foreign India, China and Australasia*.
- Eales, R.G. 1985. *Chess: The History of a Game: Facts on File*.

- Edmonds, D., and J. Eidinow. 2005. *Bobby Fischer Goes to War: How A Lone American Star Defeated the Soviet Chess Machine*: HarperCollins.
- Franklin, Benjamin. 1786. "On the Morals of Chess." in *Columbian Magazine*.
- Garfinkel, H. 1967. *Studies in ethnomethodology*: Polity Press.
- Giżycki, Jerzy. 1972. *A History of Chess*: The Abbey Library.
- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. Garden City, N.Y.,: Doubleday.
- . 1961. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Garden City, N.Y.: Anchor Books.
- . 1961. *Encounters: Two Studies in the Sociology of Interaction*. Indianapolis: Bobbs-Merrill.
- . 1963. *Behavior in Public Places: Notes on the Social Organization of Gatherings*. New York: Free Press.
- . 1963. *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, N.J.: Prentice-Hall.
- . 1969. *Strategic Interaction*. Philadelphia: University of Pennsylvania Press.
- Goffman, E. 1983. "The interaction order: American Sociological Association, 1982 presidential address." *American Sociological Review* 48:1-17.
- Goffman, Erving. 1986. *Frame Analysis: An essay on the Organization of Experience*. Boston: Northeastern University Press.
- Goffman, Erving, Charles C. Lemert, and Ann Branaman. 1997. *The Goffman Reader*. Cambridge, Mass.: Blackwell.

- Graefrath, Bernd. 2008. "To Know the Past One Must First Know the Future : Raymond Smullyan and the Mysteries of Retrograde Analysis." Pp. 1-12 in *Philosophy Looks at Chess*, edited by Benjamin Hale. Chicago: Open Court.
- Green, T.B. 1876. *The chessboard of life*. London: Published by the author.
- Hale, Benjamin. 2008. *Philosophy Looks at Chess*. Chicago: Open Court.
- Hansson, Sven Ove , and Till Grüne-Yanoff. Spring 2009 Edition. "Preferences." in *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta:
<http://plato.stanford.edu/archives/spr2009/entries/preferences/>.
- Harré, Romano. 1961. *Theories and Things: A Brief Study in Prescriptive Meta-Physics*. London: Sheed and Ward.
- Hochberg, B. 1993. *The 64-square looking glass: the great game of chess in world literature*: Times Books.
- Hooper, David, and Ken Whyld. 1984. *The Oxford Companion to Chess*. Oxford: Oxford University Press.
- Huxley, T.H. 1868. *The game of life*. London.
- Johnson, D. 2008. *White King and Red Queen: How the Cold War Was Fought on the Chessboard*: Houghton Mifflin Co.
- Josten, Gerhard. 2001. "Chess – A Living Fossil." Cologne: Initiative Group Königstein.
- Karpov, A., J.F. Phélizon, and B. Kouatly. 2006. *Chess and the art of negotiation: ancient rules for modern combat*: Praeger.

- Kasparov, G., and M. Greengard. 2008. *How Life Imitates Chess: Making the Right Moves, from the Board to the Boardroom*: Bloomsbury.
- Keats, V. 1995. *Chess in Jewish history and Hebrew Literature*: Magnes Press, Hebrew University.
- Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.
- Langer, L.L., and S. Bak. 1999. *The game continues: chess in the art of Samuel Bak*: Pucker Art Publications.
- Li, DH. 1998. *The Genealogy of Chess*: Premier Pub. Co.
- List, L., and Isamu Noguchi Garden Museum. 2005. *The imagery of chess revisited*: Isamu Noguchi Foundation and Garden Museum.
- Martin, Bill. 2008. "The Difficult Ways of God and Caissa: Chess, Theodicy, and Determinism in Gadamer." Pp. 89-117 in *Philosophy Looks at Chess*, edited by Benjamin Hale. Chicago: Open Court.
- Moreno, F. 2001. *Teaching Life Skills Through Chess: A Guide for Educators and Counselors*: American Literary Press.
- Murray, Harold James Ruthven. 1913. *A History of Chess*. Oxford: Clarendon Press.
- Pietarinen, Ahti-Veikko. 2008. "Who Plays Games in Philosophy?" Pp. 119-136 in *Philosophy Looks at Chess*, edited by Benjamin Hale. Chicago: Open Court.
- Polgár, L. 1998. *Chess: Middlegames*: Könemann.
- . 1999. *Chess endgames*: Könemann.

- Raphael, Michael W. "Social Life is a Kind of Chess." Pp. 325. New Windsor, NY.
- . 2009. "The Inescapable Way of Life." in *Poetic Moves Across the 64 Squares of Life*. Boston, MA.
- . 2009. "Moving in the Rain." in *Poetic Moves Across the 64 Squares of Life*. New Windsor, NY.
- . 2009. "On Checkmate." in *Poetic Moves Across the 64 Squares of Life*. Boston, MA.
- Rasskin-Gutman, D. 2009. *Chess metaphors: artificial intelligence and the human mind*: MIT Press.
- Réti, R, and J Hart. 1923. *Modern Ideas in Chess*: G. Bell and Sons, Ltd.
- Ross, Don. Fall 2010 Edition. "Game Theory." in *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta: <http://plato.stanford.edu/archives/fall2010/entries/game-theory/>.
- Saariluoma, Pertti. 1995. *Chess Players' Thinking : A Cognitive Psychological Approach*. London; New York: Routledge.
- Schütz, A. 1967. *The phenomenology of the social world*: Northwestern University Press.
- Seirawan, Y. 2003. *Play Winning Chess*: Everyman Chess.
- Shenk, David. 2006. *The Immortal Game: A History of Chess, or How 32 Carved Pieces on a Board Illuminated Our Understanding of War, Art, Science and the Human Brain*. New York: Doubleday.
- Silman, J. 2010. *How to Reassess Your Chess*: Silman-James Pr.

- Simpson, John, and Edmund Weiner. 1989. "chess, n.1." in *Oxford English Dictionary*. Oxford, UK: Oxford University Press.
- Smith, David Woodruff. Summer 2009 Edition. "Phenomenology." in *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta:
<http://plato.stanford.edu/archives/sum2009/entries/phenomenology/>.
- Taylor, Mark N. 2010. "Foreword." in *Masters of Technique: The Mongoose Anthology of Chess Fiction*, edited by H. Goldowsky. Newton Highlands, MA: Mongoose Press.
- Ulea, V. 2002. *A Concept of Dramatic Genre and the Comedy of a Bew Type : Chess, Literature, and Film*. Carbondale: Southern Illinois University Press.
- Vossen, Deborah P. 2008. "Chess Is Not a Game." Pp. 191-208 in *Philosophy Looks at Chess*, edited by Benjamin Hale. Chicago: Open Court.
- Watkins, J.J. 2007. *Across the Board: The Mathematics of Chessboard Problems*: Princeton University Press.
- Williams, G. 2000. *Master pieces: the architecture of chess*: Viking Studio.
- Williams, H.L. 2008. *The book of chess*: Italice Press.
- Yalom, Marilyn. 2004. *Birth of the Chess Queen: A History*. New York: HarperCollins.
- Zerubavel, E. 1999. *Social Mindscapes: An Invitation to Cognitive Sociology*: Harvard University Press.

Appendix A: Materials Consulted From J.G.W. Collection

1843. "The Philosophy of Chess." in *The Anglo American*, edited by Alexander D. Paterson.

New York: E.L. Garvin & Co.

1897. *American chess magazine*: W. Borsodi.

1914. *Escacs d'amor*. Barcelona,.

Bingham, Rev. Arles L. 1900. *Good News From the Chessboard*. Strongsville, Ohio.

Biro, Lajos. 1945. *Gods and kings: six plays*. London: G. Allen & Unwin.

Dept., John G. White. 1979. "296 poems found in 175 quarto volumes of chess and checker columns." Cleveland: Cleveland Public Library.

Eingorn, Viacheslav. 2003. *Decision-making at the chessboard*. London: Gambit.

Fox, M., and R. James. 1993. *The even more complete chess addict*: Faber and Faber.

Franklin, Benjamin. 1786. "On the morals of chess." *The Columbian magazine*: [4] , bound.

Gaprindashvili, Paata. 2010. *Critical moments in chess*. London: Batsford.

Gottschall, Rudolf von. 1870. *Poetik : die dichtkunst und ihre technik, vom standpunkte der neuzeit*. Breslau: E. Trewendt.

—. 1893. *Poetik : die dichtkunst und ihre technik, vom standpunkte der neuzeit*. Breslau: E. Trewendt.

Green, Thomas Bowden. 1876. *The chessboard of life*. London: Author.

Guthrie, W. E. 1867. *The betrothed : a nation's vow*. Philadelphia: J.A. Bancroft and co.

Halliday, Andrew. 1870. *Checkmate : a farcical comedy in two acts*. London: T.H. Lacy.

- . 1870. *Checkmate : a farcical comedy in two acts*. London: T.H. Lacy.
- Halpern, J., Frank James Marshall, and David Janowski. 1902. *Chess symposium : some of the finest end-games and curiosities by ancient and modern masters*. New York,.
- Hervey, John Hervey, and Caleb D'Anvers. 1733. *A letter to the Craftsman : on the game of chess ; occasioned by his paper of the fifteenth of this month*. London: Printed for J. Peele.
- Holloway, Wilf. 1993. *Chessreading treasure : fun, fact & fiction*. Noerten-Hardenberg, Germany: Scribe Bishausen.
- J. Lowenthal, C.H. Stanley, Paul Morphy, Samuel Loyd, Charles H. Stanley (Ed.). 1853. *The chess columns of the Family Herald, of the Glasgow Weekly Star, of Harper's Weekly, of the New York Ledger, of the New York Illustrated News, of the Round Table, of the Chess and Checker Columns, of the Household Journal New York, with clippings from Harper's Weekly, Harper's Bazaar, and the Illustrated News, New York*.
- Jefferson, Benjamin H. 1893. *What chess has to do with advertising : the strategy of chess applied to advertising. What a chess master would do as an advertising manager*. New York,.
- Larson, Loren C. 1974. *A bibliography on the mathematical aspects of chess*. Northfield, Minn.
- Laurie, Richard. 1997. *Knight of the id : a new play*. Erie, Pa.: Directors Circle Theatre.
- Lawson, David. 1857. "Collection of letters and documents relating primarily to the chess player Paul Morphy." in *Chess letters and documentation from the David Lawson collection*. Cleveland: Cleveland Public Library.

- Mander, Carel van, C. de Heyman, Ernst Boehlen, and Ernst Boehlen Chess Collection. 1913. *William Shakespeare and Ben Jonson at chess*. S.l.: s.n.
- Mielich, Hans, Ernst Boehlen, and Ernst Boehlen Chess Collection. *Vnusquisque vxorem suam sicut seipsum diliga vxorauem timeat virum suum*. S.l.: s.n.
- Neville, Edmund, and Trinity Cathedral in Newark (N.J.). 1859. *Sermon to young men : the chess players*. Newark, N.J.: S.C. Atkinson Printer.
- Pang, Laura Beth. 1997. "The psychological meaning of playing : a phenomenological exploration of the subjective experience of adults." Pp. xi, 250: Massachusetts School of Professional Psychology 1997.
- Peterson, Axel Robert, Ernst Boehlen, Society of Modern Art., and Ernst Boehlen Chess Collection. 1915. *A game of chess*. New York: Society of Modern Art.
- Severino, Marco Aurelio. 2003. *La filosofia degli scacchi : ovvero il perche´*. Napoli: Liguori Editore.
- Sunity, Degee. 1923. *Indian fairy tales*. London: J. Murray.
- Taffs, Anthony. 1941. *Chess symbolism*.
- Uflacker, Johann Christian Bernstoff. 1799. *Le genie et la philosophie des echecs*. Hambourg.
- Weinheimer, James, and Angus Carroll. 1998. *Kingly books of a royal game*. Eugene, Or.: Aster Pub. Corp.
- Whyld, Ken, and Chris Ravilious. 2000. *Chess texts in the English language, printed before 1850 : an annotated bibliography*. Olomouc: Moravian Chess.

Appendix B: *On the Morals of Chess* **The Columbian Magazine, 1786**

By Dr. Benjamin Franklin

Playing at Chess, is the most ancient and the most universal game known among men: for its original is beyond the memory of history, and it has, for numberless ages, been the amusement of all the civilized nations of Asia, the Persians, the Indians, and the Chinese. Europe has had it above a thousand years: the Spaniards have spread it over their part of America, and it begins lately to make its appearance in these States. It is so interesting in itself, as not to need the view of gain to induce engaging in it: and thence it is never played for money. Those, therefore, who have leisure for such diversions, cannot find one that is more innocent: and the following piece, written with a view to correct (among a few young friends) some little improprieties in the practice of it, shows at the same time that it may, in its effects on the mind, be not merely innocent, but advantageous, to the vanquished as well as to the victor.

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, so as to become habits, ready on all occasions. For life is a kind of chess, in which we have often points to gain, and competitors or adversaries to contend with, and in which there is a vast variety of good and ill events, that are, in some degree, the effects of prudence or the want of it.

By playing at chess, then, we may learn:

1. Foresight, which looks a little into futurity, and considers the consequences that may attend to an action: for it is continually occurring to the player, If I move this piece, what will be the

advantages of my new situation? What use can my adversary make of it to annoy me? What other moves can I make to support it, and to defend myself from his attacks?"

2. Circumspection, which surveys the whole chess-board, or scene of action, the relations of the several pieces and situations, the dangers they are respectively exposed to, the several possibilities of their aiding each other; the probabilities that the adversary may make this or that move, and attack this or the other piece; and what different means can be used to avoid his stroke, or turn its consequences against him.

3. Caution, not to make our moves too hastily. This habit is best acquired by observing strictly the laws of the game, such as, If you touch a piece, you must move it somewhere; if you set it down, you must let it stand. And it is therefore best that these rules should be observed, as the game thereby becomes more the image of human life, and particularly of war; in which, if you have incautiously put yourself into a bad and dangerous position, you cannot obtain your enemies leave to withdraw your troops, and place them more securely; but you must abide by all the consequences of your rashness.

And lastly, we learn by chess the habit of not being discouraged by present bad appearances in the state of our affairs, the habit of hoping for a favorable change, and that of persevering in the search of resources. The game is so full of events, there is such a variety of turns in it, the fortune of it is so subject to sudden vicissitudes, and one so frequently, after long contemplation, discovers the means of extricating ones self from a supposed insurmountable difficulty, that one is encouraged to continue the contest to the last, in hopes of victory by our own skill, or, at least, of giving a stale mate, by the negligence of our adversary.

And whoever considers, what in chess he often sees instances of, that particular pieces of success are apt to produce presumption, and its consequent, inattention, by which more is afterwards lost

than was gained by the preceding advantage; while misfortunes produce more care and attention, by which the loss may be recovered, will learn not to be too much discouraged by the present success of his adversary, nor to despair of final good fortune, upon every little check he receives in the pursuit of it.

That we may, therefore, be induced more frequently to choose this beneficial amusement, in preference to others which are not attended with the same advantages, every circumstance, that may increase the pleasure of it, should be regarded; and every action or word that is unfair, disrespectful, or that in any way may give uneasiness, should be avoided, as contrary to the immediate intention of both the players, which is, to pass the time agreeably.

Therefore;

1. If it is agreed to play according the strict rules, then those rules are to be exactly observed by both parties; and should not be insisted on for one side, while deviated from by the other; for this is not equitable.
2. If it is agreed not to observe the rules exactly, but one party demands indulgences, he should be as willing to allow them to the other.
3. No false move should ever be made to extricate yourself out of a difficulty, or to gain advantage. There can be no pleasure in playing with a person once detected in such unfair practice.
4. If your adversary is long in playing, you ought not to hurry him, or express any uneasiness at his delay. You should not sing, or whistle, nor look at your watch, nor take up a book to read, nor make a tapping with your feet on the floor, or with your fingers on the table, nor do any thing

that may disturb his attention. For all these things displease. And they do not show in playing, but your craftiness or your rudeness.

5. You ought not to endeavour to amuse and deceive your adversary, by pretending to have made bad moves, and saying you have now lost the game, in order to make him secure and careless, and inattentive to your schemes; for this is fraud, and deceit, not skill at the game.

6. You must not, when you have gained a victory, use any triumphing or insulting expression, nor show too much pleasure; but endeavour to console your adversary, and make him less dissatisfied with himself by every kind and civil expression, that may be used with truth; such as, You understand the game better than I, but you are a little inattentive; or, You play too fast; or, You had the best of the game, but something happened to divert your thoughts, and that turned it in my favour.

7. If you are a spectator, while others play, observe the most perfect silence. For if you give advice, you offend both parties; him, against whom you may give it, because it may cause the loss of his game; him, in whose favour you give it, because, tho it may be good, and he follows it, he loses the pleasure he might have had, if you had permitted him to think till it occurred to himself.

Even after a move or moves, you must not, by replacing the pieces, show how it might have been played better: for that displeases, and may occasion disputes or doubts about their true situation.

All talking to the players, lessens or diverts their attention, and is therefore displeasing; nor should you give the least hint to either party, by any kind of noise or motion. If you do, you are unworthy to be a spectator.-If you have a mind to exercise or show your judgment, do it in playing your own game when you have an opportunity, not in criticizing or meddling with, or counseling, the play of others.

Lastly, if the game is not to be played rigorously, according to the rules above mentioned, then moderate your desire of victory over your adversary, and be pleased with one over yourself.

Snatch not eagerly at every advantage offered by his unskillfulness or inattention; but point out to him kindly that by such a move he places or leaves a piece in danger and unsupported; that by another he will put his king in a dangerous situation, & by this generous civility (so opposite to the unfairness above forbidden) you may indeed happen to lose the game to your opponent, but you will win what is better, his esteem, his respect, and his affection; together with the silent approbation and good will of impartial spectators.

Appendix C: What is Chess?

This is a collection of quotes compiled by Fox & James published in the *Even More Complete Chess Addict*, pages xxi-xxv. It provides a wide survey of what has been said about chess and shows how difficult it really is to define chess.

1. Chess is a nice and abstruse game in which two sets of men are moved in opposition to each other. *Dr. Samuel Johnson's Dictionary of the English Language*
2. Chess is a testy, cholericke game, and very offensive to him that looeth the mate *Robert Burton*
3. Chess is ouer-wise and Philosophicke a folly *James I*
4. Chess is ludicrously difficult *Stephen Fry*
5. Chess is an earnest exercise of the minde *Thomas Cogan*
6. Chess is one long regret *Stephen Leacock*
7. Chess is a sad waste of brains *Sir Walter Scott*
8. Chess ... is a foolish expedient for making idle people believe they are doing something very clever *George Bernard Shaw*
9. Chess is . . . as elaborate a waste of human intelligence as you could find anywhere outside an advertising agency *Raymond Chandler*
10. Chess is not a game but a *disease* *Sir Henry Campbell-Bannermall*
11. Chess is a cure for diarrhea and erysipelas *A mistranslation of Herodotus*
12. Chess is a cure for headaches *John Maynard Keynes*
13. Chess is an innocent and intellectual amusement after the mind has been engrossed with too much care or study *Hassan of Basa*
14. Chess , like love, is infectious at any age *Salo Flohr*
15. Chess is a beautiful mistress *Bent Larsen*
16. Chess is a very sexy game *Sally Beauman*
17. (Chess problems are like masturbation but) playing chess is like making love *George Steiner*
18. Chess is as much a mystery as women *Cecil Purdy*
19. Chess is a jealous lover *John Healy*
20. Chess is simply a medium through which concentration and a higher state of mind is achieved ... It is like contemplating your navel, only better. It is perhaps a way of making love *Jon Speelman*
21. Chess is vanity *Alexander Alekhine*
22. Chess is one of the sins of pride *John Bromyard*
23. Chess is life *Bobby Fischer*
24. Chess is like life *Boris Spassky*
25. Chess is indeed like life *Stephen Fry*

26. Chess is my life *Victor Korchnoi*
27. Chess is my life - but my life isn't just chess *Anatoly Karpov*
28. Chess is my job and fills the main part of my life *Alexei Shirov*
29. Chess is most certainly not my life *Tony Miles*
30. Chess is life in miniature. Chess is struggle, chess is battles *Gary Kasparov*
31. Chess is a challenge, a battle *Terry Marsh*
32. Chess is a fight *Emanuel Lasker*
33. Chess is a blood Sport *Jon Speelman*
34. Chess is ruthless: you've got to be prepared to kill people *Nigel Short*
35. Chess is a fighting game which is purely intellectual and excludes chance *Richard Reti*
36. Chess is a game of courteous aggression *Julian Barnes*
37. Chess is like war *Attributed to Bobby Fischer*
38. Chess is a game of war *Anthony Saldy and Norman Lessing*
39. Chess is a confrontation *Simon Barnes*
40. Chess is a gladiatorial contest *Ray Keene*
41. Chess is a test of wills *Paul Keres*
42. Chess is first of all art *Mikhail Tal*
43. Chess is the art of battle for the victorious battle of art *Sauieily Tartakower*
44. Chess is the art of analysis *Mikhail Botvinnik*
45. Chess is the art which expresses the beauty of logic *Mikhail Botvinnik*
46. Chess is the art of human reason *Gustavus Selenius*
47. Chess is not only knowledge and logic *Alexander Alekhille*
48. Chess is an art appearing in the form of a game *Soviet Encyclopaedia*
49. Chess is an art *Gary Kasparov*
50. Chess is everything - art, science and sport *Anatoly Karpov*
51. Chess is just a game *Lajos Portisch*
52. Chess is a game *Boris Spassky*
53. Chess is a combination of ten games *Miguel Najdorf*
54. Chess is only a game and not to be classed with . . . science . . . or the arts *Emanuel Lasker*
55. Chess is a game of skill and not of genius *William Hazlitt*
56. Chess is undoubtedly the same sort of art as painting or sculpture *Jose Raul Capablanca*
57. Chess is in its essence a game, in its form an art, and in its execution a science *Baron Tassilo von Heydebrand und der Lasa*
58. Chess is an almost perfect combination of art, investigative science, knowledge and inspiration *Raymond Keene*

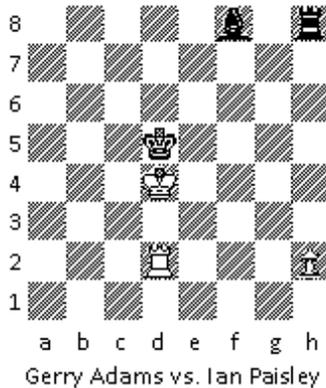
59. Chess is too difficult to be a game, and not serious enough to be a science or an art *Attributed to Napoleon*
60. Chess is not just a game; it bears an international significance - *Jeremy Hanley MP*
61. Chess is not a science *Henri Poincare*
62. Chess is beautiful enough to waste your life for *Hans Ree*
63. Chess is the most exciting game in the world *Irving Chernev*
64. Chess is the most interesting game that exists *Lothar Schmid*
65. Chess is the most intelligent thing in the universe *David Norwood*
66. Chess is the game which reflects most honor on human wit *Voltaire*
67. Chess is one of the noblest inventions of the human mind *Cyril Edwin Mitchinson Joad*
68. Chess is eminently and emphatically the philosopher's game *Paul Morphy*
69. Chess is the most beautiful and reasonable of all games *Meme de Sevigne*
70. Chess is the fairest of all games *Isaac Bashevis Singer*
71. Chess is challenging (but bridge is the stuff of life) *Lord Lever*
72. Chess is a fine entertainment *Leo Tolstoy*
73. Chess is an exercise full of delights *Arthur Saul*
74. Chess is not merely an idle amusement . . . Life is a kind of chess *Ben Franklin*
75. Chess is a game of intellect and character over the open board chess is a game of life *Frank Marshall*
76. Chess . . . is a forcing house where the fruits of character can ripen more fully than in life *Edward Morgan Forster*
77. Chess is a game for strong people with strong character *Mikhail Botvinnik*
78. Chess is a big time sport. *Tony Miles*
79. Chess is a Sport. A violent sport *Marcel Duchamp*
80. Chess is imagination *David Bronstein*
81. Chess is work *Walter Browne*
82. Chess is a cold bath for the mind *Andrew Bonar Law*
83. Chess is a form of intellectual productiveness *Siegbert Tarrasch*
84. Chess is the touchstone of the intellect *Johann Wolfgang von Goethe*
85. Chess is both profoundly trivial and trivially profound ... a universe simultaneously closed and unbounded *George Steiner*
86. Chess is not for timid souls *Wilhelm Steinetz*
87. Chess is . . . a place where I'm going to enjoy myself *John Cage*
88. Chess is a powerful weapon of intellectual culture *Slogan for 1924 All-Union Congress of Soviet Union*
89. Chess is the struggle against error *Johannes Zukertort*

90. Chess is a game of bad moves *Andy Soltis*
91. Chess is a fairy tale of 1001 blunders *Savielly Tartakower*
92. Chess is the sublimated fight par excellence *Anthony Saily and Norman Lessing*
93. Chess is ... a mime of the family romance and of the Oedipal drama *Alexander Cockburn*
94. Chess is a contest between two men in which there is considerable ego involvement *Reuben Fine*
95. Chess is a pursuit crammed with tension and emotion *Anthony Saily and Norman Lessing*
96. Chess is the movement of pieces eating each other *Marcel Duchamp*
97. Chess is a dromenon *Frank Vigor Morley*
98. Chess is an international language *Edward Lasker*
99. Chess is a sea in which a gnat may drink and an elephant may bathe *Indian Proverb*
100. Chess is me *Salvador Dali*
101. Chess is fun *Luke McShane*
102. Chess is a game of skill for two played with figures or men of different kinds which are moved on a chequered board *Chambers 20th Century Dictionary*

Appendix D: Anglo-Irish Politics: A Painting of the Game



Diagram 1



In November 2003, Anto Brennan depicted the following image in reference to an article titled “Voters In Northern Ireland Go To The Polls.” The caption of the image reads, “Gerry Adams and Ian Paisley playing chess November 26, 2003 in Belfast, Northern Ireland. The province's power sharing assembly was suspended more than a year

ago and this election is a crucial step in breaking the deadlock in the peace process.”¹⁴

What is even more crucial here is the position on the chessboard depicted in the image of the painting. With Ian Paisley of the Democratic Unionist Party as Black and Gerry Adams of Sinn Féin as White, the game represents much more

than just their 2003 deadlock. Diagram 1 expresses the position as depicted, which is illegal under standard chess rules; however, under the chess variant known as atomic chess, this position is legal and is, given proper play, a guaranteed draw. In a standard game of chess, the Kings must maintain at least one unoccupied square between each other, for a violation of such would permit one to capture the other; in atomic, Kings cannot capture any pieces. If this is understood according to the standard rules of chess, it is an illegal position. In that case it may be interpreted as indicating an altogether different narrative where the two Kings next to each other might

¹⁴ Getty Images. 2003, “Getty Images - Voters In Northern Ireland Go To The Polls”, Retrieved May 28, 2009 (<http://www.gettyimages.com/detail/2762933/Getty-Images-News>).

represent their lack of restraint to follow the normal rules of engagement with each other or their parties. In addition to that, there is some semiotic curiosity about the color assignments and what they express of the opinion of the artist. If the color assignments were not arbitrary, semiotic conventionality in chess terms may historically imply that Sinn Féin as White is the good/noble figure fighting for a just cause while the DUP as Black is the evil/non-noble figure fighting for an unjust cause derived from the archetypal connotations of white and black.

Suppose that the color assignments were arbitrary and the position was in fact a legal atomic position... then there is a history to be explored. For every game of chess represents a history of its actors and their actors' past games and it would not be such a far jump in logic to suppose that the game being played is actually between Sinn Féin and the Democratic Unionist Party since, at the time, Gerry Adams and Ian Paisley were the respective leaders of each organization. What new insight would a retrograde analysis produce? Would it unveil some underlying dynamics of the continuing conflict or do the work of theory and generate questions that would have otherwise gone unasked? What is the move?

Acknowledgements

I am whole heartedly indebted to the Faculty Committees of the Northeastern University Honors Program for (1) allowing for the opportunity to write this thesis, and (2) granting the *Undergraduate Research Award 2010-2011* to this thesis in an amount of \$2,000 to visit the John G. White Collection, the biggest chess library in the world, in Cleveland, Ohio. I am honored to receive 200% of the typical \$1,000 limit of this award. I also wish to acknowledge Kelly Ross and Stacie Brisker of the Special Collections Department of the Cleveland Public Library where the White Collection resides for their help in locating materials that would have otherwise eluded me.

I am also deep in epistemological debt beyond reproach to Professor Michael E. Brown of Northeastern's Department of Sociology & Anthropology for his constant diligence and help in explicating concepts, some of which were already my own. This epistemological debt is also owed to the Professor, Peter K. Manning, of the School of Criminal Justice and Criminology, for our countless hours of discussion on the broader issues of Goffman's sociology and dramaturgy both of which have furthered my own concepts profoundly. I am also grateful to Professor Faviana Olivier of the Department of English for her off-hand remark and reflection on how my mind works. Professor Olivier described my method as a form of "re-synthesis;" a phrase so correct that reflection upon it helped increase the specificity in the aforementioned definition of phenomenology.

I am also, of course, indebted to my parents, my mother for facilitating chess in my life and my father for perpetuating it. In addition, thanks are also due to my former coach and current friend Alan Kantor for his training and sense of humor. Gratitude is forever due to my friend, Todd B. Isenstadt, for his dedication to philosophic rigor and staunch defense of contrasting opinions

with a willingness to still debate and explore, removed from the fact that he was at once a student of these, or rather of the precursors of these ideas. His dedication to epistemological excursions is reliable and inspiring. Jonathan P. Lampron helped me capture my trip to Cleveland in detail by lending me his expensive SLR camera for which I am forever grateful. I must also acknowledge Matthew D. Soleyn who simplified the idea of writing for me. Discussions with Matthew Strax-Haber about issues of organizational structures also served as a source of personal inspiration. My friend, Daniel G. Bostwick, has also been helpful in challenging my ideas given his pragmatism, which always challenges my philosophy of language. Our conversations always serve as a reminder for a yearning of simplistic complexity.