THINKING WITH GAMES IN THE BRITISH NOVEL, 1801-1901

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My dissertation explores how nineteenth-century novelists imagined rational thinking as a cognitive resource distributed through physical, social, national, and even imperial channels. Scholars studying nineteenth-century discourses of mind frequently position rational thinking as the normalized given against those unconscious and irrational modes of thought most indicative of the period's scientific discoveries. My project argues, in contrast, that writers were just as invested in exploring rational thinking as multivalent procedure, a versatile category of mental activity that could be layered into novelistic representations of thinking by "thinking with games": that is, incorporating forms of thinking as discussed by popular print media. By reading novels alongside historical gaming practices and gaming literatures and incorporating the insights of twenty-first century cognitive theory, I demonstrate that novelists Maria Edgeworth, Charles Dickens, Wilkie Collins, George Eliot, and Rudyard Kipling experimented with models of gaming to make rational thinking less abstract and reveal its action across bodies, objects, and communities.

If Victorian mind-sciences uncovered "thinking fast," games prioritized "thinking slow," a distinction described by psychologist Daniel Kahneman in his recent book, *Thinking, Fast and Slow* (2013). Scenes of games often slow thinking down, allowing the author to expose the complex processes of rational, cognitive performance. Furthermore, such scenes register the expanded perspective of recent cognitive literary

studies such as those by Alan Palmer and Lisa Zunshine, which understand thinking, at least in part, as externalized and social. In effect, by reading scenes of thinking along the lines proposed by strategic gaming, I demonstrate how novels imagined social possibilities for internal processing that extend beyond the bounds of any individual's consciousness. Of course, games easily serve as literary tropes or metaphors; but analyzing scenes of gaming alongside games literature underscores how authors incorporated frameworks of teachable, social thinking from gaming into their representations of rational consciousness. For strategy games literature, better play required learning how to read the minds of other players, how to turn their thinking inside out.

The nineteenth-century novel's relationship to games is best understood, I suggest, within the landscape of popular games literature published at its side – sometimes literally. An article on "Whistology" appears just after an installment of *The Woman in White* in Dickens's *All the Year Round*; the *Cornhill Magazine* published a paean to "Chess" amid the serialization of George Eliot's *Romola*. As a genre, strategy manuals developed new techniques for exercising the cognitive abilities of their readers and, often along parallel lines, so do the novels I discuss. Prompting the reader to think like a game player often involved recreating the kinds of dynamic, active thinking taught by games literature through the novel's form. My dissertation explores how authors used such forms to train their readers in habits of memory, deduction, and foresight encouraged by strategy gaming.

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LIST OF ILLUSTRATIONS

FREQUENTLY CITED WORKS

For in-text citations of texts written by the same author, I have used abbreviations of the titles for ease of reference and less bulky prose. I have also used abbreviations for periodicals when titles were too similar to easily identify the bibliographic entry.

A   *Armadale, Wilkie Collins*

B   *Belinda, Maria Edgeworth*

BH   *Bleak House, Charles Dickens*

DD   *Daniel Deronda, George Eliot*

FH   *Felix Holt, George Eliot*

GE   *Great Expectations, Charles Dickens*

K   *Kim, Rudyard Kipling*

LAL   *The Law and the Lady, Wilkie Collins*

M   *The Moonstone, Wilkie Collins*

M   *Middlemarch, George Eliot*

MF   *The Mill on the Floss, George Eliot*

MP   *Morning Post*

NN   *The Life and Adventures of Nicholas Nickleby, Charles Dickens*

NN   *No Name, Wilkie Collins*

OMF *Our Mutual Friend, Charles Dickens*

OT   *Oliver Twist, Charles Dickens*

PE   *Practical Education, Maria Edgeworth*

PP   *Pickwick Papers, Charles Dickens*

QR   *Quarterly Review*

R   *Romola, George Eliot*

SC   *Stalky and Co., Rudyard Kipling*

SCL *Scenes of Clerical Life, George Eliot*

TTC *A Tale of Two Cities, Charles Dickens*

WW   *The Woman in White, Wilkie Collins*

ACKNOWLEDGEMENTS

One of the concepts that my dissertation has borrowed from cognitive science is the "extended mind" and it best frames these few words of thanks. I need hardly say that I could not have completed this dissertation without the patience, guidance, and encouragement of my committee, especially my chair, Maia McAleavey. As the first line of defense, Maia saw some *very* rough drafts. Even so, she provided the organizational insights that helped me reshape and re-see my own work. It's been wonderful to work with someone who knew what I was thinking better than I did and constantly affirmed the worth of the project even when drafts sometimes fell so woefully short. From Maia I have also learned a great deal about professionalization, how to be a good colleague; she has set a wonderful example I hope to follow in my career.

I could say similar things about my other readers, Aeron Hunt and Alan Richardson. Aeron often pushed against the weak points of each chapter, pointing out time and again where I needed stronger and more convincing analysis. Her thoroughness provoked many hours of revision and refinement that always made a better chapter. I frequently marveled that she found the time to give me such thoughtful and detailed feedback; her efforts on my behalf reinforced her verbal encouragement and support. To Alan I owe both substance and style. He introduced me to cognitive literary studies and I observed its best methods and rhetorical tactics when reading his work. I finished my dissertation in a timely manner in part because I kept to the timeline that Alan suggested.

Beyond my committee are many others who form the "extended mind" of my dissertation. I would especially like to acknowledge James Najarian, who participated on my field exams. I enjoyed many chats with James and I have taken notes on teaching and

presentation from him as I have had the opportunity to observe him. Chris Wilson has been a cherished teaching mentor and friend. I am amazed at how he has supported and invested in me even though I am not in his field. I was blessed to take the final course taught by Ti Bodenheimer and consider her a mentor and friend as well. Though retired, Ti still found the time and energy to serve on my major field and to meet with me for long discussions. She read my full dissertation before some of my committee members and I am grateful for her continual support. Others in the English department have made my time at Boston College a true joy – not just because they handled most of the paper work: no acknowledgements would be complete without mentioning Tracy Downing and Linda Michel.

I have been blessed with a community of peers at Boston College who have made these five years or so some of my most cherished: Yin Yuan, Laura Sterrett, Megan Lease – I consider you as sisters. Scott Reznick – my cohort. Reflecting on the fact that we used to be four and are now only two makes me appreciative of the immense burden of doctoral study, a burden I am thankful to share with you. And many others: Ben Clarke, Irene Ruiz Ducal; Rowena Clarke, Rachel Ernst, Linda Martin; Amelie Daigle, Eric Pencek, Lauren Wilwerding.

Finally, to my wonderful husband: I really do enjoy hearing you describe my work to other people, which you do with fair accuracy. You are a haven and a refuge. Unlike Mr. Darcy, I *can* "fix the hour, the spot, the look or the words, which laid the foundation." To my parents: you instilled a love of reading in me from many hours spent together before bedtime and you taught me to love a God who is, I think, the best reader and greatest author of all.

INTRODUCTION: "THESE DAYS OF 'BOOKISH' GAMES"

INTERIORS AND EXTERIORS. No. 6.

A CHESS DIVAN IN THE STRAND.

Figure I.1

For the chess enthusiast visiting London in 1885, there was one destination not to be missed: Simpson's in the Strand, a public chess room.[1] Here, amateurs could rub elbows with the most renowned professionals, enjoying single admission, coffee, and a cigar for one shilling.[2] The room would likely be crowded: newspapers covering chess tournaments reported increasing public interest and large numbers of spectators; the best players were true celebrities, household names, and capable of earning a living by their winnings.[3] From humble beginnings, the growth of organized chess clubs from 1810 had, by 1885, developed thriving communities scattered over greater Britain, across Europe, and throughout empires. What had once been a casual pastime was now the business of some men's – and women's – lives. This dissertation is about how the public presence of strategic gaming and its growth over the nineteenth century entered that period's novels; but more specifically, this dissertation tracks how those novels incorporated forms of thinking as discussed by the popular print media associated with strategic play. The story of global gameplay does not begin with the advent of today's video games, nor even with computer-based technologies. It begins, in fact, by "thinking with games" in the nineteenth century: the sense that in games thinking becomes less abstract and becomes shared, whether between antagonists, partners, or even among large, social groups.

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[1] The British Chess Association was founded at Simpson's in 1885 and held their first tournament there in June of that year. See "The Chess Tournament" in *The Standard* (15 June 1885).

[2] For more on Simpson's and a brief history of chess clubs in the nineteenth century, see the entry for "Chess Clubs" by Charles Dickens Jr. in *Dickens's Dictionary of London* (1879). His list of clubs and publications, is, of course, incomplete.

[3] See accounts of the 1883 International Tournament in *The Morning Post* (1 May 1883; 5 May 1883; 7 May 1883).

The cartoon above from *Punch* captures many aspects of chess culture in 1885,

including a sense of history and progress, as older players give way to younger (see fig.

1.1). The depictions of Paul Morphy, an American, and two world champions, J.H.

Zukertort and Wilhelm Steinitz, represent chess as a symbol Western intellectualism.[4]

Beyond its portrayal of real chess celebrities in their beloved Divan, however, this

cartoon also evokes one premise of games literature: games externalize thinking. In

effect, gameplay figures forth internal thought processes in experiential and visual ways

that turn *internal* cognitive processing *social*. As part of the "Interiors and Exteriors"

series of recognizable persons and scenes of British public life, this sketch literalizes the

cognitive endeavors of gameplay: the smoke of cigars wafts towards the ceiling like a

materialization of thought and re-forms as a chess board, the subject of mental attention

for the chess players seated below. Each sketch in the series produced likenesses that

could be identified by readers, sometimes for a prize awarded for the most correct

guesses.[5] "A Chess Divan" proves even more interactive than most: the chessboard

figured on the ceiling contains a real chess problem, like those posed in the daily and

weekly chess columns of periodicals. George MacDonnell, himself represented

overlooking a chess game just left of center, called the cartoon "a fancy sketch in some

particulars, but, at the same time, perfectly true to life" (152).

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[4] Zukertort, for instance, toured England and Ireland giving demonstrations of his skill that included playing twelve simultaneous Chess games – blindfold. Newspapers reported his immense mental capacity and described his prodigious intellectual energies. See "The Great Chess Tournament" in *The Freeman's Journal* (1 Feb. 1879).

[5] This cartoon shows "some of the leading members of our fraternity" (MacDonnell 151). As the sixth in a series of society pictures titled "Interiors and Exteriors," "A Chess Divan in the Strand" joined sketches of "A Cabinet Council," an "Old Masters' Exhibition," "A Well-known Circulating Library," "The Reading Room, British Museum," "Theatrical Celebrities," "The Zoological Society," "The Central Criminal Court," and "The Stock Exchange," among others.

That *Punch* expected readers might recognize these players speaks to the widespread cultural influence of what I call the *gaming community*. The gaming community did not include just any game player; its members studied the recommendations of strategic games literature, devoting hours to practice and competition. These players considered skilled gaming – *not* gambling – as the essence of intellectual achievement and a suitable rubric for the judgment of character and mental ability. For gamers, gambling on games of chance was not only morally discouraged but intellectually contemptible. Scientific play, one author wrote, "has ceased to give the excitement of gambling, with the small pleasure of winning, and the great depression of losing, but it has supplied a far higher source of pleasure... the exercise of the intellect" (Drayson 5-6). The gaming community produced and consumed huge numbers of print materials: one author sold more than 60,000 copies of a guide to Bezique, a two-player card game. "This fact might make a publisher's mouth water," one journal commented in 1877 ("Our Portrait Gallery" 191). Gamers could make a living publishing on games, competing in tournaments, or composing problems. Reconstructing the gaming community requires assessing its cultural visibility and analyzing how its recommendations for strategic play configured deliberate, analytical thinking for its audience.

My dissertation reads thinking as it is depicted in nineteenth-century novels against the archive of historical gaming literature, which is practically untapped: until recent digitization projects made these resources available for searches, games manuals were primarily known only to collectors and enthusiasts. Yet games material rewards both surface and close reading; it demonstrates an overlooked component of British

history and culture, one that captures a rich, dynamic view on deliberate, strategic thinking. For writers coming to terms with how to put thinking into words – and into novels – thinking with games modeled cognition in networks, another tool in a growing arsenal of techniques for the representation of consciousness in narrative.

Strategy literature theorizes, and in fact standardizes, thinking as both individual and collective; internal and social; teachable, replicable, and spreadable. This dissertation recovers a sense of strategic gaming rooted in nineteenth-century culture and claims that games literature proves a useful tool for cognitive historicism. The period's interest in gaming, though well-known to collectors and aficionados today, can still be traced through the metaphors and scenes of games in nineteenth-century novels, including Maria Edgeworth's *Belinda*, George Eliot's *Romola*, Rudyard Kipling's *Kim*, and – of course – nearly every Charles Dickens and Wilkie Collins novel. These novels absorbed themes and forms of cognition from the significant but critically neglected body of popular gaming literature, narratives of thinking that complement but diverge from contemporary scientific accounts of the mind. To help illustrate the variety of cognitive forms in games literature, I turn to modern cognitive science, a discipline that has also developed by investigating games to better understand thinking.

Cognitive literary historicism "[embeds] cognitive literary study" within the "historical imperative...[and] argues that cultural/historical criticism must acknowledge the history of the human body and its mind" (Spolsky 165). In other words, cognitive historicism explores how the human brain and mind, nervous body, habits of thought, and

neural architecture enter history and, in literary applications, enter literature.[6] Though

"cognitive" carries an array of meanings, in this case, as Alan Richardson reminds us,

"'cognitive' is historical, naming processes and capacities unfolding... in relation to

specific physical and social environments, that are, of course, caught up in a ceaseless

process of historical change" (*Neural* 3). Modern day cognitive historicists often turn to

contemporary works in philosophy of mind, medicine, proto-psychology or neurology to

track the mind and brain in history. Cognitive applications of new historicism, therefore,

account for the historical mind as deeply tied to specific contexts and cultural constructs

as well as to find those cultural artifacts shaped by the constraints and aptitudes of the

human brain. Nevertheless, scholars still recognize that the "attempt to meld cognitive

science with cultural and historical studies is still potentially problematic, both

theoretically and in practice" (Crane 15).

My dissertation joins a growing group of scholarly publications that have wrestled

with just how best to blend modern cognitive science with nineteenth-century texts. In

The Physiology of the Novel (2007), for instance, Nicholas Dames links modern interest

in the physiological processes of reading to its Victorian precursors. Adela Pinch

unpacks the layers of cultural processing produced by the idea of "mental relations

between persons" in *Thinking About Other People in Nineteenth-Century British Writing*

(2010) (1). Vanessa Ryan's *Thinking Without Thinking* (2012) uncovers the ways

Victorian sciences of the mind were already laying the foundation for studies of intuition,

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[6] For introductions to the field and examples of recent work, see *Introduction to Cognitive Cultural Studies* (2010) and *The Oxford Handbook of Cognitive Literary Studies* (2015), both edited by Lisa Zunshine. These books each have sections dedicated to the subfield of cognitive historicism. See also, Elaine Auyoung, "Cognitive Studies"; Alan Richardson, "Studies in Literature and Cognition: A Field Map."

attention, and unconscious processing that many neuroscience labs pursue today.[7] These authors make the case for the relevance of nineteenth-century ideas about the mind to our own investigations today and demonstrate the abiding interest of writers in the activity of thinking.

My project adds to this awareness of the period's inquiries into the mind by expanding the kinds of materials under consideration. Scientific writings, philosophy of mind, medical writing and early psychology or neurology all help us better understand how writers theorized the mind; but games literature did so as a popular medium, one widely-read, discussed, and applied when players sat down to chess or whist. Strategy literature positioned itself as scientific and systematic, a means not only of describing the mind but of changing it. Historicizing the mind through strategic gaming, therefore, participates in one of the primary goals of cognitive literary historicism: that is, to see the mind as multiple and to understand the border between mind and culture as permeable. As a result, I uncover new ways to read for thinking in novels and show how authors incorporated theories on the mind without necessarily turning to institutional science. The surprisingly large genre of games literature helped authors think about thinking by promoting strategic play, explicitly commenting on the nature of thinking or the human mind, and emphasizing games as periods of thinking in action.

In order to help highlight the cognitive tendencies within games literature, I, too, have recourse to modern day cognitive science. Each chapter draws on modern theories of thinking including Theory of Mind, metacognition, embodied thinking, and extended mind. I explain each of these in detail in the chapters they support. Bringing modern

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[7] Her book has been retracted by the Johns Hopkins University Press and therefore does not figure as prominently in my dissertation as it otherwise would.

cognitive science to bear on games literature has four main advantages: first, it highlights the cognitive aspects of games as implied, assumed, or discussed by games literature. Second, modern cognitive science helps point up the revealing discontinuities between the way games literature imagines thinking and ideas of thinking in contemporary scientific discussions. Third, cognitive science often uses games as tools to make thinking less abstract, more visible for study, and it shares this approach both with nineteenth-century games literature and with the authors I discuss. Finally, games literature tends to assume that most minds work in the same way and that strategy can be universalized but writers of fiction did not always do so, much like cognitive scientists today. Psychologists studying video games, for example, suggest different strategies may be equally successful depending on the relative mental strengths of the player: "some people have very fast reaction times, while others are good at memorizing things" (Loftus 44). These skills, though different, may prove equally successful in games. Dickens, Eliot, and Kipling each suggest that an individual's personal cognitive ability plays an important role in thinking with games.

This dissertation incorporates a range of methods from recent scholarship in cognitive literary studies. Works such as Lisa Zunshine's *Why We Read Fiction* (2006), Alan Palmer's *Social Minds* (2010), and Blakey Vermeule's *Why Do We Care About Literary Characters?* (2010) each take an ahistorical approach, turning to contemporary research in the cognitive sciences to argue for the relevance of modern, interdisciplinary readings of texts. Gaming literature provides a necessary ballast, not only for contemporary, Victorian science but also as a guide for my cognitive historicism and I draw on modern cognitive science as I find its echoes in gaming literature or in scenes of

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games in novels. Emily Steinlight briefly summarizes the Victorian understanding of the

"separation" between "networks of neural impulse" and the "higher faculty or intellect

that manages thought" (106-107). Modern approaches now understand that separation as

virtually nonexistent. Though writers on games certainly concentrated on the higher

faculty, they often turned to neural language to describe how gaming could absorb and

interest its players. Collins, too, weaves the language of nerves into his accounts of

rational thinking and Eliot, in reaction against the separation of rationalism into clinical

gaming, positions conscious thought within and throughout the body. In the absence of

specific knowledge about neurological architecture, these authors transposed

contemporary, social models of thinking from strategic games literature into novels to

bring readers new kinds of minds. Thinking with games opened possibilities for

imagining new kinds of minds or procedures for thought that sometimes contradicted

Victorian science and show striking parallels to modern cognitive science. Thinking with

games, we might say, anticipated modern cognitive science in practice, if not always in

theory.

Although strategic gaming literature was not new to the nineteenth century it did

undergo significant and period-bound changes that reflected new cognitive interests (see

fig. 1.2). Prior to the nineteenth century, games of chance were more popular than games

of skill and early games manuals synchronize issues such as chance, luck, gambling, and

morality.[8] Then, in 1742, Edmond Hoyle published a new kind of games manual

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[8] See book-length studies by Kavanagh, Molesworth, and Richard. Also see David Levy,
"Pirates, Autographs, and a Bankruptcy" and his blog, *Edmond Hoyle, Gent*., especially
the entry on "The Doctrine of Chances"; A.A. Markley, "Aristocrats Behaving Badly:
Gambling and Dueling in the 1790s Novel of Reform"; Gillian Russell, "'Faro's
Daughters': Female Gamesters, Politics, and the Discourse of Finance in 1790s Britain."

explaining how players might improve skilled play. Rather than the character vignettes,

anecdotes, and etymologies of earlier games books, Hoyle's treatise focused on

intellectualizing whist according to a system of probability calculations.[9] His system

quickly earned a reputation as a new science, but one that was so accessible to players

that whist steadily gained on chess as the dominant strategy game, a status it enjoyed

until the end of the nineteenth century when it evolved into Bridge.[10] Hoyle's manual

inspired a genre of popular games literature that exploded during the nineteenth century.

At midcentury one author estimated that the number of British games publications had

"enlarged tenfold" since 1800 ("Chess," *QR* 82). Whist and chess clubs formed in major

cities to practice game play and organize tournaments. London clubs frequently

challenged clubs in Edinburgh, Paris, and Calcutta to matches played by correspondence.

New systems of mail and eventually telegraph made such connections possible. Women

competed anonymously by correspondence, joined local clubs, formed their own clubs,

and published gaming problems in periodicals. By the end of the century, standardized

gameplay had rebranded itself as respectable and intellectual, promising players

improved cognitive function as well as amusement.

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[9] The first English rulebook, *The Compleat Gamester* (1674) by Charles Cotton, taught players how to play through character-based narratives and dialogues (Richard). Hoyle's focus on strategy, including probability charts for gambling, inspired multiple editions, imitations, and piracies (Levy, "Pirates"). The first Hoyle bibliography appeared in 1889, a sign that such literature remained both popular and collectible (W. Butler 209).

[10] With Hoyle's publication, whist replaced Ombre as the most common national game (Molesworth 71-74). Its subsequent decline in favor of bridge makes whist a particularly late-eighteenth and nineteenth-century phenomenon. For more on the history of whist, see Parlett pp. 214-237.

Figure I.2 This graph shows the relative number of times Chess, Whist, Ombre and Bezique appear in the texts of Google Books from 1700-1950. Ombre was a game of chance popular in the eighteenth century but it wanes in the nineteenth as Chess and Whist, games of skill, rise in popularity and dominate print media. There are significant spikes confirmed by my reading in the literature, such as the early jump in mentions of Chess around 1800 and the steady climb in mentions of Whist beginning in 1860. At the bottom of the chart, the slight increase for Bezique in the 1870s provides useful context: during that period, at least one author sold 60,000 copies of his guide to Bezique which enjoyed a brief, but intense popularity. That popularity, though significant, still does not approach Chess, Whist, or even Ombre. We can extrapolate, therefore, a relative sense of how pervasive were references to Chess and Whist in those books digitized by Google.

Today's *Card Games for Dummies* remarks that "you don't have to play cards all that well in order to enjoy yourself" (Rigal 1); but this was not the expectation of the Hoyle manuals or those that followed its lead. Almost immediately, reactions to Hoyle labelled his methods "scientific."[11] Though in jest, *The Humours of Whist* (1743) first proclaimed "Lo! Whist he [Hoyle] makes a science..." (7), a comment taken seriously by

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[11] Mark M. Hennelly unwittingly uses the same phrase in his essay but uses it generically. By "His paralyzing scientific play," Hennelly means Pickwick's playing at being a scientist ("Praise" 39); by "rejecting the detached play of science," Hennelly means that Pickwick abandons methods from the natural sciences for more social forms of play ("Praise" 40).

games manuals in the nineteenth century: "most probably [Whist] then began to be a scientific game [after Hoyle's treatise], and has gone on advancing to its present perfection" (Bohn 3). Nineteenth-century handbooks promised "the most complete directions for playing games of skill and science" (Bohn v); "a more logical disposition substituted for the elaborate confusion of the former editions" (H—. v); to combat "superstition" by demonstrating to players that "*chance has rules* which may be discovered" for "*Conduct is fate*" (1-3). Manuals claimed that without some kind of system, players would find it "as impossible to make any progress in the science of Whist, as to learn to *spell* before they know their alphabet" (Matthews 47). Show a player the science of Whist, however, and "he will never after err in those cases, and will also know how to profit by similar correctness in his future partners" (4).

Games occur frequently across nineteenth-century literature but not all uses of games touch on the cognitive vectors of gaming culture. William Makepeace Thackeray, for instance, uses whist as a metaphor for the "presiding genius that watched over the French nation" when its "adversaries began to pour in their trumps" (*Catherine*, ch. 1). Mary Elizabeth Braddon's narrator compares the "game of life" to the card game Écarté in *Lady Audley's Secret* (224; ch. 12); George Meredith opens *The Egoist* with an extended metaphor: "Comedy is a game" (33). Games mark characters, as Anthony Trollope's Melmotte thinks of his financial risks as a "very dangerous game" (*Way* 412; ch. 54) or Bram Stoker's Van Helsing plays a "chess game for the sake of human souls" in *Dracula* (253; ch. 14). Charles Lamb's 1823 essay, "Mrs. Battle's Opinions on Whist," nostalgically satirizes the card enthusiast of the eighteenth century through the familiar metaphor of game as war. In *Cranford*, card games such as Preference, Ombre,

and Quadrille smooth over ruffled social relations and provide common ground between classes. I could make similar lists for field sports, children's games, or parlor games, such as the Christmas games that cycle through Alfred, Lord Tennyson's *In Memoriam* much as they do through *The Pickwick Papers*. The challenge, therefore, is not finding games to discuss but selecting which to highlight.[12]

This selection process often entails, I argue, two common errors. The first considers all games as being on a par; and, in the context of "play," broadly conceived, may extend the category of game to a variety of amusements, including riddles, puzzles, and home theatricals. This error overlooks the culturally specific ways that the nineteenth-century gaming community wrote about games. Games literature, especially strategy literature, categorizes games according to the kinds of mental activity they incite. Chess, for example, tests thinking ahead, rather than memory. Theoretically, with enough processing power, every move of the game can be calculated, as Deep Blue, IBM's supercomputer, showed when it defeated grandmaster Garry Kasparov in 1996.[13] Whist, on the other hand, tests recall and deduction. Nineteenth-century gamers considered these differences in cognitive skills as indicative of the mental abilities of the players. The second error involved in studying "games" extrapolates from the concept of "game" to its familiar metaphors, such as business or love, even without explicit mentions of games in the text. Of course, authors often encourage just this kind of

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[12] For a sweeping anthology that touches on chess in literature from Tennyson to Woody Allen, see Burt Hochberg's *The 64-Square Looking Glass: The Great Game of Chess in World Literature* (1993).

[13] The rules of engagement allowed human engineers to update and correct Deep Blue's play between matches. Obviously, Kasparov had no such aid. The Deep Blue experiment tells us more about chess than it does about human intelligence. See Christian pp. 102-114, 124-128, 263-264; Grimstad pp. 115-117; Pfeifer p. 34.

extended metaphor; Trollope, for instance, uses games of chance throughout *The Way We Live Now* as an analogue for risky business practices. Without some kind of benchmark, however, this kind of analysis ends up eroding any meaningful purchase for "game" – anything might be a game.[14] In my view, this second error follows twentieth-century play theory in universalizing cultural structures at the expense of historical specificity.

For *Thinking with Games*, I extracted selection criteria from the rubrics generated by games materials, especially those emphasizing the cognitive parameters of the games in play. Some games generate more discussion of strategy and thinking than others and this is one reason I often discuss chess but never checkers.[15] I focus on the kinds of gameplay valued by and representative of the gaming community. As a result, the novels I discuss here all engage with gaming literature along specific and sustained lines, with details of strategy, terminology, and entire scenes of gameplay that incorporate, respond to, or repurpose material found in games literature. These scenes also foreground the mental activity of the players, either within the confines of the game or by adding layers of social thinking to those already present in the game. From such scenes, I then move elsewhere in the novel but I extrapolate along the cognitive lines suggested by the scene or scenes of gaming.

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[14] In the eighties, to some it was an exciting idea that "It is possible to describe much literature – and practically all fiction – in the terminology of sporting or social games" (Hutchinson 1); but the fact that such approaches did not inspire many "further, more rigorous, investigations" suggests to me that its breadth was a disservice (vi).

[15] In fact, the gaming the community did play checkers – until 1863. In that year, more than half of the games of checkers played in the world championship tournament were played exactly the same; all of the forty games were draws. With enough analysis, or practice, checkers can be fully optimized (Christian 124-128). Chess, on the other hand, presents a completely different scenario because of the number of pieces and their different abilities.

Perhaps the most well-known example of a novel that explicitly draws on gaming publications would be Lewis Carroll's *Through the Looking Glass* (1871), a novel that solves a chess problem much like those printed daily and weekly in periodical chess columns.[16] Carroll printed his own image of a chess problem as a frontispiece to his text; the board's few pieces convey a game already in progress, a problem to be completed by the reader. The key below provides the solution, whimsical moves that mimic the story to follow rather than any particular rules of chess. Carroll literally figures his novel first as a game, inviting the reader to participate in Alice's journey, maybe even play it out on a chessboard. I do not discuss Carroll at length in my chapters, however, because even though Carroll alludes explicitly to the forms published by the gaming community he does not pursue the kinds of thinking those forms were meant to generate. By contrast, Carroll, of course, reveals the irrational narrative enclosed within the surface rationalism of the chess game. Alice does not play the game so much as the game plays her – she is often moved by the other pieces without time for the kinds of studied, deliberate attention encouraged by strategic gaming. The chess game in *Through the Looking Glass* limits the reader, like Alice, from thinking through its moves. The player-reader must follow Carroll's prescription in order to achieve the right narrative, for Carroll's chess problem follows its own rules and disbars the reader from thinking through its solution without doing so along the lines he suggests (see fig. 1.3). By default, all novels lead their readers in this way and Carroll's chess problem suggests a kind of satire on the analogy

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[16] For more on Carroll and games see Kathleen Blake, *Play, Games, and Sport: The Literary Works of Lewis Carroll*; Martin Gardner, *The Universe in a Handkerchief: Lewis Carroll's Mathematical Recreations, Games, Puzzles, and Word Plays*; Richard F. McCoart, "Lewis Carroll's Amazing Number-Guessing Game."

between thinking with games and thinking with novels. Nevertheless, each of the authors in the chapters that follow incorporate games in an effort to raise the cognitive stakes of their fiction and to attune their reader to new forms and kinds of reading. Edgeworth, for example, uses the form of whist as a plotting device; Dickens rejects games as a generic domain and urges his readers to understand the difference between games of chance and games of skill; Collins and Kipling include tests of rational sensation for the attentive reader; Eliot introduces patterns of reading for the body along postural and morphological lines. Unlike Alice, the reader may take up these invitations to approach novels as games and think along with both characters and texts.
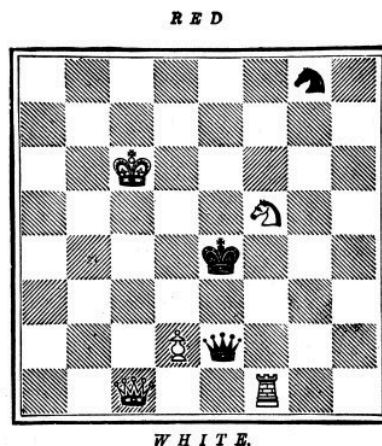
White Pawn (Alice) to play, and win in eleven moves.

	PAGE	
1. Alice meets R. Q.	140	1. R. Q. to K. R.'s 4th . . . .
2. Alice through Q.'s 3rd *(by railway)* . .	147	2. W. Q. to Q. B.'s 4th *(after shawl)* . . .
to Q.'s 4th *(Tweedledum*		3. W. Q. to Q. B.'s 5th *(becomes sheep)*
and Tweedledee)	149	4. W. Q. to K. B.'s 8th *(leaves egg on*
3. Alice meets W. Q. *(with shawl)*	168	*shelf)* . . . .
4. Alice to Q.'s 5th *(shop, river, shop)* .	173	5. W. Q. to Q. B.'s 8th *(flying from R.*
5. Alice to Q.'s 6th *(Humpty Dumpty)* .	179	*Kt.)* . . . .
6. Alice to Q.'s 7th *(forest)*	200	6. R. Kt. to K.'s 2nd (ch.) . . . .
7. W. Kt. takes R. Kt	202	7. W. Kt. to K. B.'s 5th . . . .
8. Alice to Q.'s 8th *(coronation)*	213	8. R. Q. to K.'s sq. *(examination)* . . . . .
9. Alice becomes Queen	220	9. Queens castle . . . .
10. Alice castles *(feast)*	223	10. W. Q. to Q. R.'s 6th *(soup)* . . . .
11. Alice takes R.Q. & wins	230	

Figure 1.3 Frontispiece to Through the Looking Glass *(1871). Here, the description of the moves parallels the narrative. Number 10, for example, reads "Alice castles (feast)." Significantly, the moves of this game do not follow those allowed by chess, as white moves several times in a row. If published in a periodical, readers would be given the image of the board and left to work out its solution, which they might then submit to the editor for a prize or find printed the following week in the column.*

Carroll's use of the form of gaming literature exposes the extent to which the gaming community did not play their games in the unstructured sense of free play we often associate with the term "play" today; yet most studies of games and play in history employ "play" rather than "game."[17] In *Homo Ludens* (1938), cultural theorist Johann Huizinga reinforced the stereotype that play fits better with the eighteenth and twentieth centuries than with the serious, earnest nineteenth century, which "seems to leave little room for play" (191).[18] Scholars such as J. Jeffrey Franklin, Mark Hennelly Jr., Matthew Kaiser, and Nancy Morrow have each worked to dispel this impression but without altering definition of play as free, open, and everywhere.[19] Kaiser in particular argues

[17] "Play" has a long and significant history in western thought and philosophy. Mihai Spariosu traces the concept of play in philosophy and science from the end of the eighteenth century. He takes a broad view of play, an "elusive phenomena" that "transcends all disciplines, if not all discipline" (xi). For postmodern theory, Derrida described "free play" as what remains when man can no longer be considered as the ultimate point of reference. See his essay, "Structure, Sign, and Play in the Discourse of the Human Sciences" (1996).

[18] Huizinga expands on this by saying, "Tendencies running directly counter to all that we mean by play have become increasingly dominant" (191). This definitional positioning, *all that we mean by play*, obscures varieties of play present in the nineteenth century.

[19] Studies of play frequently treat it – and games – as ahistorical and transcultural. Huizinga, for instance, traces play elements through ritual ceremonies across space and time. Social theorist Evan Berne's 1964 *Games People Play* took seriously the familiar maxim that "life is a game," expanding the concept of games in culture as a metaphor for everyday social interactions and choices (Hutchinson 1). The recent push for "gamification" espouses this notion of broadly encompassing play. Gamification refers to the idea of turning things, perhaps boring school lessons or business meetings, into games to make them more palatable and fun. In "Gamification is Bullshit," game designer Ian Bogost suggests that turning everything to a game or play structure undermines the core of what those terms actually mean. Bogost extends this position in his recent book, *Play Anything* (2016), arguing that turning things into games misses the elements of play already contained in manipulating constraints. In other words, "gamification is bullshit" because game and play already exist in everyday activities, if defined correctly. His argument echoes Huizinga's and Kaiser's in the sense that play exists throughout a diverse range of activities but differs in his emphasis on the importance of rules and limits.

that play, broadly conceived, provided Victorians with a conceptual framework for modernity. The Victorians, he argues, had "no difficulty whatsoever (and neither do we) characterizing chaos as a game" (Kaiser 17). Kaiser's historical argument, however, relies on twentieth-century conceptions of play, reading play theorist Brian Sutton-Smith's "seven primary rhetorics of play" back into literary texts to expose play in Victorian cultural paradigms (19). The very effort, however, of organizing the "fractious field of play studies" means that Kaiser's expansive vision of play brings some aspects of Victorian culture into focus at the expense of others (19). The kinds of play Kaiser explores, such as "play as subversion," "play as imaginary," or "play as fate," differ from the kinds of play valued by the gaming community.[20] For Kaiser, play functions as a philosophy or worldview, hence the title of his study, *The World in Play* (2012); for me, *game*play configures and concretizes thinking between players, whether partners or antagonists. Rather than defining games as particular kinds of activities or limit-based structures, I examine games for the forms of thinking they produce.

Jane Austen uses this kind of gameplay in a scene of gaming in *Mansfield Park* (1814): at the novel's center, two card games coordinate the complex thinking of the players. At one table, Sir Thomas, Mrs. Norris, and the Grants play whist; the remaining characters – Fanny, Edmund, the Crawfords, William, and Lady Bertram – play Speculation. The card games provide the occasion for observation and discovery: Miss Crawford plays boldly, yet badly, in an effort to disguise her interest in details concerning Edmund's future property; Fanny also hides her interest by playing the game, though her

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[20] For all seven "logics of play," see Kaiser pp. 22-39. Many of these, of course, have much older analogues whereas the gaming community developed and grew largely as a nineteenth-century phenomenon.

motives differ from Miss Crawford's; Sir Thomas observes that Henry Crawford flirts with Fanny. The scene inverts the model previously explored in the grounds at Sotherton: there, Austen obscures her characters from each other, literally losing them among the shrubs, leaving Fanny alone as a static point of contact the others occasionally pass by. At the card party, Miss Crawford explicitly recalls Sotherton and thus juxtaposes its contrast to this scene of many minds, confined to the small space of two contiguous card tables. This scene foregrounds the central concerns of *Thinking with Games*: how authors apply cognitive structures from games and how the assumptions and assertions about thinking in games shapes dynamic thinking for characters and readers. Austen, for example, tracks who *plays* what and how even as she distills who *thinks* what and how throughout the scene.

Sir Thomas "was a Whist player," Austen tells us; and she knows that for Sir Thomas, this description means being part of the gaming community. He recommends that his wife play Speculation because he "perhaps might feel that it would not much amuse him to have her for a partner" (Austen 187). Whist accommodates four players, two sets of partners, who take turns playing cards in the hopes of winning the trick. Without sharing information about their cards, partners must maximize their ability to play jointly. Sir Thomas knows that although his wife may know the elementary rules of the game, she certainly does not understand its strategy and therefore will most likely disadvantage his own ability to play well. Sir Thomas, readers infer, knows more about whist's strategy than does his wife and cares for skilled play. Players of scientific whist would certainly advise Lady Bertram just as Sir Thomas has done. Many games books,

such as A.W. Drayson's *Intellectual Whist* (1899), lamented the follies of "unteachable Whisters" (40).

Austen lightly mocks the serious intentions of scientific gameplay but she also incorporates its cognitive emphasis into her scene of whist and Speculation. She differentiates the whist "table of prime intellectual state and dignity" from the "the lively turns, quick resources, and playful impudence that could to do honour to the game [Speculation]; and the round table was altogether a very comfortable contrast to the steady sobriety and orderly silence of the other" (Austen 187-188).[21] Though ironizing the "intellectual state and dignity" of the whist table, Austen nevertheless links Sir Thomas's thinking to his game-based training. At the dinner party, "he first began to think, that any one in the habit of such idle observations *would have thought* that Mr. Crawford was the admirer of Fanny Price" (186, emphasis in original). The sentence would more simply read that Sir Thomas "first began to think that Mr. Crawford admired Fanny Price"; but, instead, Sir Thomas arrives at this observation through the indirect means of imagining what "any one in the habit of such idle observations *would have thought*." The sentence implies that Sir Thomas would not personally condone such "idle observations," yet might reasonably imagine another doing so; Austen suggests, however, as "a Whist player himself," a game predicated on the keen "observation" of its players, Sir Thomas transfers the habits and patterns of thinking from the social partnerships of the game to the more general social scene. The best whist players cultivate "observant" calculation through constant "inferences, more or less definite, as to where certain other

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[21] Dickens uses the same parallel and strikingly similar language in his scene of two games tables, one for whist, one for Pope Joan, in *The Pickwick Papers*. See pp. 127-129 in this dissertation.

cards do or do not lie" (Pole, *Philosophy* 13). Sir Thomas only observes Crawford's

liking for Fanny, of course, after the end of the whist game, when he then "became a

looker-on at the other" table and "found his niece the object of attentions" (Austen 192).

Without consciously doing so, Sir Thomas applies observational skills recently honed in

a card game to the social dynamic developing between his niece and Henry Crawford.

The rubber ends, but Sir Thomas continues drawing "inferences, more or less definite"

about Fanny and Henry, instead of his cards.

Austen may not recommend whist as a course of study for cognitive

improvement, as did some authors on the game, but she does acknowledge how studying

strategy in one context adapts another, a commentary on the brain's subconscious

teachability. In *Jane Austen, Game Theorist* (2013), game theorist Michael Chwe ranks

Mansfield Park second only to *Emma* for Austen's interest in strategic thinking (49).

Chwe contends that Austen's novels interrogate choice and rational decision making,

values now studied and applied in economic game theory, but insists that Austen

differentiates between strategic thinking for real life and winning inconsequential games

(137). Austen, he writes,

> often features card games and parlor games, such as whist and backgammon. One
> might think that she would use these games to illustrate strategic thinking, as do
> other game theorists.... Instead, Austen uses these games to illustrate the tendency
> of excessive decontextualization, of focusing in so closely on the inconsequential
> that one loses sight of the larger social context. Austen emphasizes that strategic
> thinking is about much more than the triviality of "winning." Austen's characters
> who like card and board games are generally not good at strategic thinking in the
> social realm.... When Austen's characters who are skilled in real-world strategic
> thinking do play cards, they play with an eye to the larger social context, with a
> more serious game in mind; they resist the decontextualization that close attention
> to an "artificial" game like whist requires... (137-138)

Chwe's analysis correctly distinguishes between the kinds of gamers favored by Austen but he misreads the correlation between so-called trivial games and social games by prioritizing thinking as an outcome-oriented process. Yes, in this scene, Sir Thomas and Mary and Henry Crawford all think strategically in misdirected channels even though they are three of the more skilled and invested gamers; nonetheless, they are the characters doing the strategic thinking, in part because of, or under cover of, the games they play. Whether or not games *should* train thinkers, Austen explores the ways they *do*. Though her scenes of games may not demonstrate the kinds of strategic thinking prioritized by game theory and by Chwe, such scenes come layered with the cognitive expectations and assumptions shared by gaming literature. In fact, gaming literature frequently advertised its own congruence with real life: the "educated player" plays whist like life, for "if he is a wise man he will not act at random. Although he cannot *foresee...* he may at least... form a judgment of what is *probably* the best thing to be done" (Pole, *Philosophy* 12). Such is just the kind of thinking prized by today's game theory but here it occurs because of games, not in spite of them.

I have not pursued game theory in this dissertation because doing so often means eschewing the historical context of games literature. Chwe, for example, considers all games, whether cards, board games, or parlor games as functioning in the same broad, irrelevant category because his games consist of chains of real-life decisions leading to more or less valuable, moral, or preferable outcomes. In other words, he prioritizes only one kind of thinking with games: rational decision-making. My dissertation argues, to the contrary, that by pointedly incorporating two theoretically and cognitively different kinds of games in this scene, Austen highlights the different modes of strategic thinking

pursued by their players. She could do so, in part, because gaming literatures distinguished games based on kinds of thinking. Throughout this dissertation, I argue for the significance of historically and cognitively specific paradigms drawn from nineteenth-century games and especially those rehearsed by games literature.

During the games in *Mansfield Park*, conversation and social observation occur during significant pauses in gameplay. The round game, Speculation, requires little forward thinking and therefore accommodates long conversations concerning the landscaping of Edmund's future estate. The players at the whist table, by contrast, must certainly overhear but they only rarely attend. Sir Thomas attempts to inquire about his wife's enjoyment of the other game but "no pause was long enough for the time his measured manner needed" (Austen 188). Prioritizing the claims of whist on his attention, Sir Thomas adjusts his social engagement to whist's temporalities. Mrs. Norris manages to contribute a statement but only "being just then in the happy leisure which followed securing the odd trick by Sir Thomas's capital play and her own, against Dr. and Mrs. Grant's great hands" (192). Austen's development of the whist game implies that Mrs. Norris, certainly quicker and more socially energetic than her partner Sir Thomas, speaks out in part because she feels so secure in the fortunes of the card game. Austen returns to this theme, the tempo of attention, repeatedly throughout the scene. The absent voices in the scene's dialogue, those of the whist players, underscore their necessary absorption in good play. Their silence formally expresses an intellectual ideal of gaming literature, that "habits of deep playing [require] meditation, and a total abstraction from any thought but what is fixed on the cards at the time" (Matthews 64).

Gaming literature recommended whist as "a most effective means of cultivating the perceptive faculties" and even claimed that its "study and thought will enable [players] to succeed in the game of life" (Drayson 19, 20). Though Austen foregoes any predictions of the relative success obtained by the study of whist, she links its development of perception and observation to the "game of life." Austen frames her scene of gaming by describing Sir Thomas's state of "mind," which, being "disengaged" and "at leisure," "he could not avoid perceiving in a grand and careless way that Mr. Crawford was somewhat distinguishing his niece – nor perhaps refrain (though unconsciously) from giving a more willing assent to invitations on that account" (Austen 186). Austen stages Sir Thomas's perception, however, before he perceives; that is, she frames his mental temperament at the opening of the chapter with this statement but then reveals later in the course of narrative that he first observes Crawford's attentions *after* the end of the whist game. In effect, Austen primes the reader to notice the social dynamics between Henry and Fanny *before* Sir Thomas, who only observes most closely after the cognitive preparation of "deep playing." The fact that Sir Thomas "could not avoid perceiving" proceeds from the general condition of human awareness but even more precisely in the moments directly following his "total abstraction" in the game of whist. The key parenthetical – "(though unconsciously)" – reflects the extent to which Sir Thomas's mental action absorbs the social thinking fostered by the rubber.

In fact, Sir Thomas continues this state of elevated observation throughout the rest of the evening. While Henry "sat silently observing them [William and Fanny]" he was "himself in the meanwhile observed by Sir Thomas, who was standing in a chat with Dr. Grant" (Austen 195). This simple detail actually disguises the highly cognitive activity it

contains. In cognitive terms, the key phrase is the one subordinated by syntax: "who was standing in a chat with Dr. Grant." Sir Thomas holds a coherent conversation with Dr. Grant all while observing and thinking about Henry and Fanny. In a compressed form, this sentence replays the cognitive dynamics of Speculation, where the players carry on a conversation while negotiating for cards. In his book *Thinking, Fast and Slow* (2013), psychologist Daniel Kahneman describes two related systems of thinking: the first, irrational and unconscious (fast) and the second, effortful and conscious (slow). We tend to believe our conscious choices have been guided by system two, or slow thinking, but Kahneman's book points out just how often that is not the case. One of system two's "main characteristics is laziness, a reluctance to invest more effort than is strictly necessary. As a consequence, the thoughts and actions that System 2 believes it has chosen are often guided by... System 1" (Kahneman 31). Kahneman points out, throughout his book, the challenges faced by the limited resources of our conscious attention and, although he praises the surprising ability of intuitive thinking to manage most of our thought-life, he still encourages procedures and guidelines that support system two in an effort to avoid poor judgments. In effect, the games prime these characters to continue exercising attention applied across multiple points of focus.

Austen applies whist as a means to expose Sir Thomas's cognitive activity; but the scene also pinpoints an unlikely thinker: Fanny. Though often criticized as Austen's most boring, weak, and unlikeable heroine, in this scene Austen contends that Fanny's inner intelligence matches Mary Crawford's, outwardly Fanny's direct opposite. Both women play Speculation; but Miss Crawford plays "like a woman of spirit" (Austen 190). She does so to hide her interest in the conversation about Edmund's inheritance,

pretending complete absorption in "a negociation for William Price's knave" (189). She wins the game, but, symbolically, it "did not pay her for what she had given to secure it" (190). Mary demonstrates her intelligence by her ability to follow the conversation and play the game – and play it to an ulterior purpose. Significantly, however, Fanny plays in a similar way. Just like Mary, Fanny "tried to hide her interest in the subject by an eager attention to her brother, who was driving as hard a bargain and imposing on her as much as he could" (191). Edmund, like many readers, attributes Fanny's motives to moral generosity when, all along, her play provides a cognitive screen for her real thoughts.

Austen tracks several ways gaming exposes *Thinking with Games*, the title for this dissertation. As an early nineteenth-century writer, however, she writes without the Victorian sense of the public, international gaming community. Matthews's publication of *Advice to the Young Whist Player* in 1804 and changes in whist's gameplay inaugurated increased publications of games literature that continued to increase. The awareness of games as tools for thinking continued through the century and, even though Hoyle first brought attention to the cognitive activity exposed by gaming, developed most fully from Matthews, as players realized alternative systems could cultivate thinking in new and different channels. This is the sense that Austen brings to her scenes of games and the same applies to Edgeworth's *Belinda* (1801). Both of these authors incorporate games as tools for thinking but remain focused on the game table as a kind of limit for the cognitive network of the game. The foundations of the gaming community were nascent from the beginning of the nineteenth century but would eventually become increasingly visible. Until the early-1820s, gameplay itself occurred primarily in private circles, whether in the home or in the club; but the correspondence chess match between London

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and Edinburgh in 1824, and its press coverage, forecast the trend of the gaming community that would develop throughout the Victorian period. Dickens, therefore, serves as a significant transitional writer between the early- and mid-nineteenth century as his scenes of games, especially in his early fiction, represent the same kinds of distributed thinking within close quarters as do Austen and Edgeworth even as he expands and develops his awareness of the gaming community in later novels. From the first international chess tournament in 1851, the gaming community assumed new, public dimensions, received increased press, founded new journals devoted exclusively to gaming, and carried both games and its literature through the growing British empire. Even though the gaming community belongs, in its fullest visibility, to the Victorian period, I use this term throughout my chapters to underscore its earlier foundations, a community being formed by its growing literature even before its more public exposure. Also, though less public, thinking with games was always *social*, especially following Matthews's treatise.

Attached, as it was, to nineteenth-century cultural structures, whether clubs or empire, writers in the twentieth century could still participate in the gaming community while reflecting on its status as a remnant of the past. "The Chess Problem," a short story published in *Punch* in 1922, looked back on the gaming community by reflecting on some of its most pressing questions: as a hobby, gaming could entirely absorb its adherents; could it change a person's brain? Influence how they saw and thought about the world? How successful were games as tools for thinking? The narrator claims he is "not a chess player"; but when he describes how reading "Tchekovski P – K3, Casabianca P – KB4" conjures the whole scene – "the tense white faces of the

combatants... the nervous flick of the wrists" – the reader suspects he knows more than he

lets on (Knox 4). The narrator decides to try his hand at a chess problem – "You know

the way that these problems are presented in the Press," he says – but it becomes an

obsession that interferes with his health, invades his dreams, and nearly ruins his

Christmas until a small boy comes along and solves the problem at random (4). The

story poses a tongue in cheek reflection on the gaming community, acknowledging the

cognitive absorption, strained attention, and intellectual interest its games provoke while

suggesting at the same time that more study, effort, or thinking do not necessarily

guarantee successful play. The narrator, an expert player, still overlooks the simple

solution; by thinking with games, the narrator *over*think*s* the problem.

Thinking with Games explores how novelists imagined rational thinking as a

cognitive resource distributed through physical, social, national, and even imperial

channels. Scholars frequently prioritize unconscious and irrational modes of thought as

those most interesting to Victorians, as I discuss in my chapters on Collins and Eliot; but

my project suggests that writers were just as invested in how rational thinking functioned

as a multivalent procedure. More than a source of stable selfhood, conscious thinking

constituted a versatile category of mental activity, one that authors layered into their

novelistic representations of thinking. My dissertation takes gaming – a cultural and

cognitive practice central to the nineteenth century and, I argue, to its fiction – as key to

understanding the complexities of rational thinking. By reading novels alongside gaming

practices and gaming literatures and incorporating the insights of twenty-first-century

cognitive theory, I demonstrate that novelists Maria Edgeworth, Charles Dickens, Wilkie

Collins, George Eliot, and Rudyard Kipling experimented with models of gaming to

explore how applied rational thinking simultaneously enables gameplay and manages

cognitive demands in social networks.

I.   Historical Gaming Literature

It is a singular but an unmistakable testimony to the popularity of Whist, that in none of the books on the subject is it thought necessary to give any elementary description of the game; it is taken for granted that everybody, man, woman, or child, knows generally how to play Whist. — William Pole, *The Philosophy of Whist*, 1884

Popular games writing included periodicals, handbooks, essays, manuals for

strategy, and even poetry.[22] These publications covered many different kinds of games,

from parlor games to billiards to cricket to cards. Henry Bohn's *The Handbook of Games*

(1850) devoted more than 600 pages to thirty-four games; *Hoyle's Games* (1826) by

Charles Jones greatly expanded on those games actually written about by the original

Hoyle and ranged from card games to golf, with a bonus chapter on horse racing. These

anthologies present a view of generalist gaming in the period but do not accurately

represent the literature of the gaming community. Rather than games anthologies, the

gaming community published on individual games, focusing on strategy and developing

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[22] Most installments of games periodicals, such as the *Westminster Chess Club Papers* or *Lasker's Chess Magazine*, included verse. Such poetry often praised the intellectual achievement or strategic elegance of good play, such as J.O. Hagen's ode to "Blackburne Blindfold" (1 Apr. 1879, p. 257). D.L.H. Watson published "A Compliment" in *Lasker's*: "What art is hidden in a brain like this / That mine has missed?" (May 1905, p. 11). The poet continues by pondering evolutionary genetics and concludes with the hope that his mental efforts, though more feeble than those of the player he admires, might still contribute to the eventual expression of similar genius in a descendent.

highly skilled play. It targeted "scientific" games – those games that minimize chance or luck and depend on thoughtful, attentive play.[23]

Strategy manuals made mental skills less opaque and, with less moral opprobrium, games of skill, especially whist, rose in prominence. By the nineteenth century, though games of chance were still popular, they no longer dominated coffee houses, clubs, and drawing rooms as they had in the eighteenth century. Games of skill became more genteel and more "intellectually attractive" (Sampson 121). "There is an opinion," one author wrote, "that Whist is at the present moment so exceedingly popular that it is fast becoming a serious rival to afternoon tea" (Hewby, *Decline* 8).[24] Lower prices made handbooks more widely affordable and advances in printing technologies allowed for illustrated manuals and playing cards (see fig. 1.4). In 1849, the *Quarterly Review* marveled over "the growing popularity of Chess" and explicitly declares it to be a nineteenth-century phenomenon based on its growing literature, "enlarged tenfold" since the beginning of the century ("Chess" 82). The evidence of the literature points to its readers – countless members of chess clubs springing up around the country. The author attempts to calculate the number of people engaged in analytical chess but finally admits failure "when it is considered that hundreds of meetings such as these take place weekly throughout England" (85). Together, the organized clubs, matches, and even standardized strategy, all bound together by a popular print literature, formed a distributed gaming community that crossed national borders.

[23] Robert Withy satirized the "science" of gameplay with the tongue-in-cheek title of his 1791 manual, *Hoyle Abridged: Or, Short Rules for Short Memories at the Game of Whist*.

[24] In 1841, George Walker rejoiced that "The rapid advance Chess has made, since I enlisted my humble services in the cause, is to me a source of the purest gratification. The Chess-board is now recognized as a part of the furniture of almost every sitting-room; an article, altogether essential to the arrangements of a family party" (*New* xv).
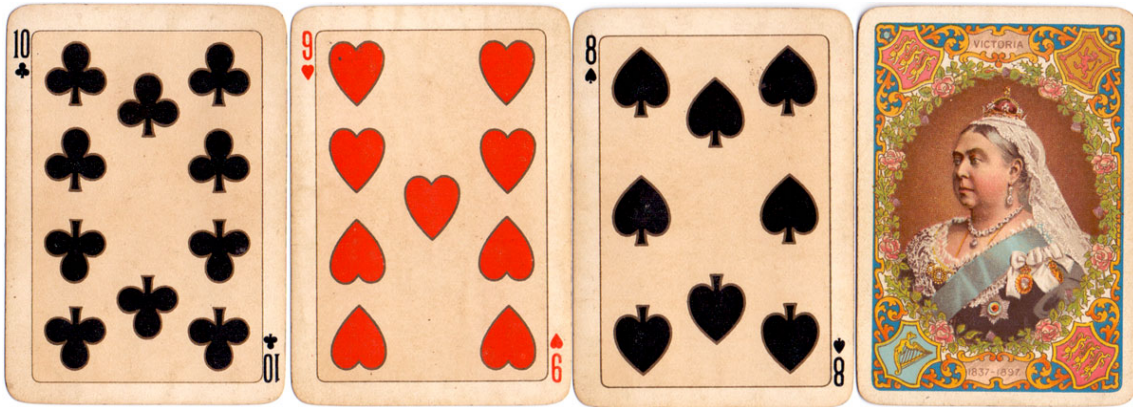
Figure I.4 For Victoria's Diamond Jubilee, Goodall and Son, the leading manufacturer of English playing cards, printed commemorative decks featuring the queen on the back of every card. The face cards featured monarchs from English history, a selective royal lineage running from Henry III through Elizabeth I and George III. Commemorative cards were new to the nineteenth century; before the 1820s, playing cards had blank backs. Advances in printing technologies, however, led to colorful new designs and, eventually, in 1864, the first commemorative deck for Shakespeare's tercentenary. These simple, inexpensive mediums of amusement rehearsed a comfortable highlight reel of English history and culture.

The gaming community saw itself as a kind of modern sensation, arising from and participating in new technologies and the spirit of the age. *The Westminster Chess Club Papers*, a journal of chess and whist, dubbed the times "these days of 'bookish' Chess" ("Chess-Reputation" 62).[25] In 1824, the London Chess Club played the first match by correspondence with the Edinburgh Chess Club and the telegraph enabled international contests extending across the empire. In 1851, during the Crystal Palace Exhibition, the first International Chess Tournament was held. The rising popularity of strategic gaming seemed unaccountable to some:

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[25] The journal was edited by a number of individuals, primarily by P.T. Duffy, who reviewed all submissions on chess, and Charles Mossop, who reviewed material related to all other games of skill. For a brief summary of the journal's history, see its farewell issue, especially "Looking Back," *The Westminster Chess Club Papers*, vol. 11, pp. 249-251.

> We have chess-books, chess-magazines, chess-editors for weekly papers, chess-heroes, chess-congresses, sets of chess-men made of silver, and gold, and precious stones, chess-clubs without number, and even a chess-literature. The study of the game has become, we are told, the labor of a lifetime, and a chess-champion received in every great city an ovation equal to that which awaits the conqueror in a hundred battles. If he plays a great game in London, Paris, Berlin, or New York, the world is all agog with excitement, and telegraph wires are kept twanging and flashing and steam-engines puffing and rushing to proclaim the progress and event of the mighty conflict... (Nadal 134)

Others accounted for it as an antidote to modernity, "this anxious period": "in this age of mental high pressure, men seek in their very diversions something of intellectual discipline for the battle of life" ("Chess," *QR* 82). In 1885, *The Standard* announced the founding of the British Chess Association and its first president: poet laureate Alfred, Lord Tennyson. John Ruskin served as its vice president and at its inaugural tournament the two men offered autographed copies of their complete works as prizes (MacDonnell 175; "Chess Tournament," *The Standard*).[26]

The body of literature produced by the gaming community based its cultural hierarchy on mental ability rather than economic class or ethnicity. William Pole's article on "Modern Whist" (1871), for example, delineates four "classes" of whist player based on the quality of study and common sense revealed during play.[27] "We cannot all have genius," admitted the *Westminster Chess Club Papers*; "but we can all have attention; the absence of intelligence we cannot help, inattention is unpardonable" (qtd. in

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[26] Sir Robert Peel and Lord Randolph Churchill joined Ruskin as vice presidents ("Chess Tournament," *Berrow's Worcester Journal*, 20 June 1885).

[27] ProQuest (via the Wellesley Periodical Index) attributes this anonymous article to Henry Jones, another writer on whist; however, much of it is reprinted in William Pole's *The Evolution of Whist* (1897). Pole and Jones shared a close working relationship but Pole is noticeably more verbose and I'm inclined to believe that he reused material from his earlier article in his later book, thereby making him the author of "Modern Whist."

Hewby, *Whist* 4). John Petch Hewby cajoled his readers to choose whether they would play whist or Bumblepuppy for the next fifty years, defining Bumblepuppy as "persisting to play Whist, either in utter ignorance of all its known principles, or in defiance of them, or both" (1). George Walker, best known for his often-republished *Chess Made Easy* (1839), particularly urged the advantages of low-cost handbooks, that all persons, "however humble in the social system," might direct their "exertions... according to the best of his ability, towards the extension of intellectual cultivation and amusement" (vi).[28] Within the gaming community, therefore, existed the language and structure of intellectual hierarchy that provided assessment of skill and promised to advance and reward its members for dedicated effort and genius. All of the authors in this dissertation take up this theme: Edgeworth, Dickens and Collins reward their readers for effortful reading; the relative intelligence of criminal masterminds and protagonists contributes to Collins's sensation; Eliot probes the hierarchy, exploring alternative paradigms for thinking that might change social habits of thinking; Kipling recommends exchanging the political structure of empire for one based on classes of intellect.

    Not all gamers appreciated the seriousness of scientific play; John Ruskin, the well-known art critic, famously deplored scientific chess, even though he served as vice-president for the British Chess Association: "Pleasant 'play,' truly! in which the opponents sit calculating and analysing for twelve hours, tire each other nearly into

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[28] As Walker notes in *A New Treatise on Chess* (1841), "When the first edition of this Treatise presented itself to public notice, in the spring of 1832, it was remarked by me, as matter of general surprise, that while Chess was then so much more practised in England than formerly, no really scientific compendium of the game, at a price to come within the reach of Chess-players of every class, had as yet made its appearance" (v).

apoplexy or idiocy, and end in a draw or a victory by an odd pawn!" (Ruskin 573).[29]

Chivalry characterizes Ruskin's preferred style of play: moves should be quick, open, decisive, and noble. Only the "brilliant highlights… secure Ruskin's attention," reflects an article from the *British Chess Magazine* in 1923; he misunderstands "unobtrusive strategy," proves "quite unable to comprehend the progressive development of a combination... and in recording the boredom that such processes inflict he has no suspicion that his mental grasp is at fault" ("John Ruskin" 115). The author reviews one of Ruskin's annotated chess handbooks, generally showing from Ruskin's own marginalia that Ruskin lacked insight into the finer points of the game. Ruskin repeatedly "does not see" just as, the author concedes, "those who like *Tarzan of the Apes* would find *Cranford* lacking in incident" (116). Ruskin impatiently seeks sensation – "volcanic means to a violent end" – but as a result, he mistakes other kinds of sensation and intellectual activity for bad chess (118). He focuses his attention on one kind of chess play rather than lowering himself into fuller reflection on the process of the game. For the writer of the article, such narrow-minded insight reflects poorly on Ruskin's "mental grasp," his inability to manage strained attention.

The commentator's allusions to *Tarzan* and *Cranford* come as little surprise: the gaming community was a widely-read community. The nineteenth-century novel's relationship to games is best understood within the landscape of popular games literature published at its side – sometimes literally. An article on "Whistology" appeared just after an installment of *The Woman in White* in Dickens's *All the Year Round*; the *Cornhill*

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[29] Though Ruskin disliked scientific or analytical chess, he loved the game and played frequently. His letters to the editor of the *Chess Monthly* were often published in that journal; he also subscribed to *Modern Chess*. He exchanged several letters with Henry Bird, an eminent chess player, and played chess by correspondence with many others.

Magazine published a paean to "Chess" amid the serialization of George Eliot's *Romola*. Books on whist or chess frequently reprinted excerpts from literary sources, Edgar Allan Poe's opening to *Murders in the Rue Morgue* and Charles Lamb's essay, "Mrs. Battle's Opinions on Whist," being two of the most common. Lamb was well-known for hosting parties for "Martin and the card-boys," as he called the group of his friends who frequented his apartment for a rubber (Courtney 129). William Courtney's *English Whist and English Whist Players* (1894) devoted two separate chapters to such material: "The Whist of the Poets" and "Whist and the Novelist." [30] "Several of the chief writers of fiction of Great Britain," Courtney maintains, "have ranked among its leading experts in whist.... The game of whist is a mimic world" (337). Courtney quotes at length from Henry Fielding's *Tom Jones*, Dickens's *The Pickwick Papers*, Thackeray's *Virginians*, Trollope's *The Bertrams* (Trollope "had participated in many thousands of rubbers, and watched the habits of a vast army of whist-players" (348)), and Benjamin Disraeli's *The Infernal Marriage*, among others. Likewise, periodicals such as *The Westminster Chess Club Papers* reprinted excerpts of books that related to strategic games, including Charles Reade's *The Woman Hater*.[31] All of these passages prove the point, their editors argued, that several noteworthy writers not only played cards themselves but included scenes of games in their novels as touchstones for readers sure to share their interests.

Gaming literature connected itself to those poems and scenes in novels that particularly resonate with the gaming community and it also provided an outlet for

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[30] All the examples in this paragraph are related to whist; but a similar paragraph could be written for chess; and both could be expanded were those selections related to politicians, the clergy, the military, scientists, and the like added to the list.

[31] See "Extracts from 'A Woman Hater.'" *The Westminster Chess Club Papers*, vol. 10, 1 Aug.1877, pp. 66-70.

authors with literary and game-based ambitions of their own. Newspapers and games

journals frequently published original poetry, short stories, sometimes even dramas based

on experiences at the club or gaming table. *Short Whist* (1834) by C.B. Coles combines

conventions from epic poetry, theatrical dialogues, frame narratives, and, through this

whirlwind tour of literary genres, a *jeu de mots*: puns. Seeing novels as games or games

as stories felt normal in the nineteenth century precisely because games literature made

that link in terms of its hybrid-status as a literature devoted to games, its reprinting of

literary material, and its encouragement of bringing literary forms into gaming materials.

From this perspective, Carroll's frontispiece seems expected, not atypical. This account

of history returns notions of literary play to the forms of play entwined with the writing

and fiction of the nineteenth century and expands on the cultural richness of historical

gameplay unavailable through theoretical play studies from the twentieth.[32]

The nineteenth century's gaming community retains some visibility today. A few

of its magazines are still in print: *The Field: a country gentleman's newspaper* has been

in print since 1853; *The British Chess Magazine* has been published continuously since

1881. Whist, however, was rarely played after the turn of the century, due, ironically, to

its overelaboration by strategic literature. John Petch Hewby's *The Decline and Fall of

Whist* (1884), a commentary on the state of whist literature, described it as "pedantry run

mad!" (14). The new and improved systems of whist, he wrote, differ from the old in that

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[32] Peter Hutchinson introduces *Games Authors Play* (1983) with the remark that "Joyce's
method is built on a long tradition of literary hide-and-seek... and the present volume
aims to throw light on that tradition as much as on its peak in modernism and later
derivatives" (vi). Literary hide-and-seek, this dissertation suggests, is only one kind of
game authors might play and certainly not the one of the games of choice preferred by the
gaming community. In so far as Hutchinson means authors challenge their readers, the
gaming community can articulate how this happens much more specifically by pointing
to the games they actually played, not generic hide-and-seek.

the latter served "to supply your partner with brains... theirs is to do away with all necessity for any brains whatever" (9).[33]

Today's gaming community would undoubtedly be the video gaming community and in its scope and characteristics it approximates that of the nineteenth century, even though, of course, its games, skills, and mediums differ markedly. Being a "gamer" carries much the same meaning: one who knows the community as a player, an insider, and, as such, knows the community as an alternative kind of world, one with its own values, rules, language, orders and systems. A "gamer" knows the difference between whist and Bumblepuppy. The gaming community in the nineteenth century was surely more integrated with surrounding modes of culture but, nevertheless, our awareness of it exists more in tune with our awareness of gaming today. This dissertation seeks to help the non-gamers of literary studies to see the nineteenth century anew as populated by players as often as by readers.

> However open and accessible gaming becomes over the next generation, there will always be a division of it fenced off for the hardcore. Because simply, there are certain things that the casual and less well educated [sic] gamer will never understand. Having immersed ourselves in this medium for 30 years or so now, the **gaming community** has a language and lexicology completely alien to **normal people**. I'm not even talking about our garbled tech-talk regarding the optimisation of sub-pixel quadra-poly phase mapping.
>
> – David Houghton, "Everyday gaming phrases that mean something very different to non-gamers" (2013)

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[33] Another fin de siècle whist book, *Cut Cavendish; or, Whist in a Few Whiffs* by A.E. Mainwaring also indicates growing frustration with the complexity of scientific play.

II.   Modern Cognitive Science

Young players... may be assured that skill in nothing, not even in a game at cards, can be acquired without thinking about it. — C.B. Coles, *Short Whist*, 1834

What is the nature of the mental processes which are comprehended in the play of a Whist hand? — William Pole, *Philosophy of Whist*, 1884

When gamers claimed their methods were "scientific," they weren't wrong. As the chapters to follow demonstrate, the view of the mind in gaming literature resonates with modern findings in cognitive and neurosciences. Nineteenth-century sciences, including early psychology and physiology, laid the groundwork for the research done in the mind sciences today; but the inquiries of gaming literature, honed by specific games, asked different questions and focused on different aspects of mind. Nineteenth-century writers drew their perceptions and understanding of the mind from games literature as well as contemporary science; some writers were better versed in one than the other. Turning to modern cognitive science helps me expose the cognitive aspects of gaming that were available to nineteenth-century authors as templates for how the mind works. These templates prove very different from those produced by science because they nearly always investigate thinking as plural and dynamic, the interactive mode of minds processing other minds; the "mental processes comprehended in the play of a Whist hand" always include three other thinkers. Gaming literature parsed the *cognitive pluralism* of games and writers incorporated this approach into their representations of social thinking.

Victorians confronting the mind faced similar challenges to those experienced by today's researchers in the modern cognitive sciences, neurosciences, artificial

intelligence, philosophy of mind and psychology. Early psychologists and physiologists

witnessed "on a daily basis the discrepancy between, first, discoveries about nervous

impulses, reflex arcs, and so forth, and, second, the phenomena of mind as actually

experienced by living human beings, a discrepancy that was hardly apparent before 1830

but was dramatically evident by 1850" (Kearns 111). In spite of many recent advances,

cognitive evolutionary anthropologist Dan Sperber reminds us today that "Our

understanding of cognitive architecture is [still] way too poor, and the best we can do is

try and speculate intelligently" about the mind and how it works (qtd. in Zunshine, *Why*

6). Scientists then and now have struggled with viewing and articulating thinking;[34] but

games have proved a valuable heuristic linking investigations of thinking from the

nineteenth century to today. Games artificially isolate certain types of mental action,

whether they be tests of memory, attention, or reflex. As a result, though the brain itself

may remain opaque, games provide a means of externalizing cognitive procedures in

material forms, such as the chessboard.[35] If "we have... few tools for thinking about the

mind dynamically, as a process or procedure, especially *as it is physiologized* in the

nineteenth century," we have many tools developed by gaming strategists for examining

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[34] Late in the nineteenth century, father of psychology William James described
consciousness as being just out of sight: "Whenever my introspective glance succeeds in
turning round quickly enough to catch one of these manifestations of spontaneity in the
act, all it can ever feel distinctly is some bodily process" (300). One hundred years later,
cognitive scientists Fauconnier and Turner echoed his statement: "Evolution seems to
have built us to be constrained from looking directly into the nature of our cognition,
which puts cognitive science in the difficult position of trying to use mental abilities to
reveal what those very abilities are built to hide" (*The Way We Think* 34).

[35] Ian Bogost's essay "The Rhetoric of Video Games" argues that "we can learn to read
games as deliberate expressions of particular perspectives" (119) and that "playing video
games is a kind of literacy.... the kind of literacy that helps us make or critique the
systems we live in" (136). His rhetorical analysis highlights games as objects that can be
read; I extend this practice to reading games for the practices of thinking they form,
encourage, or bolster.

the dynamic, social procedures of rational thinking (Ryan 13, my emphasis). Gamers,

however, though interested in thinking, primarily sought better ways to play their games.

Reading modern cognitive science alongside gaming literature, therefore, helps expose

the kinds of cognitive applications implied by texts more explicitly engaged with

particular games. Juxtaposing modern science with gaming literature also reveals their

shared interest in cognition as a mental "process or procedure." Gamers did not take

cognitive transparency for granted; their anecdotes of bad play dispel any notion that

simply reading a games manual would suddenly grant access to cognitive architecture.

At the same time, gaming culture encouraged the development of rational and conscious

thinking through the social thinking practiced by strategy games.

It is no coincidence, I would argue, that the earliest investigations of artificial

intelligence and cognitive science in the twentieth century often featured games as

avenues for their research.[36] In 1950, Alan Turing proposed exchanging the query "Can

machines think?" for a practical litmus test: the imitation game. In the imitation game, an

interrogator tries to determine the gender of two unseen persons, one of whom may lie.

Turing then suggested modifying the game so that an interrogator tries to determine

which of two unseen participants is human, and which machine. How long could a

machine successfully imitate – that is, deceive – the interrogator as to its true status?

Turing proposed that machines might successfully imitate human thinking, especially in

mathematical calculation and in playing chess (434-435). Researchers followed his lead,

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[36] Cognitive science has also borrowed terminology from gaming to describe the mind:
combining various mental components in an ability is called a "strategy" (Loftus 43).

developing computers that could play chess better than humans.[37] In 2016, Google's

DeepMind AlphaGo computing system defeated world champion Lee Sedol at the

ancient game of "Go," considered the most complex strategy war game, one with more

"possible configurations... than the number of atoms in the universe" (McFarland

00:01:33-40). AlphaGo surprised researchers and Sedol by making creative, instinctual,

and counter-intuitive moves, moves human players typically ignore or consider naïve

(Wong; see fig. 1.5). Readers of gaming literature might not have been so surprised: as

strategists discovered, sometimes playing smarter simply means making unexpected,

even irrational moves. Nineteenth-century gaming laid a foundation for rational thinking

as the process of following procedural forms rather than as an ontological source.

Thinking with games continues today in the research prerogatives of robotics and

artificial intelligence.

[37] The Turing Test is still pursued today during an annual competition for artificial
intelligence. Judges converse with the chatbots and with human confederates for five
minutes, then record whether they believe they have just been talking with a human or a
computer. Programmers and developers compete with their software for the title of
"Most Human Computer"; but the human confederates compete for the "Most Human
Human" award. For more on this contest, reflections on being human, and the art of
conversation, see Brian Christian's *The Most Human Human* (2011).
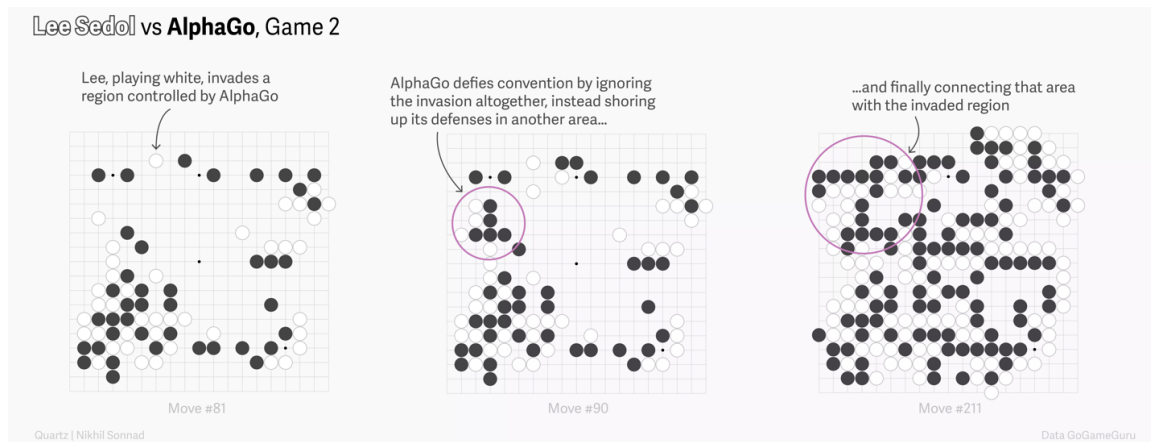
Figure I.5 AlphaGo surprises Lee Sedol during their second game. Lee only won one out of their five match-ups by learning from the computer and trying an unconventional strategy. For more images of their unusual gameplay, see Wong.

Historical gaming literature, by its very nature, probed the mind for its cognitive abilities and explicitly staged its investigation as a frame for its strategic recommendations. The groundwork for any strategic analysis begins by asking, for instance, "what is the nature of the mental processes which are comprehended in the play of a Whist hand?" (Pole, *Philosophy* 10). Whister William Pole examined the tasks required by the game, then deduces the "mental processes" necessary for such tasks. He derived his understanding of thinking from the constraints imposed by the game, thereby narrowly focusing on the cognitive aptitudes required by whist. Gaming literature also rehearsed the common queries that games raised about the mind. *The Quarterly Review*, for example, pondered this common question: "It has often been asked, 'Are great abilities requisite to make a first-rate chess-player?'" ("Chess" 89). Gamers observed their own cognitive performance based on gameplay and applied their observations to improving play. A.W. Drayson, for instance, recalled being frustrated by a whist

problem during the evening but going to bed and awaking around 4 a.m. with the solution suddenly apparent. From this circumstance, he drew a "valuable lesson": "Our brains get tired, and, like the body, become exhausted. In order to obtain the best results, rest is necessary, and we can then obtain the cream of our intellect.... By this means the intellect becomes strengthened, and whether it be a case at Whist or some other subject, we become more efficient performers, and thus gain confidence" (Drayson 112). Drayson's observation sounds surprisingly modern. He connects the mind to its physical conditions as a brain that requires rest and assumes that it works best when its requirements are observed and met.

Throughout the chapters that follow, I draw on a variety of ideas from modern cognitive science to help illustrate how games literature brought these conceptions to gamers in forms of amusement. I explore the surprising congruence between Maria Edgeworth's description of puzzle pieces and a study on Tetris. Other chapters apply Theory of Mind, conceptual blending, metacognition, and theories of cognitive artifacts. All of these ideas, even the most disembodied, come marked by the influence of a modern emphasis on the "extended" mind. Recently, scientists have turned away from models of internal, computational, or linear cognition towards models of social, environmental, and physical embeddedness.[38] Where a program for robotics once focused on writing competent software, researchers now realize that a robot's basic morphology plays a crucial role in its decision making and thinking procedures. By changing the robot's form, engineers drastically alter the kinds of programming required for rational action. In 1998, Andy Clark and David Chalmers recommended the "Parity

[38] See Alan Palmer's summary of the basic opposition, *Social Minds* ch. 2.

Principle" to help reconfigure what counts as thinking. The Parity Principle states that "if, as we confront some task, a part of the world functions as part of a process which, *were it to go on in the head*, we would have no hesitation in accepting as part of the cognitive process, then that part of the world *is*... part of the cognitive process" ("Extended" 8). Clark and Chalmers offer the example of playing Scrabble: moving the letter tiles aids the thinking process. If players were unable to move the letter tiles, their cognitive load would greatly increase; therefore, Clark and Chalmers argue that moving Scrabble tiles and even the tiles themselves participate in extended cognitive processes (9-10).

Because cognitive studies now see cognition as "what occurs when the body engages the physical and cultural world" and "no longer assumed to be purely internal... and disembodied," the extended perspective includes cognitive artifacts, objects such as notebooks, lists, or Scrabble tiles as part of the thinking mind for their relevance to cognitive processing (R. Gibbs, "How" 610). As the most radical non-traditional framework, the extended view on the mind has generated much controversy among scientists and has provoked a wide range of responses, from justifications of traditional computationalism to modified models of embedded cognition. Cognitive scientist Robert D. Rupert, for instance, rejects the extended view but highlights the ways that embedded and embodied views on the mind supplement a computational approach.[39] Though Rupert hesitates to extend cognition beyond the organism in ways championed by Clark,

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[39] For Rupert's argument against the extended view, see especially chs. 2, 4 and 8. For Rupert's modified view that draws on the implications of embedded cognition within a computational perspective, see ch. 9. Rupert particularly discards the Parity Principle for its "theoretical thin-*ness*" (31); see Rupert 29-35. For Andy Clark's defense against objections to the extended view, see his book *Supersizing the Mind*, ch. 5. Clark responds specifically to "Rupert's Challenge" in *Supersizing*, ch. 6.

he nevertheless recognizes key ways that the body and environment "minimize the subject's use of internal resources" (Rupert 181). With Rupert, I find that extended views often overstate the case; but, at the same time, I find the Parity Principle a useful tool for resisting an over-attention to models of deep, reflective consciousness often prioritized by traditional studies of literary consciousness.[40] Writers of fiction, of course, were free to extrapolate beyond the limits recommended by science or games and often used the gaming structures expressed in the gaming community to imagine very extended networks of thinking that stretched through the British nation and into its empire. This point is best made by my chapter on *Kim*, a novel that pushes the scientific sense of extended thinking far beyond the individual and their immediate environment, an extension of thinking made possible by building from its expression in the world-wide gaming community.

My project points out the ways that nineteenth-century novels were sometimes at odds with contemporary scientific ideas and used games for models of socially-distributed thinking, whether in partnership with another player, through the physical medium of the game, or as the gaming community. During the nineteenth century, scientists studying psychology and physiology, such as William Carpenter, Alexander Bain, Herbert Spencer, and G.H. Lewes, discovered new and unexpected links between

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[40] I am thinking here of Dorrit Cohn's seminal work, *Transparent Minds: Narrative Modes for Presenting Consciousness in Fiction* (1978). As her introduction makes clear, by consciousness Cohn refers to the fictionalized "inner life," what "writers and readers know least in life: how another mind thinks" (4-6). Gamers, by contrast, knew very well how "other minds think" – at least within the context of certain strategy games. Games literature, therefore, provides one way to concretize and, to some degree, to make thinking transparent. No one, even today, truly knows how "minds think" at the neural level; but gamers could attest to the best thinking recommended for playing in networked configurations structured by game rules.

body and mind, the automatic functions of the nervous system, and even unfathomed depths of unconscious thinking. Bain even used the terminology of "extended cognition" and "unextended cognition" to describe the phenomenological disjunction a subject's experience of thinking and the material processes of neural activity (137; qtd. in Kearns 103). Though Victorian sciences certainly laid the foundation for today's investigations, ideas of extended cognition remained closely tied to the individual. Bain's distinction, for example, between extended and unextended cognition, refers to the subject's awareness of outward observation and inward consciousness. By contrast, gaming structures often moved from the individual game player to gaming communities on much larger scales.

My readings show how each of the authors I discuss use gaming to emphasize the processes and procedures of cognition that undergird the mind's content. In each chapter, scenes of actual games and games materials from the nineteenth century ground my readings while at the same time helping to develop and expand the range of my analysis from the small distinctions between games to the limits of thinking with games as metaphors or in terms of large groups. Maria Edgeworth's *Belinda* (1801) lays the groundwork for seeing games as mental processes in fiction. My first chapter, "Games of Hazard, Games of Address: Maria Edgeworth and the Priority of Plot," functions as a pivot between eighteenth and nineteenth-century modes of gaming and games literature. Edgeworth draws on an eighteenth-century author, Edmond Hoyle, but she applies his gaming principles in ways later deployed by other nineteenth-century authors. *Belinda's* cognitively-attuned plot emphasizes the process of thinking rather than the content of thinking as Edgeworth trains the reader in modes of address opposed to hazard.

Adding the cognitive paradigms from games diversifies the kinds of thinking we can recognize in Eliot but also revises the reputation of authors who have been underappreciated for their representations of mind. My second chapter, "Charles Dickens's Gamers: Social Thinking in Victorian Gaming Communities," revises the common opinion that Dickens was "no psychologist." Proponents of the new psychology considered Dickens a misinformed traditionalist when it came to psychological realism; but from the cognitive perspective on games, he proves highly attuned to the cognitive dimensions of games, particularly to patterns and forms of social thinking capable of coordinating the individual within national social systems. Dickens's investigation into social thinking ranges from models of partnership, like those from whist, to models of national systems, like those represented by the growing culture of gaming. Like Edgeworth, Dickens focuses on the cognitive characteristics of games but he does so as a tool for coordinating large patterns of thinking rather than for formal narrative structures. In Dickens, social systems function according to their constitutive characters, that is, the gamers that populate their communities.

Games in Dickens expose many minds at play, a trend that continues in the fiction of Wilkie Collins, especially as it involves the reader. "Rational Sensation: Wilkie Collins as a 'literary chess-player'" balances out accounts of nervous sensation with a model of rational sensation drawn from contemporary games literature. Collins dramatizes his interest in thinking by expanding games into frameworks supporting his novels, a fact often recognized by contemporary reviewers, one of which denominated Collins a "literary chess-player." Collins follows the metacognitive trends current in

1860s gaming literature in order to train his readers in habits of mind conducive to rational sensation.

My fourth and fifth chapters both continue the investigations into rational and conscious thinking carried out by Edgeworth, Dickens, and Collins while also transposing those models into registers of the body, for Eliot, and the empire, for Kipling. "George Eliot's 'game of life': Reading for 'thinking bodies' in *Romola*" modifies the emphasis on rational thinking in the first three chapters for a view of thinking known today as embodied cognition. Eliot, I argue, systematically rejects notions of critical thinking based solely on deductive logic and instead, turns to a model of cooperation between body and mind. Victorian scientists emphasized the disjunction between rational and unconscious thinking; but George Eliot, like researchers in robotics today, also explores elements of partnership between embodied and conscious thinking. The social thinking in games, therefore, helps distinguish Eliot, well-known for her knowledge of Victorian science and connections to its circles, from her contemporaries. Eliot, we are reminded, does not replicate science in her fiction, refusing to limit the imagination of thinking in her novels to those models offered by either science or games. Looking beyond Victorian models of mind more clearly defines Romola as an intellectual heroine and imagines a history for women based on "thinking bodies" rather than game-based social logic.

Continuing to push the boundaries of rational thinking, "Rudyard Kipling's 'intellectual sublime': the Great Game and the 'thinking empire'" extends the integration of games, thinking, and literature beyond the individual or nation to the empire. In *Kim* (1901), Kipling uses the Great Game to argue that British and Indian gamers might share

cognitive and imperial prerogatives. Kipling bases this model of imperial partnership on

models of shared game-based thinking, demonstrating that like-minded gamers might

transcend other forms of power-based hierarchy. In his vision, the British empire in India

exists because of and for the sake of the Great Game. This imperial fantasy ignores

political and social power imbalances of imperial relations but it also organizes and

motivates *Kim's* representation of thinking extended to an imperial scale.

CHAPTER ONE: GAMES OF HAZARD, GAMES OF ADDRESS: MARIA

EDGEWORTH AND THE PRIORITY OF PLOT

We argue that traditional accounts [of actions taken in games, like Tetris] are limited because they regard action as having a single [pragmatic] function: to change the world [the environment, like board position]. By recognizing a second function of action – an epistemic function – we can explain many of the actions [in Tetris] that a traditional model cannot. …. The best way to interpret the actions is not as moves intended to improve board position, but rather as moves that simplify the player's problem-solving task. — Kirsh and Maglio, "On Distinguishing Epistemic from Pragmatic Action," 1994

It will not be beneath the dignity of a philosophic tutor to consider the different effects, which the most common plays of children have upon the habits of understanding and temper. Whoever has watched children putting together a dissected map, must have been amused with the trial between Wit and Judgment. The child who quickly perceived resemblances catches instantly at the first bit of the wooden map…; whilst the wary youth, who has been accustomed to observe differences, cautiously examines with his eye the whole outline before his hand begins to move; …. he joins them [the pieces] with sober confidence.... He is slow, but sure, and wins the day. — Maria Edgeworth, *Practical Education*, 1798

In the video game Tetris, puzzle pieces of various block-based configurations rain

down from the top of the screen. Players must find the best fit for each piece at the

bottom of the screen, rotating and adjusting the shape so that it fits squarely into the

growing foundation. If players do not carefully align the blocks, gaps will be left in the

foundation, and the pieces will stack up. Players lose when the tower of blocks reaches

the top of the screen. Therefore, maximizing space at the top of the screen by finding the

best fits at the bottom leads to winning the game. David Kirsh and Paul Maglio (1994) studied expert Tetris players to determine how those players thought about the game. In the terms suggested by Maria Edgeworth's description of the wooden puzzle in *Practical Education* (1798), Kirsh and Maglio wanted to know whether Tetris players practiced "Judgment" or "Wit": did Tetris experts mentally analyze the shape's appropriate fit, then maneuver it in space? Or did the action of moving the shape contribute to the player's decision-making about where it should ultimately be placed? Kirsh and Maglio suspected the latter.

In order to test their hypothesis about playing Tetris, Kirsh and Maglio created a computer simulation that would play the game according to the linear model of cognitive computation endorsed by most scientists. The program would only take *pragmatic actions*, the kind of "sober confidence" practiced by Judgment. In other words, it would only move the piece once it had mentally calculated where it should go. Kirsh and Maglio found, however, that the pragmatic actions of the program did not produce homologous results to those achieved by expert Tetris players. Instead, they discovered that real-life players took many excess movements, or *epistemic actions*. In fact, the best players instantly rotated the shape as soon as it appeared on the screen, flipping it repeatedly, even redundantly, "to help *determine* whether the shape and slot are compatible" (Clark, *Supersizing* 222).   Surprisingly, players even moved the shape to the side of the screen, using the straight, vertical edge to better identify shape. This seems counter-intuitive because moving the shape to the side takes the shape further away from its ultimate destination and appears to require extra energy. As it turns out, this strategy not only leads to better shape awareness and placement, it more efficiently uses brain

power. The study found that calculating with purely mental rotation took more than three times longer than physically rotating the object. In Tetris, Judgment is "slow and sure" but does *not* "win the day."

Furthermore, what really excited Kirsh and Maglio was that players began taking epistemic actions *before* their brains could conscious assess the results. This means that rather than a linear process – vision, assessment, motion – as most scientists previously conjectured, Kirsh and Maglio could argue that cognition acts in a more roundabout way and extends beyond the biological brain. Excess movements suggest, at the very least, that the brain is simultaneously working on different parts of the problem; and more radically, that some of the thinking determining epistemic action is not controlled or monitored by the brain at all. Epistemic action, in other words, participates in non-linear, extended cognition because it occurs before the brain can complete the four phases of mental assessment followed by conscious thinking (Kirsh and Maglio 526). In Kirsh and Maglio's understanding, traditional accounts of the mind treat it as too isolated; or, in Andy Clark's phrase, brainbound (*Supersizing* xxvii).[41] Analysis does not necessarily precede action, they argue; in fact, at least in the case of Tetris, it appears that the body, mind, and world engage in a cyclical, non-linear process of thinking where later phases of cognition may be incited before earlier phases are complete (Kirsh and Maglio 542).

Kirsh and Maglio are certainly not the first to suggest that we might learn about how the brain works from examining games. Throughout the nineteenth century, games literature probed just that and Maria Edgeworth urges those interested in the workings of

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[41] For Clark's definition and application of these terms, see his introduction to *Supersizing the Mind*, pp. xxv-xxix. For a brief summary of my engagement with extended mind, see the introduction to this dissertation, pp. 43-46.

the mind to "consider the different effects, which the most common plays of children have upon the habits of understanding and temper." Long before Tetris prompted scientists to think about how our physical actions bear some of the cognitive burden of thought, Edgeworth described a Tetris-like wooden puzzle: "Whoever has watched children putting together a dissected map, must have been amused with the trial between Wit and Judgment. The child who quickly perceives resemblances catches instantly at the first bit of the wooden map, that has a single hook or hollow that seems likely to answer his purpose; he makes perhaps twenty different trials before he hits upon the right; whilst the wary youth, who has been accustomed to observe differences, cautiously examines with his eye the whole outline before his hand begins to move; and, having exactly compared the two indentures, he joins them with sober confidence, more proud of never disgracing his judgment by a fruitless attempt, than ambitious of rapid success. He is slow, but sure, and wins the day" (*PE* 19).

The parallels – and disjunctions – are remarkable. Edgeworth's young child exercises *epistemic action*: moving "quickly," he "catches instantly" at the pieces without prior reflection. His "twenty different trials" exemplify the kinds of rotations taken by the most expert Tetris players. By contrast, the "wary youth," older, wiser, and "accustomed to observe," first "examines with his eye… before his hand begins to move," making the final fit with "sober confidence." Thus far, the comparison appears straightforward. Clearly, Edgeworth prizes the judgment of the wary youth over the wit of the child, and within the moral discourse of the early nineteenth century, we might align "understanding and temper" with moral character. I propose, however, that by uncovering the cognitive dimensions of Edgeworth's work, especially in her novel,

Belinda (1801), we find a deep interest in the processes and procedures of thinking, the "habits of understanding" that underwrite character so that *how* thinking occurs matters, not just *what* is thought. This chapter revises the Romantic ideal of the "well-regulated mind" that implies fine discernment, moral self-control, attuned sensibility, and socially productive conformity; and suggests, instead, that for Maria Edgeworth, mental regulation also includes a more literal cognitive dimension.[42]

Regarding cognitive resources, for example, Edgeworth's reading of the wooden puzzle contains a significant ambiguity: when Judgment wins the day, what has been won? It remains unclear whether his success attends finishing the puzzle more completely, in a timelier fashion, or whether Edgeworth only refers to his victory of self-control. Judgment prizes "never making a fruitless attempt" over "rapid success," which entertains the possibility that Wit may actually finish the puzzle first, winning the puzzle, but not the day. Edgeworth's formulation, then, does not align with what Kirsh and Maglio target as an "one-sided view" of action studies, too concerned, they argue, with "the control of gaze" and "the control of attention" (526, 515); but neither does she subordinate focused, mental calculation. Apparently, in Edgeworth's system, "winning" has less to do with solving the puzzle, or doing so first. When the wary youth "wins the day," he gains more than a completed picture – or "high score." His "sober confidence" will serve him well in both the puzzles at play and, more pertinently for Edgeworth's social agenda, the puzzles of life.

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[42] Alan Richardson argues that, instead of "radical critique," the domestic novel promotes an "educational ideal designed to produce a 'well-regulated mind' – a key phrase applied to the heroine in novels by West, More, Edgeworth, and Susan Ferrier" (*Literature* 189).

If Edgeworth appears to valorize Judgment over Wit, and the older boy over the younger, her fiction suggests a different understanding of the relationship between the two. Instead of seeing these two categories as opposed, Edgeworth's novel *Belinda* suggests that one develops from the other. These two boys, in that sense, are really one: Wit grown up is Judgment. Furthermore, the procedures of *Belinda's* plot incorporate both styles of thought-based play, the epistemic and the pragmatic, demonstrated by the characters but also enacted by the reader in the processing of moving through the novel. To win at life, Edgeworth endorses a combination of wit and judgment, a game-based model of cognition that prioritizes information-gathering called "address," a broad eighteenth-century term for skill. Games of address, as we will see, engage both epistemic and pragmatic action: address requires witty trial and error but the process of linking these moments of address together creates a game dependent on long-term judgment. For example, while Lady Delacour's many trials to "discover Clarence Hervey's secret" – a hidden lover – by frequent resource to great "address" (*B* 142) prove to be only "fruitless attempts," the reader attentive to *Edgeworth's* address may arrive at the final revelation of his secret with "sober confidence." Ultimately, in *Belinda*, Edgeworth prioritizes constant recalculation, a kind of epistemic awareness that facilitates conscious cognition associated with pragmatic actions.

Models for this kind of combination-cognition were readily available to Edgeworth through strategic games manuals. Her family owned at least three: William Hooper, *Rational Recreations* (1782); Edmond Hoyle's *Mr. Hoyle's Games of Whist, Quadrille, Piquet, Chess, and Backgammon* (no year, but likely late eighteenth century); William Payne, *An Introduction to the Game of Draughts, the Whole Designed for the*

Instruction of Young Players (1756).[43] I will focus on Edmond Hoyle's original text

from 1742, as it was by far the most popular, widely read, and paradigm-changing.[44]

Before Hoyle, treatises on games primarily described the moral dangers of gambling and

games of hazard, or chance. By contrast, Hoyle prioritized games of skill, like whist, and

offered strategic advice to advance judgment over wit.

Bringing modern neuroscience to bear on *Belinda* helps emphasize just this kind

of point: it helps us see past the moral discourse strongly tied to games throughout the

eighteenth and nineteenth centuries. Most historical studies of games in this period frame

their work with moral discourse associated with gambling but this obscures how an

author like Edgeworth prioritizes the cognitive, not moral, dimensions of games.

Edgeworth pits address against hazard, but her primary concern – she mentions address

more often – is not with gambling. In *Belinda*, in fact, her moral intervention against

gambling takes second place to her concern with the cognitive procedures of games of

address.

Reading Edgeworth alongside a modern study of cognition does not mean to

suggest that she anticipated such research, or that she is a proto-cognitive scientist; nor

does it suggest that the inventors of Tetris were inspired by this paragraph from *Practical*

Education. That being said, such parallels help us differentiate Edgeworth's approach

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[43] Unfortunately, when UCLA purchased a portion of the family library in the 1940s, they did not purchase the games manuals. I have a record of their existence in the itemized report of the Edgeworths's library from UCLA but have been unable to track down the actual books.

[44] Additionally, Hoyle had a presence in Ireland throughout the eighteenth century because his books were pirated in Dublin presses (see Levy, "Pirates, Autographs, and Bankruptcy" as well as Levy's blog on Hoyle, "Edmond Hoyle, Gent." http://edmondhoyle.blogspot.com).

from other contemporary philosophies of mind, like associationism.[45] Looking to

modern neuroscience alongside *Belinda* draws our attention to the dearth of scholarship

on Edgeworth's approach to the mind. Most scholarship on *Belinda* focuses on its social

dynamics, such as its engagement with early feminism, debates over interracial marriage,

its undercurrents of empire, and its capitalist agendas. All of these discussions would be

enhanced by an understanding of how Edgeworth hoped to carry out her social ideals at

the cognitive level. Furthermore, the similarities and divergences between Kirsh and

Maglio and Edgeworth make sense when we consider that all three use the same methods

– inferring how cognition works from actions taken in games – but differ in how they

evaluate and assess what such inference means.

In this chapter, I explore how Maria Edgeworth thought about games in terms of

cognitive resources. Earlier educational theorists, such as John Locke, suggested how

games might aid education: cards might have trivia printed on them, or letters to teach the

alphabet; but Edgeworth does not look to games merely for their potential to convey

content. Instead, she thinks about games as procedures capable of exercising mental

behaviors. Once a game procedure becomes a cognitive template, that template can be

transposed into other areas of thinking or behavior. Not all games, however, promote

worthwhile templates. Games of hazard, rehearsing pure chance, prove addictive.

Games of address, or skill, on the other hand, exercise the mind's wit *and* judgment.

Belinda elevates games of address over games of hazard precisely because they provide

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[45] Association-psychology believed the mind could be impressed and formed by
circumstances, but not changed or re-made. Michael Kearns makes this point about
Charles Dickens, who "went far beyond his contemporaries' use of associationism in the
extent to which he showed minds to be impressed by environment and *re-formed* through
the agency of the heart" (159). Edgeworth suggests the mind may be re-formed by its
own agency, supplemented by games.

powerful models of adult re-education. Unlike children, allegedly working from a tabula

rasa, adults need to replace harmful templates with good ones. Games of address may

just prove one way of doing that and, in the process, Edgeworth works to re-fashion her

culture's gaming metaphors to combat its gaming obsessions.

I.   Practical Education

In 1798, Maria Edgeworth and her father, Richard Lovell Edgeworth, published

their educational treatise, *Practical Education*.[46] Continuing the trend of earlier

educational writing, like John Locke's *Some Thoughts Concerning Education* (1693) and

Rousseau's *Emile, or On Education* (1762), both of which the Edgeworths explicitly

invoked, *Practical Education* provides advice to parents educating their children.[47] Less

obvious, however, is how the Edgeworths engaged another strain of education manuals

that also thrived during the eighteenth century: games manuals. Over the eighteenth

century, as educational theorists took up the ideas from Locke and Rousseau and began

developing ideas of national education, games education developed from the work of

[46] For more on *Practical Education*, see Richardson, *Literature* pp. 52-63; and on its
relationship to Maria's fiction, see Alex Howard, "The Pains of Attention: Paratextual
Reading in *Practical Education* and *Castle Rackrent*" and Mona Narain, "Not the Angel
in the House: Intersections of the Public and Private in Maria Edgeworth's *Moral Tales*
and *Practical Education*."

[47] For more on the Edgeworths' adaptation of eighteenth-century educational philosophy,
see Marilyn Butler, *Maria Edgeworth: a Literary Biography*; Julia Douthwaite,
"Experimental Child-Rearing after Rousseau: Maria Edgeworth, *Practical Education* and
Belinda"; Mitzi Myers, "My Art Belongs to Daddy? Thomas Day, Maria Edgeworth, and
the Pre-Texts of *Belinda*: Women Writers and Patriarchal Authority"; Alice Paterson, *The
Edgeworths; a Study of Later-Eighteenth-Century Education*; Catherine Toal, "Control
Experiment: Edgeworth's critique of Rousseau's Educational Theory"

Charles Cotton, who published *The Compleat Gamester*, the first games manual in

English, in 1674. Games manuals, like *The Knowledge of Play, Written for Public*

Benefit, and the Entertainment of all Fair Players (1729), *The Odds and Chances of*

Cocking: *the Sportsman's Sure Guide* (1773), and *A Guide to the Turf* (1786), among

others, all advertised "exact odds" and tutored their readers in placing bets. The

incredible popularity of games manuals, especially Edmond Hoyle's *Short Treatise on*

the Game of Whist (1742), served as proof that regardless of their childhood educations,

many adults sought quick tips and shortcuts to success in games.[48] *Belinda* works out a

theory of education for adults that builds from the earlier ideas of *Practical Education* but

resonates with the pedagogical style of some early games manuals, like Hoyle's.

The idea of education through amusement goes back to John Locke's notion in

Some Thoughts Concerning Education (1693) that parents might "cozen [children] into a

Knowledge of Letters" (qtd. in Pickering 70). Locke suggested adapting the familiar

artifacts of games, like dice and cards, replacing their numeric signs with letters (75).

John Newbery, an early publisher of children's literature, adapted Locke's notion of

education by delight to books of alphabetically-organized rhymes and to cards with

letters (74). Other eighteenth-century card-makers followed up on Locke's ideas by

illustrating their cards with trivia attuned to social etiquette, empire, and school-age

topics, like astronomy and geography (Richard 132).

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[48] *The Compleat Gamester* went through nine editions (1674, 1676, 1680, 1709, 1710, 1721, 1725, 1726, 1734) before being taken over by Richard Seymour and continuing in print through the end of the century. Hoyle's *Short Treatise* "went through five runs in its first *year* of existence, eventually selling more copies than any other book of its type (or, surely, of any other type) written in the eighteenth century" (Molesworth 67).

Such content-based educational tools, however, did not take into account the cognitive spirit of Locke's advice. His agenda shifted attention from training a child's body to educating his or her mind (Barney 41). Locke suggested education for children be fitted to their attention spans, that lessons be kept short, varied, and interesting (Pickering 71). Locke adapted his system of education to the configurations of mind he identified, including patterns of association, sensation, and reflection.[49] This is the aspect of Locke that Maria Edgeworth and her father most sought to develop. Their educational theories also present their understanding of the minds of children and how education might be best adapted to childhood cognitive development.

Practical Education provides advice to parents grounded in cognitive sensitivity, with chapters on "Attention," "Memory and Invention," and "Wit and Judgment." Edgeworth understands attention and intelligence as mental faculties to be cultivated. She distinguishes between "temper" and "talent" as individually specific, but targets "character" and "genius" as general qualities capable of development (*PE* 90). For an example, Edgeworth offers two vocations that appear at odds: lawyer and huntsman. Surely, the lawyer is the more intellectual position of the two, the one that requires more study and talent. Edgeworth points out, however, that both positions require rapid task-based and transitional thinking (110). Counter to our expectations, she sees a similarity in patterns of cognition between the two vocations. Therefore, she argues, the lawyer has not become a lawyer because his mind better fitted him to that position; he could just as easily have been a huntsman. Significantly, Edgeworth describes "genius" in terms of

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[49] For more on the mind in education in the eighteenth century, see Richardson, *Literature, Education and Romanticism*; Noah Sobe, "Concentration and Civilisation: Producing the Attentive Child in the Age of Enlightenment."

cognitive procedure. Lawyers and huntsman share similar cognitive habits, in Edgeworth's account; neither is more intelligent than the other, a priori.[50] Edgeworth indicates that because the cognitive faculty is more generic than personal, it can be cultivated. It is no surprise, then, that she groups genius with moral character because, for Edgeworth, it too can be developed and improved.

This egalitarian approach to the mind emphasizes transferable skills and ties intelligence to effort rather than to genius, a point Edgeworth applies to games. Departing from Locke, who suggested children might over-play, Edgeworth dismantles distinctions between play and productivity, arguing that "play is nothing but a change of employment, and that the attention may be exercised advantageously upon a variety of subjects which are not called Tasks" (*PE* 95). It may not appear that the child accomplishes anything while spinning a top but as "long as a child shows energy upon any occasion there is hope: if he 'lend his little soul' to whipping a top, there is no danger of being a dunce" (94). Like the "sober confidence" instilled by the dissected map, the energy and enthusiasm generated by play at tops will serve this child well in the future by developing his or her moral temperament.

Whipping a top, of course, only lays the groundwork required for more advanced cognitive control later in life. While she plays out shades of address in her novel, she lays the groundwork for her fictional practice in the theory of *Practical Education*. The first chapter of *Practical Education*, "Toys," makes clear that the Edgeworths follow

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[50] Nicole M. Wright's assessment of Edgeworth's empiricism points out Edgeworth's belief that "all [her characters] are adaptive individuals who are capable of learning to govern their reactions through empirical assessment of the sensory data available to them," even the non-British, like Juba (525-528). Wright demonstrates that the concept of a plastic, or adaptive, mind could serve a writer like Edgeworth seeking to overcome prejudices of race, class, sex, and age.

Rousseau in encouraging self-directed, environment-based learning that integrates play into cognitive development.[51] Rather than fancy, elaborate playthings, the Edgeworths recommend giving young children blocks of various shapes and sizes, allowing children to learn their relative size and weight by moving them around (*PE* 5, 9). This mode of practical, environmentally-oriented education treats the learner as cognitively embedded: learning happens within and because of surroundings. Good parents, therefore, nurture their children best by creating experimental spaces for their children to explore, both physically, with their bodies, and mentally, by asking questions. Also, children don't need the latest and most complicated games because what matters is how the object is used. Blocks, or even a dissected map, may do just as well as more extravagant toys. The Edgeworths believed games could help direct and shape a child's personality, providing the necessary ballast for any extreme tendencies (*PE* 19-20). For example, if your child should prove inarticulate, slow to form his or her overly elaborate thoughts into words, the Edgeworths recommend a game of distraction called "Birds, Beasts, Fishes." A ball is thrown into the air and a bird, beast, or fish is called, indicating which of the other players must then respond by catching the ball and repeating their tag. Thus, the pondering, day-dreaming child learns to respond quickly. For less abstract thinkers, the Edgeworths recommend the "solitary-board," a game in which every calculated move must contribute to the ultimate win; for precipitate, hasty children, the Edgeworths suggest chess or draughts: "happy if they can learn prudence and foresight by frequently losing the battle" (20). These games are all recommended based on style of play,

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[51] The professional, writing relationship between Maria and her father has received much critical attention. See Elizabeth Kowaleski-Wallace, *Their Fathers' Daughters: Hannah More, Maria Edgeworth, and Patriarchal Complicity*, pp. 95-197.

procedures meant to counter less desirable habits of character at the cognitive root. The Edgeworths stress that frequent trials are necessary to achieve the ultimate purpose of change in behavior.

Not all games, however, promote healthy cognitive processes. Edgeworth makes clear her preference for "trials of address and dexterity" as opposed to "games of chance" precisely because games of chance offer impoverished opportunities for players to control or engage with the procedures of play (*PE* 33). Games of chance pose two further problems for Edgeworth: first, they inculcate "a taste for gambling"; second, games of chance confuse causation and correlation because the "idea of personal merit is insensibly connected with what is called *good luck*" (33). As a result, games of chance impart bloated self-image and nurture negative character traits, like laziness: "Indolent persons are fond of games of chance, because they feel themselves roused agreeably from their habitual state of apathy, or because they perceive, that at these contests, without any mental exertion, they are equal, perhaps superior, to their competitors" (33-34). By contrast, games of address supplement the overarching agenda of *Practical Education*, which, Jessica Richard asserts, "means to empower children by showing them how they can control events" (131).

In her injunction against games of chance, Edgeworth departs from other educational theorists. Locke himself created an educational game styled on the Royal Oak Lottery and encouraged parents and children to make bets about which letter might surface first, or who could identify it fastest (Pickering 77). Following Locke's prescription, eighteenth-century educational theorists created fine distinctions for licit gambling. If gambling materials could be applied to education, was gambling still a

negative category? When Newbery published a lottery game similar to Locke's, he attached a disclaimer both eschewing gambling but allowing it when learning to read (Pickering 78). As Richard notes, "this careful parsing of types of gaming reflects the metamorphosis in the eighteenth century of playing cards and other games from instruments of chance to educational tools used to teach children everything from grammar to morality to facts about other countries" (128).

In so doing, Lockean educational theorists followed the lead of many games manuals, which did not differentiate between different types of games, as Edgeworth would later do. Cotton's *The Compleat Gamester* (1674) includes a wide range of games, from billiards to horse-racing to cards. He does not promise certain odds, or even offer advice on betting, but he does claim to clarify the "art and mystery" of riding, racing, archery, and cock-fighting (174). More problematically, Henry Proctor's *The Sportsman's Sure Guide* (1773) promises "the exact odds at horse-racing, lotteries, raffles, Cock-fighting, Cards, &c. &c." Unlike Edgeworth, who insists on analyzing games for their specific, cognitively-relevant procedures, Proctor shows no fine distinction between different types of games, entering both hazard and address under one heading. He even includes odds for animal-based games, like cock-fighting and horse-racing. Proctor, along with many others, shifted the emphasis of manuals towards predicting results guaranteed by quick and easy tips.

Though Edgeworth's application of games runs counter to the tendency of most games manuals published during the eighteenth century, she does not entirely ignore their precedent. For example, like Cotton, Edgeworth believes in downplaying the "*knack or mystery*" tied to games of skill. "Whenever children play at such games," Edgeworth

writes, "we should point out them how and why it is that they succeed or fail we may show them, that, in reality, there is no *knack or mystery* in any thing, but that from certain causes certain effects will follow; that, after trying a number of experiments, the circumstances essential to success may be discovered; and that all the ease and dexterity, which we often attribute to the power of natural genius, is simply the consequence of practice and industry" (*PE* 17). Because skills, like genius, may be cultivated, there is no secret dispensation of elect game players: all are welcome.

Cotton himself warns against pitting theory against practice, habit, and hard work. He tells the anecdote of a young gamester confused as to why he lacks the skill of the seasoned gamester "since he had the same Theory of them all, and knew how they [the sleights of hand] were done; O young man, replied the Gamester, there is nothing to be attain'd without pains; wherefore had you been as laborious as my self [sic] in the practice hereof, and had sweated at it as many cold winter morning in your shirt as I have done in mine, undoubtedly you would have arrived at the same perfection" (Cotton 16-17). Along with practice, Cotton urges all players to exercise the utmost attention: "if you be not careful and vigilant" you will be cheated, either with false dice or with inflated scores (11). In some ways, all games manuals promote demystification; but Edgeworth aligns more with Cotton in their shared concern for the repetition of play rather than with those manuals that focused on the probability of winning outcomes, like Henry Proctor's *The Sportsman's Sure Guide*.

In order to understand why Edgeworth deploys games, especially when so much gaming literature promoted values counter to her own, it will be helpful to look more closely at the culture she hoped to change, a culture generated by gambling. Edgeworth's

short story "The Lottery" exposes the hazards of gambling by refusing to replicate any kind of predictive probability and by valorizing the tried and true – hard work – over the chance of trial and error. In effect, Edgeworth wants to substitute *skilled gaming* for *gambling* by dissociating game play from money and risk.

II.   "The Lottery"

England's gambling culture included three key forms: illegal games of hazard, the national lottery, and personal wagers.[52]   Not surprisingly, the differences between these categories, legal and nonlegal, were finely discriminated and often up for debate. What was being legislated? Why could the government sponsor nationwide gambling but individuals could not run gambling houses? Legal debates participated in the confusion around gaming and how to define it at the same time that educational theorists, like Newbury and Locke, experimented with bringing some form of gambling into education. Edgeworth's "The Lottery" suggests that games be defined, and regulated, according to their cognitive procedures and skills. In doing so, she urges the law to limit games of hazard – including its own, the national lottery. She also targets the disturbing tendency of games to prove addictive; however, as I will show in the final section of this chapter, her analysis also imagines re-purposing that addictive capacity.

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[52] See Richard, *Introduction* pp. 1-17. For distinctions between different types of gambling and the history of gambling in Britain, see John Ashton, *The History of Gambling in England*; Steve Donoughue, "A History of Gambling in the UK (until 1960)."

"The Lottery" (1799) describes the literal fortunes of the Robinson family, small-time, hard-working farmers, whose domesticity remains ideal until their city-wise relation, Mrs. Dolly, comes to stay. Corrupted by big-city living, Mrs. Dolly urges Mr. Robinson to buy a lottery ticket, "the chance of making a fortune without any trouble" ("Lottery" 5). He resists her temptation at first, but eventually does buy the ticket and wins five thousand pounds. Flush with success, he moves the family to the city to try shop-keeping. Things go well for a time, but despite the good influence of his wife, Mr. Robinson soon begins gambling, Mrs. Dolly produces a huge amount of debt, and the family nearly falls into ruin, saved only by timely help from a rich benefactor and the return of an old friend, William Deane. Unfortunately, nothing saves Mrs. Dolly, who "drank herself into ill health, which would soon have killed her, if she had not, in a drunken fit, shortened the business, by fracturing her skull" (65).

Edgeworth's moral could hardly be clearer. "Aye," says Robinson, "you [Deane] have trusted to your own sense and industry; and not to gaming and lotteries" ("Lottery" 66). Her short tale ends with a kind of benediction: "May equal happiness attend every such good wife, and mother! And may every man, who, like [Robinson], is tempted to be a gamester, reflect that a good character, and domestic happiness, which cannot be won in any lottery, are worth more than the five thousand, or even the ten thousand pounds prize" (69).

When Edgeworth writes that "ignorant imprudent poor people… hazarded guinea after guinea," she's not exaggerating ("Lottery" 59). Probability, a new, developing branch of mathematics, was poorly understood.[53] Gambling manuals popularized the

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[53] See Kavanagh, pp. 9-28; Molesworth, ch. 2; Richard, chs.1-2.

idea of certainty in the form of statistics behind seemingly chance phenomena but, for the most part, they conveyed misleading ideas. For example, in *The Sportsman's Sure Guide*, Henry Procter perpetuates the false understanding of probability common at the time and still misleading today: "Suppose there are nine battles in a [cock-fighting] match to fight, wherein there is even money on each side every battle; and, that one side is already four battles a-head, of course the other side must win" (v). This analysis wouldn't even apply correctly to dice; to suggest that cock-fighting might be predicted in this way demonstrates the common misconception that probability reliably predicts the future.

The Edgeworths steer clear of sketchy probability and statistics. Scholars have long identified the Edgeworths with Enlightenment and eighteenth-century rationalism (Myers, "Romancing" 100). Alan Richardson, for instance, discerns "the mechanical character of the Edgeworths' conception of psychic development, and their desire to produce a child whose further progress can be predicted with something approaching mathematical rigor" as counter to the freedom of spirit commonly associated with Romanticism (*Literature* 55). Certainly, the Edgeworths not only expect their formulas to work, but to work for everyone. On the other hand, their approach to play and games as a means of cognitive development suggests a more flexible model, one that carefully avoids the kinds of "mathematical rigor" promised by the games manuals.

Not only did probability studies often mislead, but the laws against gaming were also hazy, at best, primarily because of confusion over how illegal games were to be defined. Technically, England tightly controlled gaming: from Richard I to Henry VIII, games of all sorts were illegal, except during the twelve days of Christmas – or, year-

round, at court (Richard 9). Publications like *The Laws of Gaming* (1764) recorded England's many legal codes on that "extensive subject," especially the attempt to limit cheating and fraud: "No Person of what Degree soever shall by himself, Factor, Deputy, Servant or other Person, for his or their Gain, Lucre or Living, keep hold, exercise or maintain any common House, Alley or Place of Bowling, …half Bowl, Tennis, Dicing Table or Carding, or any other Manner of Game prohibited by any Statute heretofore made, or any unlawful new Game now invented or made, or any other new unlawful Game hereafter to be invented, found, had or made," wheezes *The Laws of Gaming* (110-111).[54] The synonyms appear excessive; but renaming popular illegal games was an early loophole practiced by gamesters.[55] Despite its tendency to lump all games together, British law specifically targeted Hazard, the most common dice game, with a fifty-pound fine (115).

Hazard, most likely brought back to England during the Crusades, is an easy game entirely dependent on chance, and, during the eighteenth century, was the most popular and widely played; for, as Cotton puts it, "[certainly] Hazzard is the most bewitching Game that is plaid on the Dice; for when a man begins to play he knows not when to leave off" (172). Cotton's description speaks not only to the addictive quality of gambling but also, literally, to the ambiguity inherent in betting: might just one more throw of the dice make your fortune? The forerunner of Craps, Hazard requires at least two participants: one caster to throw the die and one fader to bet against the caster. There is no limit, however, on the number of faders who may be involved on any throw, and, as

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[54] The inconsistencies of gaming law were still a concern in the early nineteenth century. See John Disney's *The Laws of Gaming, Wagers, Horse-racing, and Gaming-houses* (1806).

[55] Hence, "Bassett" became "Faro" (Richard 10).

any non-participant could place side-bets on play, Hazard could draw large numbers to the table. Hazard was so widely played that its name eventually came to denote all games of chance. In fact, before "hazard" meant "chance" (1582), even before it meant "risk" (1548), Hazard was a game of two dice (1300) and, according to the OED, "arbitrary rules."[56]

Today, probability theory's term, "hazard function," harkens back to its eighteenth-century roots. The hazard function is "a measure of the instantaneous probability of completing a process in the next move" (Clark, *Supersizing* 72). This modern definition recovers one of the main problems with games of hazard. Players often assumed they were about to get lucky – in the next move. In other words, players at Hazard didn't realize that probability does not predict the immediate future but describes what one might expect over a long series. Just because you've been unlucky several times before is no reason to assume your luck is about to change, just the kind of thinking "The Lottery" warns against.

Games of hazard displease Edgeworth for two reasons. First, chance decreases agency by removing events beyond the player's control. In "The Lottery," two characters argue over whether or not the lottery counts as gaming: "As I take it though," replied William [Deane], "it is gaming. For what is gaming but trusting one's money, or

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[56] During the eighteenth century, "hazard" conveyed risk of the highest stakes, transposed into religious discourse to convey potential avenues of damnation (For example: "The hazard of a death-bed-repentance" (John Dunton, 1708); "The hazard of being saved in the Church of Rome" (John Tillotson, 1723). In the 1850s, economists and insurance companies formally adopted the term "moral hazard" in their discussions of risk (Connelly 1060). At first, the term applied to the client: if the client seemed likely to be a "moral hazard" – that is, untrustworthy, perhaps tempted to claim his insurance payout by crime – then policy writers hesitated to insure (Connelly 1061; Baker, "Genealogy" 250-252).

somewhat, to luck and hap-hazard? And is there not as much hap-hazard in the turning of the wheel, as in the coming up of the dice, or the dealing of the cards?" (7-8). Here Edgeworth defines gaming's immorality in terms of its "luck and hap-hazard." Therefore, the instruments of the game – dice, cards, or wheel – don't matter. Instead, how the game is played determines whether it should be legislated against. Edgeworth's attention to the procedures of games highlights her concern with process and rational choice. Edgeworth wants games and other activities to prepare their players to think carefully about future possibilities and to weigh their decisions. In games of hazard, the rules have scripted out all judgment. There is little possibility for any kind of cognitive regulation.

Secondly, in addition to unregulated high risk, Hazard moves too quickly to foster beneficial cognitive habits. In *The Compleat Gamester*, Charles Cotton comments "Hazzard is a proper name for this Game; for it speedily makes a man or undoes him; in the twinkling of an eye either a Man or a Mouse" (168). Like the child who quickly rotates the puzzle piece, players at Hazard need little time for reflection and no time for practice. As we will see, by contrast, Edgeworth prioritizes time in education, slowing education down to allow for repetition, habit building, and memory. She applies this practice to her novels, for to "emphasize such a process [of development] implies certain formal consequences. Attention to process entails a more leisurely pace" (Spacks 59). In this way, Edgeworth imports time-bound procedures from games into her fiction by using narrative to exercise similar cognitive patterns found in games of address, explored below.

As state-sponsored gambling, the lottery was not considered a game of hazard; but Edgeworth saw little difference. In the harrowing climax of "The Lottery," Robinson, having returned his ticket and thus safe from the fortunes of "the wheel," observes a "poor maid servant, with scarcely clothes to cover her… stretching her thin neck across the counter," asking in a "voice of agony" for her ticket (60). The "careless" clerk hands down the inevitable verdict: "a blank" (60). The unlucky woman "burst into tears, exclaiming, "Then I'm undone!"" (60). In this anxious scene of ruin, Edgeworth sees a remaking of the wheel of fortune, not a crowd liberated by chance from the tyranny of the gods. In this upside-down world, the clerk becomes the judge; the poor, a source of national income: a state of affairs just waiting to become "undone," the gambler's keynote of ruination.[57]

While Edgeworth continues the themes of gambling and chance in her first domestic novel, *Belinda* (1801), she also complicates her discussion of games by introducing a new type for consideration: games of address. Unlike games of hazard, games of address focus on skill, not chance, and therefore, contain potential cognitive benefits that Edgeworth mines for her educational agenda. Edgeworth combats the cultural malaise produced by games of chance with other games, thereby substituting a healthy gaming alternative for the dangerous gambling temptations of Hazard and the lottery.

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[57] The South Sea Bubble scandal was actually a plan to raise money for lottery prize money because the Government couldn't meet all its promised payouts (Richard 19). The English were not the first to use a national lottery to raise government money: "As early as the second century BC, the Chinese under the Han Dynasty designed the game Keno to fool reluctant taxpayers into paying for city fortifications; eventually such profits would be used to build the Great Wall of China" (Molesworth 21).

III.   Games in *Belinda*

Belinda follows the fortunes of a young woman, the last in a number of nieces who have been married off by their Aunt Stanhope. Hoping for another society match, Aunt Stanhope sends Belinda to live with Lady Delacour, a woman of high fashion and wit. As Belinda soon discovers, however, while Lady Delacour presents an unblemished face to the world, her home conceals an unhappy marriage, an estranged young daughter, and a threatening illness. Belinda cannot help but compare her secretive hostess with the stable, open, domestic Percival family, whom she quickly comes to admire and hopes Lady Delacour may emulate. Meanwhile, in what critics have frequently recognized as an ungainly plot, Clarence Hervey, Belinda's future spouse, decides to train a wife for himself and settles on the pure but puerile Virginia. He realizes too late that forming the perfect wife is more hazardous than educational theorist Jacques Rousseau made it sound in his treatise, *Emile* (1762).

When *Belinda* opens, the eponymous heroine "was yet to be developed by circumstances" (7), a keynote for the plots of education that follow. Various forces and temptations come to bear, but Belinda proves difficult to mold. Instead, she observes society, becoming "wonderfully clear sighted" in the process (15). The "more she reflected" on her circumstances, the more she listens to her own good sense and reason: "for the first time in her life she reasoned for herself upon what she saw and felt" (69). Belinda's moral character guides her through jealous accusations from Lady Delacour, a mismatched engagement with the Creole Mr. Vincent, and a nearly derailed romance

with Clarence Hervey. Along the way, each of these characters – Lady Delacour, Vincent, and Hervey – also "develop by circumstances" and experience their own re-educations of character. These characters, unlike Belinda, must confront habits from their pasts before they can lay down new habits worthy of future development. Significantly, their pasts have been structured by games of hazard but Edgeworth introduces all three to games of address, with mixed results. Games, therefore, play a prominent role in the novel as Edgeworth draws attention to the role of gambling, both in terms of gentlemanly wagers and cultural metaphors for courtship. Simultaneously, games call attention to the kind of cognitive habits that players unconsciously imbibe while gaming.

Most studies of *Belinda* that mention games recognize the prominent role they play for Mr. Vincent. Vincent, a Creole planter brought up gambling with his father's slaves, becomes addicted to gambling as an adult, falls prey to a crooked E.O. table (an early form of Roulette), and, though saved at the last minute by Hervey from becoming "undone!" (*B* 447), ultimately loses Belinda because of his "unfortunate propensity to a dangerous amusement" (448). Richard focuses on Vincent's gambling and argues that "the novel links the passion for play to Vincent's upbringing in the West Indies" and his "susceptibility to gambling enables the novel at once to highlight and ultimately to evade the dependence of the British economy on slave labor" (129-130). Vincent's plot epitomizes the familiar anti-gambling morality of the 1790s, but Edgeworth's novel richly explores gaming beyond mere gambling.

The novel emphasizes Vincent's confusion over how to define games. It seems simple when his benefactor, Mr. Percival, prefers "jackstraws," or pick-up-sticks,

because "it is a game of address, not chance" (*B* 249); and yet, those very labels prove

conducive to manipulation. Vincent's downward spiral begins with his justification of

wagering at billiards: "Billiards, however, was a game of address, not chance…. He did

play: his skill was admired; he betted, and his bets were successful: but he did not call

this gaming, for the bets were not to any great amount, and it was only playing at

billiards" (424). Vincent downplays the aspect of gambling attached to a game of address

in order to justify his play, a common strategy in the legal debates over how to define

gaming. [58] His reasoning rehashes the conversation between Robinson and Deane from

"The Lottery" over what counts as gaming, but with disastrous results.

Vincent also takes advantage of arbitrary gaming statutes to downplay the size of

his bets. Queen Anne's 1710 statute decreed that winnings could not exceed 100 pounds,

which sounds simple enough, but proved otherwise in practice: were winnings restricted

to hard cash? One case brought to court included a ring worth twenty pounds plus

another 100 on credit: had the cap been passed? (*Laws*, 1764 113). Another case

wondered whether the amount applied to one sitting or was good across games that

included multiple sittings? (119) This case so divided the court that the plaintiff dropped

the charges, not willing to hazard his chances at winning the trial. When Vincent

remarks that his bets were "not to any great amount," he means both that he has them

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[58] This kind of sophistry was quite common in the legal disputes surrounding games and their definitions; and as the laws were updated or revised every few years, lawyers could refer to one without considering another. One plaintiff attempted to argue that cock-fighting was neither a game of hazard nor address because hazard indicates chance, and address, skill – "a quality of the human intellect," the plaintiff insisted – but the cocks display strength, relative size, age, and weight (Humphreys 487). Therefore, the plaintiff argued, he could not be fined because his activity was outside that legislated by the law. The final decision explained that the gaming act of 1799 must be interpreted by that of 1803, both of them subject to the precedent laid down by Henry VIII, statute 33, chapter 61 and the guilty verdict was upheld (490).

under control and that they won't be noticed by the law. Unfortunately, this reasonable

gambling soon exceeds the bounds of legal hazard. When Mrs. Luttridge, a scheming,

manipulative character, convinces Vincent to try E.O., an illegal game of hazard, she also

increases the stakes of his bets. Mrs. Luttridge knows that a man of honor will pay a debt

regardless of the limit placed by the law, yet another loophole that made gambling

difficult to regulate. And, with a crooked table, she skillfully engineers what appears to

be chance.[59] Like the card sharpers of the eighteenth century, Mrs. Luttridge makes her

own luck.

In order to educate Vincent as to the dangers of his misguided gambling

addiction, Hervey allows Vincent to experience the full force of becoming "undone," the

result of blurring together all types of games and wagers. Hervey allows Vincent to think

all was lost in order to extract his promise "that you will never more trust your happiness

and hers [Belinda's] to the hazard of a die" (*B* 434). This plot may seem extreme; but it

worked for Maria's father, Richard Lovell Edgeworth. A family friend undertook to

educate Richard Lovell Edgeworth much as Hervey educates Vincent. Lord Longford

"allowed young Edgeworth to win a hundred guineas at faro, and then lose it all again, to

try his disposition, and see if he were in danger of becoming a gambler" (Oliver 19).

Unlike Richard Lovell, Vincent proves less teachable, his opportunities for re-education

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[59] Gillian Russell's essay, ""Faro's Daughters": Female Gamesters, Politics, and the
Discourse of Finance in 1790s Britain," does not mention Edgeworth or Mrs. Luttridge
but her description of "Faro's Daughters" – women who ran gambling houses, often got
involved in politics, practiced shooting, and were known to cheat their clients – fits Mrs.
Luttridge perfectly. Beside "being a great faro-player," Mrs. Luttridge "was a great
dabbler in politics" and – "what do you think? – an excellent shot!" (*B* 53-54). It's no
surprise that Harriet Freke joins forces with Mrs. Luttridge; both participate in gaming
and hazard. Freke, however, by her wagers, represents a more masculinized version of
the female gamer than Mrs. Luttridge, who is primarily seen organizing games, not
playing them.

no match for his "propensity to a dangerous amusement." He eventually learns his lesson, but too late to retain Belinda's affections. Hervey, on the other hand, succeeds just where Vincent fails and thus proves himself the appropriate suitor for Belinda. Significantly, Hervey only saves Vincent after having learned the dangers of wagers himself.

At first glance, Clarence Hervey appears to be the ideal young man but Edgeworth warns her readers at the novel's outset that he's far from perfect. In fact, he "might have been more than a pleasant young man" if he had not been "early flattered with the idea that he was a man of genius"; and, with his current friends, Edgeworth foresees his potential to "soon become vicious" (*B* 14). There are no guarantees of moral character in Edgeworth's world and just as Belinda must develop her character, so must Hervey his. Like Vincent, Hervey must contend with his gaming habits; but whereas Vincent comes scarred by gambling, Hervey comes scarred by wagers.

Gaming law drew a fine line between gambling, which was illegal, and wagering, which was not. During the eighteenth century, wagers bolstered "gentlemanly identity" and were considered legal and binding contracts (Richard 11).[60] In other words, as Richard points out, English law limited bets on games of chance but validated wagers on contests of skill. Men bet on anything and everything, from the sex of unborn children,

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[60] The only character to wager as much as Hervey and Sir Philip is Harriet Freke. This is, of course, one way that Edgeworth signifies Freke's superficial masculinity. As Deborah Weiss points out, "Edgeworth locates Freke's masculinity in male mannerisms," not ideals or moral manliness (446). This raises a point of nuance: is Freke condemned for her gender bending or for gender bending the wrong masculinity? Weiss argues that, like Wollstonecraft, Edgeworth wanted to disrupt the typical binary categorization of male and female intellect; unlike Wollstonecraft, Edgeworth maintains the value of some female behaviors (450). As a "caricature of a caricature," Weiss surmises, Freke's wagering represents a superficial understanding of Wollstonecraft's principles: Freke merely swaps one set of manners for another (446).

to "who would win impromptu swimming or foot races, … on whether a waiter who fell down in a fit was dead, on whether a man could live 12 hours underwater" (Richard 11; Ashton 150-155). Maria Edgeworth's paternal grandfather engaged in such wagers. One evening, having gambled away everything else, he came to his wife during a dinner party to ask for her earrings, to make one final attempt. She gave them to him, and he won everything back and swore to play no more, but "afterwards he was found in a hay-yard with a friend, drawing straws out of the hay-rick, and betting upon which should be the longest" (Oliver 8-9).

Clarence Hervey begins as a man addicted to wagers. Through a series of three episodes structured around games, Edgeworth weans Hervey from his wagering ways and introduces the idea that he might repurpose his bad habits into good ones that allow him to play the social game with success and skill.

In the first contest, Hervey wagers a hundred guineas that he can drive a herd of pigs to market before a French prisoner of war can deliver a herd of turkeys. This strange sight immediately arrests the "attention" of an English mob: "At the news of this wager, and at the sight of the gentleman turned pig-driver, the mob were in raptures…. eager for the fame of Old England, the crowd followed Clarence with loud acclamations…. All eyes and hearts were intent upon the race" (*B* 58-59). Edgeworth capitalizes on the addictive quality of games. The drama and tension created by a race with such high stakes, economically and in terms of national pride, completely redirects the thought-process of the entire crowd. Any tool capable of such redirection must be a powerful one – and one that may be turned to better social purposes than a wager. In the wake of revolution and mob threats, Edgeworth seems to suggest that games may provide an

opiate for the masses. Such unconscious absorption, however, runs counter to everything

Edgeworth proposes; therefore, Edgeworth shows Hervey that games require thoughtful

and rational play, not merely high stakes, by guiding him through two additional games

episodes.

The second contest is actually a series of three escalating wagers involving wine,

walking, and swimming. Here, Edgeworth explores the betting culture of the aristocracy

as she probes the game-based friendship of Hervey and Sir Philip Baddely.[61] In this

scene, she explores the common way one wager could lead to another as gentlemen

sought to regain their dignity after a loss. Hervey initiates the wagers with a boast that

"no man in England had more correct taste than himself," leading Sir Philip to propose a

contest of wine-tasting (*B* 89). Hervey wins this contest despite an attempt by Sir Philip

to cheat; but his wine-inflated sense of victory leads him to accept a contest of race-

walking from the wounded baronet: "'Done,' said Clarence, 'for ten guineas – for any

money you please'" (90). Hervey loses this race because he refuses to overrun a group of

children in the park. His consideration reveals his true gentlemanly character, a character

partially obscured by his ennui-inspired gaming.

Not content with remaining a loser, Hervey offers one final wager, a contest at

swimming, forgetting, in his drunken state, that he doesn't even know how to swim.

Hervey might have drowned were it not for Mr. Percival's timely intervention. It is no

coincidence that Mr. Percival, Vincent's guardian and the novel's voice of reason, comes

to the rescue. Percival prefers "games of address" (*B* 249) and, by saving Hervey,

enables Hervey to later save Vincent.

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[61] For more on the literary critique of aristocratic gambling and dueling in the 1790s, see
Markley.

This isn't the first time Hervey's wagers have nearly cost his life. Previously, to enliven a masquerade, he "had laid a wager… that he could perform the part of the serpent [but his elaborate costume caught on fire] …. it was with the greatest difficulty that he was extricated. He escaped unhurt, but his serpent's skin was utterly consumed" (*B* 23). Clearly, despite his wit and charm, Hervey displays a lack of judgment. In a "trial of wit and judgment," like the puzzle Edgeworth describes in *Practical Education*, Hervey would fail to exercise the necessary control. Hervey needs to hear the advice Mr. Percival offers his young son: "Done! and done! – sometimes ends in – Undone" (248). Fortunately, his near-drowning alerts him to his own "propensity to dangerous amusement" and he breaks with his current friends.

Hervey's third and final contest, a game of chess, demonstrates his judgment and prepares him to apply address to the social scene. Unlike the other contests, this "combat" requires true skill (*B* 113). Hervey proves himself intelligent and studious, a chess player and reader of its literature. His knowledge of "the literary ground" of chess, briefly summarized by Edgeworth, impresses all his hearers, one of whom challenges Hervey to prove whether "he were as perfect in the practice of as in the theory of the game of chess" (113). The entire gathering watches the ensuing game of skill and Hervey eventually wins.

Significantly, it is this contest that Edgeworth transforms into Hervey's game of address with Lady Delacour.[62] When Dr. X— laments that he cannot take Lady

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[62] Edgeworth mentions "Vida's Scacchia" (*B* 113), referring to a poem on chess entitled "Scacchia ludus" by Marco Girolamo Vida (1485-1566). This poem was referenced by Pope in "Essay on Criticism" and translated to English first in 1736 by George Jeffreys, then again translated by Oliver Goldsmith around 1765 (J. Gibbs, *Works* 117-134). Edgeworth also mentions the cultural and historical work on chess being published

Delacour's pulse "by reason," Hervey assures him it can be done "by address": observing

the movement of the shadow of Lady Delacour's ruff will reveal her pulse (115). Hervey

impresses Dr. X— with his creative ingenuity and receives this commission: "What a pity

[that a young man like you] should waste upon petty objects powers suited to the greatest

– should lend his soul to every contest for frivolous superiority, when the same energy

concentrated might ensure honourable pre-eminence among the first men in his country.

Shall he… who might be more permanently useful to his fellow creatures, content

himself with being the evanescent amusement of a drawing-room?" (116). With this

exhortation in mind, Clarence turns his attention to Lady Delacour in the hopes of

convincing her to "[give] up a losing game" of anti-domestic, society living (124).[63]

Hervey's task to reform Lady Delacour proves difficult precisely because she is

an expert game player herself, albeit jaded by society games, which Lady Delacour sees

very literally as such. She coaches Belinda at "Cupid's chess board" (*B* 273) and warns

her that a rival will resort to "*hide and seek*" to convey a billet-doux (437). The

vocabulary of games saturates Lady Delacour's accounts of her marriage and social life,

reinforcing the ways England's gaming culture extended beyond gambling. Through

Lady Delacour's metaphors, Edgeworth balances her critique. Games are not inherently

bad, Edgeworth suggests, but they may corrupt social practices and family life if they are

wrongly – haphazardly – incorporated into culture. On the other hand, Edgeworth targets

during the 1790s by such cultural anthropologists as Sir William Jones, the first to correctly identify India as the original source of chess.

[63] For more on Lady Delacour's transformation, see MacFadyen, Rosenberg. David Thame reads Lady Delacour's transformation as recovery from mental illness. While unwilling to go so far, I would at least point out that both his explanation addresses the mind's balance and ability to function clearly. Right thinking proves the cure for both misguided morality or mental illness.

the system, rather than Lady Delacour. Hervey isn't saving Lady Delacour from herself so much as teaching her how to play a new game.

Games of address prove to be the category of gaming that Edgeworth hopes may combat and supplant games of hazard. Games of address denote all games of skill, much as games of hazard denotes all games of chance. Just as hazard proves too broad a category, ignoring style of play and lumping together disparate activities, so Edgeworth demonstrates that she means something more specific by address than just skill or dexterity.

Address proves to be a slippery category throughout the novel. Address most frequently characterizes Lady Delacour, who uses wit and skill in conversation – address – to read other people. "With much address," Lady Delacour confirms Hervey's interest in Belinda (*B* 80) and "uses her address to draw some farther explanation from sir Philip" (145). To cover Belinda's distress, Lady Delacour distracts the company, "[keeping] them in play by her address" (456). Similarly, Dr. X— puts his address to good use, earning Belinda's approbation: "She felt that he unfolded her powers, and that with the greatest politeness and address he raised her confidence in herself, without ever descending to flattery" (112). Belinda notes the same quality in Mr. Percival, who "possessed the happy talent of drawing out all the abilities of those with whom he conversed…. he was capable of estimating the *potential*, as well as *the actual range* of the mind" (323). These emphasized terms resonate with discourses of gambling and hazard because of the frequent discrepancy between the potential and actual outcome of bets. With address, however, Mr. Percival discerns that key differential and accurately estimates the cognitive abilities of the other characters.

Likewise, Clarence Hervey demonstrates skilled "address," to which Belinda attributes Lady Delacour's reform (*B* 275); however, Edgeworth also probes the less admirable side of address. Belinda "had often heard of Mr. Hervey's great *address* in affairs of gallantry, and she was sometimes inclined to believe that he was trifling with her, merely for the glory of a conquest over her heart" (144). Address can be manipulative, as when Lady Delacour drops hints to Belinda, trying to catch her in an adulterous blush. Sir Philip practices a kind of blundering address when he hints that Hervey's secret involves another woman (190). The anonymous letter sent to Vincent accuses Belinda of "address and boldness" (333). Aunt Stanhope recommends address as key to managing the Delacours so that all are happy: "And this only by using a little address – without which nothing is to be done in this world" (86). Perhaps the most damaging form address takes in the novel is Mrs. Ormond's interpreting and leading of her ward, Virginia, which nearly results in a marriage between Virginia and Hervey.

The moral neutrality of address helps demonstrate how and why it must be correctly – cognitively – managed. By address, Hervey convinces Lady Delacour "to give up her losing game" and brings a playful spirit to her moral reform (*B* 124). In a light-hearted wager for the amusement of Lady Delacour, Clarence Hervey dons one of her dresses and "managed his hoop with such skill and dexterity, that he well deserved the praise of being a universal genius" (75). In contrast with this comic scene, hazard never deserts the tragic muse. With surprising menace, Lord Delacour judges Vincent: "if he game, God forbid that Miss Portman should ever be his wife!" (419). An infectious fear of "the fatal taste for play" (450) underlies the promise Clarence demands from Vincent: "Swear to me, for Belinda's sake – solemnly swear to me, that you will

never more trust your happiness and hers to the hazard of a die – swear that you will

never more, directly or indirectly, play at any game of chance" (433-434). Address, like

other qualities of mind – wit, judgment, imagination, reason – must be rightly and

habitually applied.[64] Unlike hazard, address offers potential depending on the moral

character of the player.

Though Edgeworth unfavorably contrasts games of hazard with those of address,

she doesn't reject all games outright as some of her peers were willing to do.[65] Reformist

novels of the 1790s were more likely to take the tone of anti-gambling tracts, like *A Plain

and Candid Address to all Lovers of the Game at Cards*, aimed at allaying the

"extravagant passion for Card-playing [that] has so greatly increased of late years" (iii).

The tract urges those intoxicated by "an inordinate love of this amusement" to "reflect,

(e're it be too late)" on their status as "rational beings" (iii). The author understands his

mission as "reclaiming" cognitive character and redirecting it towards "infinitely nobler

objects" (iii). This task proves difficult because, as "common experience showeth,"

"Card-playing has something entangling and bewitching in it" (5). The pamphlet,

therefore, shares Edgeworth's concern with reeducation; however, it makes no distinction

between hazard and address, considering all games as equally dangerous. For this author,

the addictive quality of games inspires fear and therefore must be completely avoided.

Edgeworth agrees that games must be handled carefully and acknowledges their addictive

power; but unlike this candid writer, who quickly decides that "[t]this and every other

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[64] Toni Wein argues that Edgeworth does the same with another of her pet virtues,
prudence. Wein's argument contributes to a branch of criticism on *Belinda* that sees
more in the novel than straightforward didacticism. Wein's fine distinction between
prudence and propriety seems in line with Edgeworth's careful parsing between different
kinds of games and their definitions.

[65] See Markley pp. 162-163.

amusement, must doubtless be evil, whenever it unfits the mind for spiritual exercises,"

Edgeworth repurposes gambling culture and its cultural metaphors (6). In the process,

she explores how the very qualities of games that the author of *A Plain and Candid*

Address rejects might actually be turned to the service of moral pedagogy.[66] In games of

address, Edgeworth identifies positive habits of cognition. She imports these cognitive

templates into *Belinda's* plot by encouraging pragmatic and epistemic reading, while, at

the same time, Clarence Hervey and Lady Delacour change their moral lifestyles by

exercising teachable genius.

IV.   The Epistemic and Pragmatic Actions of *Belinda's* Plot

Following their recommendation in *Practical Education* that parents appropriately

match games with their children's lack of desired behavior, the Edgeworths insert this

disclaimer: "We are not quite so absurd as to imagine, that any great or permanent effects

can be produced by such slight causes as a game at draughts, or at the solitary-board, but

the combination of a number of apparent trifles is not to be neglected in education" (*PE*

20). Rather than an outright deprecation of games, this caveat cautions parents that

changes in behavior require time and discipline. More importantly, however, this

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[66] This style of intellectual engagement should come as no surprise to scholars familiar
with the number of conflicting critical opinions on Edgeworth's principles, especially in
so far as those principles are political. In her discussion of comparative gender in
Belinda, Dannie Leigh Chalk helpfully reminds us that general conclusions about
Edgeworth ignore Edgeworth's "intense particularity," which explains some of the
seeming paradox within her work (132). I see the same principle here: Edgeworth allows
that some games may prove fruitful and sets about delineating their qualities with the care
of a species biologist, to borrow a metaphor from Chalk.

seeming disclaimer highlights the fact that games – "apparent trifles" – really can make a

difference. Deborah Weiss distinguishes Edgeworth for her commitment to "an overhaul

of custom based on a pragmatic application of theory" (451). Plot, as I will argue, forms

the concrete basis for Edgeworth to re-inscribe procedures from children's games into a

form fit for adults. The cumulative effect of these "apparent trifles" – games and plot –

combat the gambling-based thinking that underlies many social behaviors Edgeworth

disparages.[67] Both Aunt Stanhope and Lady Delacour advise Belinda in the "desperate

game" of "Cupid's chess board" (*B* 199, 273) while Lady Delacour describes her

marriage as a "ridiculous game" (39). Such manipulations and maneuvers as Lady

Delacour and Aunt Stanhope recommend may take great "dexterity" but are not the kinds

of skills that Edgeworth wishes to instill in her readers (199). On the other hand, unlike

her advice for children in *Practical Education*, Edgeworth does not propose that adults

combat cognitive deficiencies with more games. Instead, she adapts the procedures of

those games that offer the most cognitively beneficial styles of judgment to the procedure

of fiction: plot.

Edgeworth inscribes cognitively specific procedures of one game of address,

whist, into the plot-structure of *Belinda*. Whist mimics the kinds of thinking Kirsh and

Maglio associate with epistemic and pragmatic action and the formal expression of

epistemic and pragmatic action in plot alternates dynamics of *delay* and *occlusion*.

Edgeworth frequently delays exposition in the narrative equivalent of epistemic action:

continual readjustment actively builds meaning. Narrative occlusion, by contrast, works

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[67] Even before meeting the Percivals, Belinda knows that hazard involves high risk:
""Surely," said Miss Portman, "it is better for me to throw away fifty guineas, poor as I
am, than to hazard the happiness of my life"" (*B* 84).

by pragmatic action: the reader must wait until all the pieces of the puzzle have been examined before engaging judgment. In other words, by deploying narrative tactics of delay and occlusion, Edgeworth's plotting formally replicates the epistemic and pragmatic cognitive action evinced by her puzzle, whist, and modern-day Tetris. Together, delay and occlusion develop the kinds of cognitive habits Edgeworth hopes will promote better games of address for society. Delay and occlusion undermine the authority traditionally given to an omniscient, third person narrator but, though risky, I argue that neither delay nor occlusion prove hazardous. Instead, Edgeworth shares some of her authority with her readers; or, in whist's terms, her partners. I examine the pedagogical style of Hoyle's whist manual in more detail because unlike other contemporary authors of games manuals, he teaches skill, not chance and engages with games in a way that encourages the same kinds of cognitive procedures that Edgeworth ultimately hopes to instill in her readers. Through formal delay and occlusion, Edgeworth incorporates the epistemic and pragmatic thinking prevalent in Hoyle's manual into *Belinda*.

When Edmond Hoyle published his *Short Treatise on the Game of Whist* (1742), he could little have foreseen how wildly popular it would become. Like earlier games manuals, Hoyle used narrative elements – case studies and question-and-answer dialogues – and included probability tables; but, unlike the others, Hoyle focused on one game: whist. In whist, two pairs sit opposite each other to form a square. All the cards are dealt face down, except the last card, which is shown to all the players before going into the dealer's hand. This card determines the trump suit. Players lay down one card in order to take tricks, which are won by the high card or trump. Hoyle promises

"Calculations, directing with moral Certainty how to play well, any Hand or Game, by shewing the Chances of your Partner's having 1, 2, or 3 certain Cards." Rather than predicting the possibility of winning, Hoyle offers predictions into the likely process of play. Knowing where you are in the order of play, who plays what, and what has already been played all become crucial to planning how you will play your hand to win the most tricks.

Of course, whist can be played haphazardly, without keeping track of the cards; but Hoyle wanted players to think through their play – despite the heavy cognitive cost. Hoyle instructs readers in a sparse, "clinical" style that eschewed the "cautions, polemics, or judgments" of previous gaming literature for stream-lined "rules, calculations, and cases" (Molesworth 69). He seems aware of the economy of memory and seeks to ease cognitive load rather than to overtask it. His frontispiece advertises that "with due Attention" to the laws and rules of the manual, players will become successful. That being said, he promotes his second publication, a system of "Artificial Memory," by claiming it "does not take off your Attention from your Game" and encourages readers to "only charge their Memories with those [probabilistic calculations] marked N.B." should they feel overwhelmed (Hoyle, *Short* 1-2). As if following Locke's advice for educating children, Hoyle scales his lessons to the attention of his readers. He also carefully ordered his lessons so that beginners could gradually take on more challenging skill-concepts.

Hoyle orders the manual so that chapter one aims towards beginners while chapter three consists of "Particular Games, and the Manner in which they are to be played, after a Learner has made some Progress in the Game" (*Short* 25). Chapter eight, "A Case to

demonstrate the Danger of forcing your Partner," will be useless unless the player already understands how to read the other players at the table as described in chapters four and five. By the end of the treatise, Hoyle offers a kind of riddle which the reader should now be able to solve: "The foregoing Case shews that both Hands are exactly equal; and therefore let one of them name his Trumps, and lead, he wins thirteen Tricks only. But if one names the Trumps, and the other leads, he that names the Trumps ought to win fourteen Tricks" (86). Hoyle implicitly tests whether or not the reader can count out the tricks and find the fourteenth, a task only possible once all the lessons of the treatise have been learnt.

The idea of scaled education fits well with the Edgeworths' ideas about pedagogy. Associationist psychology popular in the eighteenth century suggested that materials be matched to the ability of the learner. As Richardson writes, in "order for the child's text to successfully penetrate and reform the child's mind..., it had to reflect the child's presumed developmental level in the relative simplicity of its style, the length of its individual chapters or lessons, and the familiarity of its examples and images" (*Literature* 129). Richardson focuses primarily on education for children in this chapter of *Literature, Education, and Romanticism*, but his summary maxim – "For every age its book; for every developmental stage its template" (130) – easily extends the Edgeworths' agenda from lower-class readers to include more educated adults. Thus, we might think of "The Lottery," with its straightforward plot, as scaled to the cognitive ability of children; while *Belinda*, probing epistemic and pragmatic action like a dealer managing two decks, targets the cognitive ability of adults.

Hoyle's "laws" helped to standardize whist by regulating foul play, effectively "[creating] citizens out of its subscribers" (Molesworth 71); but more importantly, Hoyle's laws prioritized cognitive behaviors, like attention and memory. Hoyle's law penalizes disorderly play but also maintains the limitations on information shared between partners, thus enforcing the need for attention and strategic play as communication. The most penalized action is the revoke (Hoyle, *Short* 8-10). A player revokes when he or she fails to follow suit even though able to do so. The fairness of play depends on a fine balance of withholding information. Should hearts be played but you play a spade (in spite of holding a heart in your hand), your action is severely punished because it sends the message to the rest of the players that you no longer have hearts, thereby disrupting their calculations and Hoyle's system; however, revoke is only penalized if caught by the other partnership. Hoyle demands that players following his system count cards; otherwise, should they refuse to bring this kind of attention to the game, he lets them go on to their failure, much like Hervey does for Vincent.

Hoyle advises counter-intuitive play in order to prioritize knowledge and certainty. When you take the final card, the trump card, into your hand, Hoyle recommends saving it as along as possible because your partner knows what it is (*Short* 69). This means you may give up higher cards in its place but when you finally do play it, your partner knows you have no remaining trump.[68] Only players who commit to watching and remembering what cards have been played will achieve certain rates of success. As Hoyle closes his treatise, "Those who would attain to the playing of Whist to perfection, must not be content only with being a Master of the Calculations contained in

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[68] Hoyle repeatedly encourages this strategy in subsequent whist manuals, like his *Artificial Memory* (1744).

this Treatise, and also an exact Judge of [all the cases]; but be a very punctual Observer

of such Cards as are thrown away" (86). As Molesworth points out, Hoyle's method of

play "directs each reader [of his manual] specifically to build and constantly revise a

mental picture of each player's hand" (166). In the vocabulary of Kirsh and Maglio,

Hoyle proceeds by pragmatic action only, and with good reason – in whist, as in some

scenarios of life, epistemic action is not an option. Like the wary youth, carefully

observing each piece of the puzzle before taking an action, Hoyle recommends careful

consideration of each card played in the game. Throwing down cards out of turn or

playing without thinking first are "fruitless attempts" and are penalized by Hoyle's laws.

Belinda's plot mimics this partner-style card play.[69] Just as the cards must follow

in a pre-arranged, linear form, so must Edgeworth follow word with word and event with

event. And, while Edgeworth can't show her whole hand, she signals her readers along

the way. At the same time, just as Hoyle demands that those following his method

remember what has gone before, so Edgeworth tests reader recall by delayed exposition.

Thus, the plot structure of her book continually moves forward without ever losing track

of its previous moves. In most plots, final twists introduce new information that causes

readers and characters to reconsider what has gone before but delayed exposition

introduces new events that must be inserted into the sequence during the reading

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[69] Molesworth points out that Hoyle's whist also promoted middle-class values, like
"caution, prudence, and oddmanship" (73). Critical commonplace associates these same
values with the Edgeworths and their educational system, so Hoyle's whist makes a good
choice for thinking about what kinds of games of address Edgeworth might encourage.
At the same time, the Edgeworths do not reinforce the common work/play binary that
distinguishes some literary studies of games and pits the serious nineteenth century
against its playful forebear. For examples, see Huizinga pp. 191-192 and Morrow pp. 25-
29.

process.[70] Edgeworth changes the shape of reading by formally framing re-reading as something that occurs always, during reading. As Michael Gamer points out, situating Edgeworth within a neat and tidy history of the realist novel obscures the formal variety available to early writers; he argues that Edgeworth's "generic self-consciousness" rejected some genres, like history, while interweaving a variety of others, like allegory, anecdote, and irony (261). It is precisely her awareness of other literatures and genres that allows for the incorporation of approved cognitive structures found in games manuals into a novel like *Belinda*. Reading Hoyle alongside *Belinda* helps make better sense of its plotting, especially as regards the Virginia plot, which, for most scholars, proves puzzling and unwieldy at best.

The forms of games manuals proved fruitful for eighteenth-century authors seeking episodic plots. In *The Romance of Gambling in the Eighteenth-Century British Novel* (2011), Richard notes that the form of games manuals "reflects the episodic experience of the gambler in picaresque, serial narratives of cheating at play," and argues that eighteenth-century novelists, like Smollett and Fielding, imported the episodic plot of games manuals and gambling into their novels as the best representation of dynamic tension between chance and control (52, 54). As such, Richard ties the form of games manuals to the developing form of the eighteenth-century novel: "Just as Hoyle's serial

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[70] Mary Poovey discusses how literary writers tutored their readers in reading their texts, especially to promote the survival of their works and establish literary value. Austen, she contends, encourages re-reading by including scenes of her characters reading and re-reading, like Elizabeth's frequent return to Darcy's letter in *Pride and Prejudice* (307-310). Edgeworth's delayed exposition fits with this kind of analysis but takes a different form. Like *Pride and Prejudice*, *Belinda* prompts an overall re-reading; but delayed exposition, I argue, prompts earlier and more frequent re-reading, even during the very first reading. For further consideration of reader conscription, see Garrett Stewart, *Dear Reader: The Conscripted Audience in Nineteenth-Century British Fiction*.

cases approximate gamblers' episodic experiences at the tables, the form of episodic fiction presents its characters' experiences as they happen, without the interpretive commentary of a retrospective narrator who knows their story's teleology, thus presenting a series of incidents that cannot, as they occur, confidently be fitted into a larger pattern of meaning" (65). Molesworth also insists on the importance of plot to engagements with chance in the eighteenth century (82-89). Edgeworth, I argue, continues this tradition, but instead of adapting the episodic nature of the games manuals to her fiction, Edgeworth draws on their style of play and the types of cognitive thinking that play encourages.

Belinda diverges strikingly from the general pattern of Edgeworth's moral or children's fiction. Myers articulates the general scholarly view that in Edgeworth's fiction of "common sense," the "linear plot appropriate to such a world view enacts the protagonist's learning process or failure to learn; the pedagogical process itself generates the rational plot, which links causes and consequences and displays the uses of foresight and analytical assessment" ("Romancing" 101).[71] Richardson agrees that a "program of strict narrative control operates at the level of plot throughout the children's tales of Maria Edgeworth, in which the apparent moral ambiguities encountered by her child heroes and heroines are invariably exposed to the reader as equivocal only from the limited perspective of the child protagonist, with an adult figure spelling out the correct moral choice" (*Literature* 146). This is not what we find, however, in *Belinda*; at least, not at the level of plot. And, unlike the clear morals littered throughout "The Lottery," Lady Delacour's tongue in cheek moral at the end of the novel reads like a riddle: "Our

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[71] Myers argues that Edgeworth's fiction deserves a less linear, more affective reading.

tale contains a moral, and, no doubt, / You all have wit enough to find it out" (*B* 478).

Lady Delacour's moral mimics the sing-song cadence of Mr. Percival's "Done and done"

but emphasizes the reader's power of mind and the author's address. And, like Hoyle's

concluding challenge to the reader of his whist manual, it requires a thorough reading of

the novel for its possible solution.

If *Belinda's* moral teases its readers, so do its formal delay tactics. The plot only

partially reveals its workings, providing significant information that alters the story later

in the narrative, despite boasting an omniscient third-person narrator. Three key factors

complicate the narrator's status. First, the narrator is fully omniscient but still withholds

key details. Second, withholding information is not motivated by the story, as it would

be in detective fiction. Thirdly, the omniscient narrator allows the reader to believe that

the episode has been resolved only to reveal that even earlier information has been

withheld. Overall, delayed exposition creates a non-linear plot structure that constantly

tests reader recall. Just as Edgeworth recommends different types of games to different

types of minds, so she adapts her plot structure to the cognitive level of her readers.

Delayed exposition performs like epistemic action, continually recasting the puzzle, or, in

this case, the plot.

Edgeworth's plot-based delay continues the process of experimentation Spacks

identifies in the novels of the eighteenth century and especially those by women writers.

Belinda deploys the characteristics of the novel of development Spacks exemplifies with

Fielding: third person narration, focus on instructive events rather than inner

consciousness, many characters to explore the social impact on the individual

protagonist, and, like *Tom Jones*, "suspenseful situations, with purposefully delayed

resolutions" – all of which, Spacks argues, "suggest a new understanding of what will give readers pleasure" (63). What strikes me as particularly unique about *Belinda* is how the novel's delay deviates from the kind of suspense in *Tom Jones*. Edgeworth's delay is not founded on reader suspense because, for the most part, we remain unaware that further resolution exists. In other words, we don't know that we have anything for which to be waiting. This suggests that Edgeworth has other goals in mind than those of sympathetic engagement pioneered by Fielding.

Consider how Edgeworth layers her plot episodes by formal delay. In the coach episode, Lady Delacour requests that Hervey buy her new carriage-horses as a peace offering to Belinda and with Belinda's permission (*B* 79). Pages later, Lady Delacour reveals her deceit to Belinda, who never condoned the purchase, with the result that Belinda, upset at being misrepresented to Hervey, offers to pay for the horses herself (82-83). Lady Delacour, however, does not give Hervey the money, but uses it for a new carriage to go with her horses (87). Finally caught out by Belinda, Lady Delacour explains the complicated transaction to Hervey, thus restoring Belinda in his esteem (88). The episode appears resolved; however, more than forty pages later, Edgeworth finally reveals the inciting incident: "Now, it had been said by the coach-maker, that Mrs. Luttridge would sport a most elegant new vis-à-vis, on the King's birthday. Lady Delacour was immediately ambitious to outshine her in equipage; and it was this paltry ambition, that made her condescend to all the meanness of her transaction, by which she obtained Miss Portman's draught, and Clarence Hervey's two hundred guineas" (125).

This non-linear narrative organization should give us pause. At first, this structure appears motivated by Edgeworth's desire to juxtapose Lady Delacour's petty

motivations with the impending ruin of the carriage. The expense appears all the more

wasteful once it is revealed that it was motivated by jealousy. However, this moral

agenda is bought at a high price. We become more aware of how much we don't know;

or, instances of narrative occlusion. For example, towards the end of the novel, the

narrator takes more explicit liberties: "It is sometimes prudent to draw a veil over the

excess of joy, as well as of grief. There are scenes, which may be imagined, but which

cannot be described" (*B* 412). Just when readers begin to think Edgeworth is their

partner, she withholds her hand. As *Belinda* develops, the narrator continues

undermining the narrative account. In this way, narrative occlusion contributes to the

first tenet of delayed exposition: a third-person, omniscient narrator withholds key

details. This becomes problematic as the narrator asks us to both read attentively yet trust

her chosen moments of occlusion.[72] Apparently, the narrator wants her readers to

actively re-calculate without all the variables; or, in other words, to exercise both

epistemic and pragmatic styles of reading simultaneously. It is precisely this mode of

occlusion that, while necessary to the procedure of address inscribed in the plot, also

invites critical deconstruction.[73]

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[72] In Hoyle's terms, this would be equivalent to *forcing*, when one partner forces their
partner to play trump against their will. Hoyle strongly discourages forcing because
seizing that much control undermines the trust relationship between partners. Forcing is
not only inconsiderate but usually indicative of ignorant play. Hoyle devotes chapter 8 to
"A Case to demonstrate the Danger of forcing your Partner." Subsequent whist manuals,
including later editions of Hoyle, admit forcing may at times be necessary and even
allowable if it means winning the game.

[73] Catherine Toal, for example, points out that Edgeworth is guilty of stratagem even
though Edgeworth accuses Rousseau of the same kind of deceit. Toal does not discuss
plot, but she does explain how Edgeworth's strategies "dominate forces and competing
perspectives that would threaten both its sanguine celebration of uncontrived beneficence
and its confident, comfortable preservation of "natural" constraint" (228). See also
Jordana Rosenberg, "The Bosom of the Bourgeoisie."

I propose that Edgeworth shapes her narrative by delay, even at risk of undermining the narrator's authority, because of its potential cognitive benefits. This narrator constantly retells the story, revising with increasing narrative consequence and tasking the reader with more elaborate recall. In fact, Edgeworth's delayed exposition exercises our cognitive metarepresentational ability. As cognitive literary critic Lisa Zunshine defines it, metarepresentation refers to "information (or representation) stored under advisement" (*Why* 128). When our brain receives information, it stores the information with tags that indicate to what degree we may need to revise that information at a later date. If we trust our source, our brains just remember the information; but, if we don't trust our source, our brains remember the information *for now*. That means, our brains remember the information *and* remember that we may need to revise it. The less certain we are about the information or its source, the harder we press our metarepresentational ability to remember to fact check. *Belinda's* narrator both insists she is trustworthy yet demands revision, thus particularly stressing our metarepresentational ability. Significantly, Zunshine's analysis explores how we store information under advisement from characters or first-person narrators; she implies we normally wouldn't do such a thing with an omniscient third-person narrator.

In today's terms, we might say that Edgeworth's strategy is "cognitively expensive" – it doesn't use energy efficiently, the way Tetris players do when they incorporate epistemic actions into their decision making. Edgeworth, however, uses the processes of fiction to exercise the minds of her readers, slowly building their endurance for progressively demanding cognitive recall and adjustments. Edgeworth trains her readers procedurally from the first sentence of the novel: "Mrs. Stanhope, a well-bred

woman, accomplished in that branch of knowledge, which is called the art of rising in the

world, had, with but a small fortune, contrived to live in the highest company" (*B* 7). The

delay tactics of this sentence give a surface to depth revelation of Aunt Stanhope's

character, creating an ironic feedback loop that re-characterizes earlier information. For

example, we find within a few clauses that "well-bred" means something specific to the

context, not literally or generically – that is, not actually – "well-bred." The sentence

continually adjusts itself: Mrs. Stanhope, a well-bred woman (well, I should certainly

hope so!), accomplished in that branch of knowledge (ah! she's educated! Hopefully not

a blue-stocking…), which is called the *art* (uh oh) of rising in the world (as I feared), had,

with but a small fortune (she lived beyond her means, didn't she?), contrived to live in

the highest company (and she gets away with it too! A parasite! Well-bred, indeed!).

This first sentence models the mode of continual re-evaluation that Belinda will find so

necessary to her moral development; has grammatically indicated the plot structure to

follow; and has begun training the reader to expect re-processing. Of course, all reading

involves procedural modification as each phrase in a sentence – or card in a round –

builds meaning.[74] But, as this sentence demonstrates, and as the plot enacts on a larger

scale, Edgeworth tasks the memory with non-linear recall that disrupts normative reading

practices.

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[74] The word-by-word model of reading is familiar to literary scholars from Stanley Fish,
"Interpreting the 'Variorum.'" While we don't physically close read as Fish suggests, we
can certainly consciously adapt this style of close reading. Recent studies in cognitive
science have found that our eyes scan in rhythms called "saccades": reading occurs more
accurately at the level of the phrase than the word. Some cognitive studies, such as
Natalie Phillip's work on the neuroscience of reading, focus on larger "chunks" of text
(55-81).

If Edgeworth is the dealer, the Virginia plot is her "trump card."[75] At the end of

the novel, a surprise confession reveals that Clarence Hervey is not a free man. Instead,

he has accidentally become engaged to Virginia St. Pierre, the girl-woman that he has

attempted to educate according to the principles of Rousseau. His plan goes terribly

wrong, as one might expect, for "it was difficult to meet with an understanding totally

uncultivated, yet likely to reward the labour of late instruction" (*B* 362); unless, of

course, one follows Hoyle's principles, not Rousseau's. With the Virginia plot, readers

discover that we have been playing a kind of whist with Edgeworth herself, without

paying enough attention to the thrown-away cards. Early on, Hervey admits to Dr. X—

that he "[has], or had, another mistress" (134). The dropped lock of hair, the painting in

the gallery, a servant's testimony – all cards that Edgeworth lays down, letting us know

she still holds the original trump card. As Hoyle reiterates in his "Artificial Memory,"

"When you deal, put the Trump turned up [that is, dealt last] to the right of all your

Trumps, and part with it as late as you can, that your Partner may know you have that

Trump left, and so play accordingly" (8). This, then, is how to read the Virginia plot: not

as an awkward, final supplement, but as a plot carrying out Hoyle's prescription to hold

the Trump as long as possible. Edgeworth rewards those readers who already read with

card-counting attention while reinstructing those who do not yet do so. After all, this is

the only way to guarantee "moral Certainty" (*Short*).

Most critics have responded to the Virginia plot as "something of an aberration,"

but I think it worthwhile to reconsider this apparent blunder on Edgeworth's part (Britton

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[75] As is well-known, the Virginia plot also critiques Edgeworth's friend, Thomas Day,
who actually tried to educate a wife for himself according to Rousseau's principles. In
terms of content, therefore, Edgeworth takes her story from life; but, in terms of
narrative, Edgeworth takes its procedures from games.

441).[76] Jeane Britton argues that Virginia's subplot "informs Belinda's main plot" (438) and should be read "alongside" it in order to most fully understand Edgeworth's theory of moral and fictional characterization (441). While Britton's reading incorporates the Virginia plot into the larger scheme of the novel, her assessment does not go far enough either in terms of its significance or complexity. Edgeworth's interest in the procedures of games, thinking, and plot means that her interest lies more with plot-making than with plotlines – that is, with the motions of the plot. In fact, the "Virginia" plot is something of a misnomer since this plot does more than just expose character or interiority. Instead, Edgeworth invests this plot with the highest cognitive stakes for the novel. It serves as the keystone for her cognitive agenda, and, unlike the plots of the romances Virginia digests, this plot plays trump by teaching its readers how to exercise pragmatic action.

Whist appears very different than Tetris, but they elicit similar patterns of information-processing cognition: "Instead of viewing Tetris cognition as proceeding serially, we can view it as a cascading process in which each phase begins its processing before it has been given all the information it will eventually receive" (Kirsh and Maglio 524). This is also, in effect, how Edgeworth structures *Belinda's* plot. By occluding information and delaying exposition, *Belinda* invests its reading with the patterns of cognition necessary to form new, more controlled habits of thought. Edgeworth not only substitutes gaming for gambling; she also experiments with how novels might serve as vehicles for the same kind of mental re-training. Ultimately, the Virginia plot contributes to cultivating the genius available to each of its readers, exercising their address while performing its own.

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[76] See Britton, Thame for summary of critical dissatisfaction with the Virginia plot.

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V.   Conclusion

It is primarily Edgeworth's concern for procedure that determines the types of games and plots she finds cognitively beneficial. If hazard stakes everything on outcome, address prioritizes the skills needed to maintain, delay, and carry out an engagement. This principle helps solve one final complaint with *Belinda*: Lady Delacour's miraculous recovery from the breast cancer that never was. While critics have suggested multiple ways to address this seeming break from realism, we don't need to turn it inside out so that what should have been a "triumph" becomes "a scenario of bewildered female bonding: both Belinda and Lady Delacour are wrong, together, about wit's power" (Rosenberg 576-577). The point never was the breast cancer itself but much more about Belinda and Lady Delacour's "struggling together with the perils of cleverness" (576). Lady Delacour's sudden recovery from nothing makes the point that procedure matters more than winning; playing right counts even when there's literally nothing at stake.[77] As Kirsh and Maglio comment, in italics, "*The point of taking certain actions, therefore, is not for the effect they have on the environment as much as for the effect they have on the agent*" (546).

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[77] David Francis Taylor reads this scene in the context of contemporary satire and suggests that Edgeworth critiques Lady Delacour's error is reading her body according to the tropes given by satire. Like Taylor, I think Edgeworth draws our attention to the arbitrariness of this plot's conclusion in order to ask us to re-examine how the characters arrived at (or the procedure to) such an anti-climax.

Reading modern studies about what games tell us about cognition while reading early games manuals from the eighteenth century highlights subtle aspects of cognition not usually addressed by more familiar historical frameworks for mind, like associationism or sensationalism. Kirsh and Maglio expand the definition for cognition because they examine how thinking integrates action and how action furthers thinking. Historical models of mind tend to focus on the formation and projection of ideas, rather than this more active, embodied cognition. In games, however, the kind of thinking pinpointed by Kirsh and Maglio occurs through the actions taken with the game. This is, in fact, the style of thinking that *Belinda* also engages. Games manuals expand our history of mind and help link parallel investigations, then and now.

Kirsh and Maglio's Tetris study provides a vocabulary for putting Hoyle's whist and *Belinda's* plot in modern, neuroscientific terms but Edgeworth's use of the cognitive habits engendered by games of address and reading also comments on the assumptions undergirding modern studies. For example, by highlighting epistemic action, Kirsh and Maglio more accurately describe how the brain thinks but they concede that Tetris encourages epistemic action because the constraints of the game mean that "local effects of an action are totally determinate" (543). Effective study design requires narrow parameters, but Edgeworth reminds us that many scenarios in life will not treat local actions so considerately. Her model ranges much further than Kirsh and Maglio's and makes riskier claims about the applicability of game-developed cognition to other areas of mental life. At the same time, Edgeworth's approach does not undermine such important scientific findings. Kirsh and Maglio might find her a helpful ally in arguing

for a plastic, environmentally based model of mind. It is reading Edgeworth that in fact makes such a study relevant to everyday living.

Belinda lays the groundwork for the rest of the chapters in this dissertation by foregrounding games as cognitive procedures and, furthermore, by differentiating kinds of games according to the mental processes they involve. As strategy handbooks emphasized how games should best be played it became possible to think about games more procedurally rather than in terms of their content. *Belinda* uses this developing understanding of games to distinguish between gambling and gaming. This shift also broadly marks the transition between eighteenth- and nineteenth-century interests in types of games. Charles Dickens especially capitalizes on the differences between games as key to possible configurations of social thinking. Though gambling persisted throughout the nineteenth century, even sometimes related to gaming, the growing gaming community developed its own cultural emphasis on skilled play, not chance or luck. Gaming became more respectable and regarded as a predominantly intellectual pursuit.

A new manual on whist would be published in 1804, just a few years after *Belinda*, and the game itself would evolve by 1810, effactually initiating a gaming community. By presenting an alternative system to Hoyle's, Thomas Matthews inspired countless others to do the same; the shortened game and more standardized rules led to new clubs and meeting places for play. Matthews revised Hoyle's approach to whist, downplaying the individual's calculation of probability and turning instead to partner-style thinking. Beginning with my next chapter, on Dickens, then, thinking with games becomes more dynamic, distributed through the games table, and even extended through social networks.

When Charles Dickens published *The Pickwick Papers* in 1836, the gaming community was well-established, and growing. Major cities across Britain, like London, Dublin, and Edinburgh boasted at least one chess club. The first chess match by correspondence between clubs in London and Edinburgh occurred in 1824. Bath and London were major centers for the development and play of whist. Newspaper articles and games handbooks were quick to point out the public sphere occupied by the gaming community, as contrasted with those games played around the "domestic hearth" (Hewby, *Decline* 8). Gaming now indicated a network of players and readers studying the new publications on strategy or reports of tournaments in newspapers. As such, Dickens used games for their social applications, not just as figures of social power but primarily as figures of social thinking. He extrapolated from the games table of two to four players to the gaming community, populating the unseen network with many present, thinking minds. His social systems, structured as gaming communities playing their own kinds of games, imagine the complex and at times overwhelming power of collective thinking.

CHAPTER TWO: CHARLES DICKENS'S GAMERS: SOCIAL THINKING IN VICTORIAN GAMING COMMUNITIES

In 1905, *Lasker's Chess Magazine* published a nostalgic reflection on "Charles Dickens as a Chess Player." Dickens's "old time friend," Miss Tregear, recalled often playing whist and chess with the competitive novelist: "He was always annoyed when she beat him, and invariably wanted to play another game" (Lasker, "Charles" 12). One night, "at midnight," they reached a draw and Miss Tregear remembered Dickens soliloquizing, "somewhat resignedly," that the results were just: "Man and woman represent an equation after all.... Intellectual affection is the only lasting love. Love that has a game of chess in it can checkmate any man and solve the problem of life" (12). One "peculiarity" marked Dickens as a chess player: "He always wanted Miss Tregear to play first. He followed all her play and accepted all her variations. 'It was just so,' she said, 'in all his novels. He lets a character lead, and then he simply follows it.... He never created a character'" (12).

With dramatic irony, Miss Tregear situates *herself* as one of Dickens's characters, trailed throughout their games of chess and whist by the observant novelist. This anecdote, though surely somewhat fanciful, draws our attention to a neglected side of Dickens and an historically specific culture of intellectual gaming. Dickens scholars have typically associated the novelist with *play* – "locomotion," noisy parlor games, and

leapfrog – but, when playing strategy games, Dickens "moved very deliberately and only after careful thought," the kind of gameplay associated with new, scientific methods of probability and deduction ("Charles" 12).[78] Dickens follows Miss Tregear's scientific play because she "made a study of the gambits and variations" (12). During the nineteenth century, games literature, including handbooks for strategy, anthologies, manuals, and magazines for enthusiasts, like *Lasker's*, promoted a specialist culture of standardized gameplay that reinforced its claim to science by organizing games according to cognitively-specific taxonomies derived from the kinds of thinking exercised by various games.[79] Scientific manuals help focus an investigation of games in Dickens because the forms and varieties of Dickensian games bewilder – from wordplay to cricket to "con games" to the "game function of detection" – and, as a result, often obscure the ways that Dickens himself distinguished forms of play that require deliberate thought

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[78] For this emphasis on play and "locomotion," see Hennelly, "Praise" p. 28 and "Playing" pp. 227-228; Kaiser pp. 13-48. For W.H. Auden, *The Pickwick Papers* rehearses the confusion of the "open world of reality" with the "closed world of the game" (77). Auden distinguishes between "play" and "games" along moral lines; thus, evil enters the storyworld through the corruption of superficially benign forms of play. Hennelly and Kaiser both resist Auden's division between "play" and "games." Hennelly reads the dark nature of games into play and Kaiser positions games as indicators of the play frame for a constitutively Victorian worldview. All three of these critics treat games and play as symbolic categories with real-world referents. Their concern lies with the significance of the category as a guiding form for reality; my concern lies with how the literal referent allowed Dickens to represent minds.

[79] In Old English, "game" functioned as a broad category for any type of amusing activity or jest, from riddles to pranks to sexual dalliance (OED). Games, such as those played with dice or cards, were only subordinate classes within this larger category. See *Linguistic Categorization* by John R. Taylor for an overview of the scholarship on category and prototypes, especially chs. 1-4. For whist, specifically, its new respectability, based on its rising intellectualism, reclassified the game from "city" to "court" (Parlett 220). Rather than class or family, entrance to this court depended on correct methods and intellectual achievement.

(Bodenheimer 33; Miller 94).[80] This chapter traces scientific games, especially whist,

through *The Pickwick Papers*, *Nicholas Nickleby*, and *Bleak House*, among others, in

order to emphasize Dickens's interest in cognitive activity, deliberate thought, and to

explore how Dickens extrapolates paradigms for social systems from the social thinking

developed by scientific games literature for strategic gaming.

     Literary critics writing on minds in Dickens have had to grapple with his

longstanding reputation, voiced in 1869 by reviewer George Stott, that Dickens is "no

psychologist" (P. Collins 496-97).[81] Sarah Winter attributes his reputation, in part, to

intellectuals like George Eliot and G.H. Lewes who "attempted to discredit" outdated

models of psychology in Dickens's novels in favor of "new scientifically based formal

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[80] Andrew Lang's *Letters to Dead Authors* (1886) declared Dickens "the greatest comic genius of modern times," casting him as a now-departed spirit of humor, succored by the muse of the "fountain of laughter imperishable" and also the "fountain of tears." Kirsten Parkinson's article on card games in *Great Expectations* unpacks the class signals associated with Beggar-My-Neighbor, a children's card game played by Pip and Estella under the watchful eye of Miss Havisham. Parkinson provides social analysis related to details of game play but also connects Beggar-My-Neighbor to other card games, like whist, and ever larger, more "symbolic" categories (121): the "psychological games" of society (119); "the game of being a gentleman" (129); even the "game of life," which, "like the game of cards, appears to be rigged" (123). By making analogical leaps from a child's game of chance, like Beggar-My-Neighbor, to one of calculated attention, like whist, Parkinson overlooks how contemporary strategy literature differentiated between species of games according to cognitively-specific templates. For similar readings, see Hennelly, "Playing" pp. 227-228 and "Prison" p. 193.

[81] Quoted in Bodenheimer p. 4. Critical consensus still holds that if "one major direction in the development of the novel is a process of interiorization, it must be said that Dickens adheres quite unswervingly to an external and omniscient point of view" (Alter 45). For an overview of this "long history of critical condescension" see Bodenheimer pp. 1-5. Bodenheimer notes that the prominence of Freudian criticism did recuperate interest in Dickens's use of dreams and interest in memory and fantasy. See Carolyn Dever's chapter on Dickens in *Death and the Mother from Dickens to Freud* pp. 81-106; Robert Lougy's article, "Dickens and the Wolf Man: Childhood Memory and Fantasy in *David Copperfield*"; and Juliette Smeed, "The Pickwickian Art of Forgetting."

protocols for realism" (271).[82] Winter defends Dickens by valorizing the political

implications of his psychological associationism and downplaying the importance of

scientific accuracy. Alan Palmer, by contrast, turns to modern cognitive science for an

"externalist perspective" on the mind capable of appreciating Dickens as the "novelist of

appearances" (105).[83] Palmer challenges traditional ways of reading for consciousness in

literary studies but his turn to modern science obscures the ways that gesture, facial

expression, and nonverbal cues formed common tropes of sentimental literature and

melodrama. Furthermore, Palmer's attention to the surface overlooks, in the same vein as

contemporary psychology, just how internal minds in Dickens can be. I propose that

turning to games literature provides a contemporary model of mind that explicitly

emphasizes social thinking and provides a matrix of cognition more amenable to minds in

Dickens than early psychology. From the cognitive-historicist perspective of scientific

games literature, however, Dickens depicts the surprisingly social aspects of internal,

systematic thinking. Because whist strategy emphasized the analytical aspects of whist

as thinking shared by partners, its formulations portray the mind as both computational

and public, knowable when players follow the recommended prescriptions for scientific

play. Unlike early psychology, which often figured the mind as static and individual, or

sentimental literature, which externalized the mind, games literature imagined the mind

[82] For more on the critical perspective of Eliot and Lewes on Dickens, see Winter pp. 274-285. Michael Kearns situates Dickens within an eighteenth-century model of the mind-as-entity, a less dynamic model of mind than that seen in later writers like George Eliot. Kearns defends Dickens, however, by arguing that "he went far beyond his contemporaries' use of associationism in the extent to which he showed minds to be impressed by environment and *re-formed* through the agency of the heart" (159).

[83] Palmer's analysis dovetails with a familiar view of Dickens as a unique observer, capable, as Raymond Williams suggests, of "dramatizing a social and moral world in physical terms" because of his special "way of seeing" (161). For Palmer's distinction between internalist and externalist perspectives on the mind, see *Social Minds* pp. 39-64.

as active and socially engaged with other minds through the means of the card table, the kind of dynamic, social-internal thinking we find in the novels of Charles Dickens.[84] When we read for games as an alternative, nineteenth-century science, we find that Dickens has a highly technical view of thinking and that his novels do possess mind-science, although not traditional psychology.

From the cognitive perspective on historical games manuals, Dickens appears to be a *cognitive presentist*.[85] He draws timely links between cultural phenomenon, social systems, and the kinds of minds described and trained by scientific games literature in order to actively reflect on the habits and patterns of thinking that structure his present social and cultural moment. Dickens pays close attention, therefore, not only to the key differences between types of games but to the differences in the minds playing those games. As a result, his observations take him beyond the game-based thinking imagined by games literature. Ultimately, game-based characters that I call "Dickensian gamers" transfer the intermental, social thinking of scientific whist from the game table into social domains in ways that turn social systems into large games.[86] The gaming community

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[84] For more on the static model of mind in nineteenth-century psychology, see Kearns pp. 88-133.

[85] In Emily Steinlight's recent article, "We Have Always Been Presentist" (2016), she uses "presentist" as an adjective, defining it as being "shaped and motivated by the conditions of the present, whether or not we acknowledge it" (105). I extend Steinlight's concept by suggesting that Dickens did acknowledge it and that one variety of his presentism exists in repurposing cognitive paradigms from games literature *in order to actively reflect on the present*. Whereas I apply methods of cognitive historicism to understand thinking in the past, Dickens used *cognitive presentism* to understand habits and patterns of thinking in his own moment.

[86] George Lakoff's and Mark Johnson's *Metaphors We Live By* (1980) introduced foundational concepts for cognitive studies of metaphor that continue today. Lakoff and Johnson describe "domains" as "structured [wholes] within our experience that is conceptualized as what we have called an *experiential gestalt*. Such gestalts are *experientially basic* because they categorize structured wholes within recurrent human

shaped by and shaping games literature made such thinking networks possible and visible
during the nineteenth century. Dickens saturates scenes of games with jargon from
games literature: "roughed the spade," "finessed the heart," "played up to the king" (*PP*
482). Whether Dickens actually studied the manuals for himself, or just absorbed their
culture from others, like Miss Tregear, his texts come marked by the language and
imagination of the gaming community and demonstrate a virtually encyclopedic
knowledge of games.[87] More importantly, Dickens incorporates templates of social
thinking recommended by scientific whist into his representations of social systems in
order to explore the national community as a cognitive one.

Dickens applies models of social thinking recommended for strategic, scientific
play to his representations of social systems. For Raymond Williams, the Dickensian city

experience.... Domains of experience that are organized as gestalts in terms of such
natural dimension seem to us to be *natural kinds of experience*" (117). By "natural,"
Lakoff and Johnson mean very generic experiences, such as breathing, eating,
experiencing gravity as up and down, and so on. Obviously, these concepts will have
many subjective wrinkles for the individual but that does not alter the generic
applicability at the abstract level of the domain. See also Lakoff, *Metaphors* pp. 52-53.
For more on domain categorization see Sam Glucksberg, "How Metaphors Create
Categories – Quickly" and John R. Taylor, *Linguistic Categorization: Prototypes in
Linguistic Theory*.

[87] Dickens's specific use of games distinguishes him from other nineteenth-century
novelists who use "game" more generically. Anthony Trollope, for instance, tells us
Miss Demolines "knew her game very well" (*Last* 330) and that the "game" between
Mrs. Dobbs Broughton and Conway Dalrymple was "so far innocent" (368), though
"Husbands when they have been drinking are very apt to make mistakes as to the purpose
of the game" (369). Trollope deploys "game" in its conventional tropes: game-as-plot
and game-of-love. As we will see, however, even when Dickens uses games in a
metaphorical way, he does so with specific games in mind. If Dickens had written *The
Last Chronicle of Barset*, Miss Demolines might have known cribbage very well while
the Mr. Dobbs Broughton's misunderstanding of the chess match between Conway and
his wife may have occurred because he assumed they were playing at draughts. Like
Maria Edgeworth, who distinguishes between games based on their style of play, Dickens
pays close attention to the details; however, unlike Edgeworth, who groups all games into
those of hazard or address, Dickens considers all games individually for their forms and
meanings.

functions as a kind of "determining system," predicated on "miscellaneity and randomness," a "system of indifference" and "differentiation" organized spatially by the layout of streets and houses (154). Williams describes systems as visible and material but unobserved. The unique composition of the city, at once random and systematic, gives rise to immaterial, cultural frameworks: indifference, differentiation. Dickens uses games to expose other kinds of systems, particularly those predicated on networks of like-minded individuals; or, perhaps, like-thinking individuals. Thus, Dickens very carefully preserves the minds generating institutional structure, the complex, social composite of many minds. Unlike city-systems, game-based systems prove more dynamic and their effects less certain, entirely dependent on the skill and method of their players. Dickens uses games to carefully preserve the minds generating institutional structures, the complex, social composites of many minds.

In the absence of specific knowledge about neurological architecture, Dickens transposes contemporary, social models of thinking from strategic whist literature into character-filled social systems to bring his readers new kinds of minds. Dickens's "gamers" lay the foundation for an unusual systemic analysis: Dickens imagines the social game as a community of minds that can be known because those minds play specific games known through games literature. As one periodical expressed it in 1850, scientific play provided "for *thousands of minds*, a contest confessedly enchanting" ("Chess Tournament," *MP* 3, my emphasis). Scientific play, paradoxically, provides the link to the social domain. Through the lens of games culture, Dickens insists that systems are not mindless nor run by one mastermind; instead, he pictures a magnified public room at Bath, with many tables, many games, many minds. In Bath, Mr. Pickwick

sits down for a game of whist, just one of many: "In the ball-room, the long card-room, the octagonal card-room… the hum of many voices, and the sound of many feet, were perfectly bewildering…. hovering around the card-tables, were a vast number of queer old ladies and decrepid [sic] old gentlemen" (*PP* 477-478). Those many small, social games may contribute to social effects that cannot be attributed to any single player but Dickens urges his readers to maintain awareness of the many minds at work in the gaming community, without losing sight of their own place at the table.

I.   Theory of Mind in Whist Manuals

Around 1810, whist underwent the "most momentous of all revolutions," as one manual hyperbolically claimed (Coles 7). "Short Whist" replaced "Long Whist" and strategic systems of observation and deduction replaced Edmond Hoyle's eighteenth-century methods of calculation. Thus, Edgar Allan Poe distinguishes his detective analyst, Dupin, from the average calculating genius satisfied by the "rules of Hoyle" (4): "to have a retentive memory, and to proceed by 'the book,' are points commonly regarded as the sum total of good [Whist] playing. But it is in matters beyond the limits of mere rule that the skill of the analyst is evinced" (5). That is, even beyond mere scientific play, the narrator argues, the true analyst will accurately read the cards in the hands of the other players by reading their expressions and body language. Noting every glance, "variation of face," mannerism, and "casual or inadvertent word," the analyst "[gathers] a fund of thought" that reveals the course of play: "The first two or three

rounds having been played, he is in full possession of the contents of each hand, and thenceforward puts down his cards with as absolute a precision of purpose as if the rest of the party had turned outward the faces of their own" (5). The analyst, in effect, "turns outward the faces" not only of his opponents' cards, but of their minds. As a result, the mind-reading power honed by "proficiency in whist implies capacity for success in all those more important undertakings where mind struggles with mind" (4).

Poe's narrator, intent on describing the "mental features discoursed of as the analytical," treats the mind more explicitly than does some games literature, often more intent on describing strategic play (3). That being said, I hope, as Poe does, to draw out the social, thinking mind implied in strategy manuals. Whist provides the best material for doing so because of its partnership dynamics and, unlike more established games, its theory evolved considerably over the nineteenth century. In whist, "the winning partners are those who consistently acquire reliable information early enough in the game to be able to play the rest of the hand to most advantageous effect" (Parlett 215). Solving this information problem inspired two competing methods: Hoyle's use of probability and calculation and Thomas Matthews's nineteenth-century emphasis on observation and deduction. In the first section of this chapter, I will show how changes in strategy reimagined both the game and the minds playing the game. Reading modern theory of mind alongside historical games manuals helps to underscore the cognitive dimensions and biases of the manuals.

The earliest games manuals were, in some ways, detective texts, warning players about the many cheats of card sharpers. Card sharpers circumvented whist's information problem by elaborate schemes. Charles Cotton warns his readers that "if you be not

careful and vigilant" you will be cheated, either with marked cards or inflated scores (11).

He takes the sharper's perspective, admitting that "he that can by craft over-look his

adversaries Game hath a great advantage.... or if he can have some petty glimpse of his

Partner's hand," and lists out the common signals used to cheat at cards, such as winks

and taps (117). Other methods included "Piping" at whist: a confederate smoking his

pipe in the corner used various phrases and pipe-gestures to indicate the cards of the

player whose shoulder he overlooked (Seymour 9).[88] Whereas Dupin observes every

"inadvertent" signal, card sharpers artificially imposed facial expressions, gestures, and

interjections on the game in order to take "full possession of the contents of each hand."

For Dupin, "over-looking" means deduction; for the card sharpers, over-looking literally

means over-looking, with glances or signals providing direct confirmation of the contents

of another's hand. In other words, sharpers may know the cards with certainty without

understanding why they have been played. Card sharpers, therefore, only "turn outward

the faces of the cards" but never turn outward the minds of the other players.

Card sharpers artificially simulated, in whist, what human brains evolved for

everyday communication and interpretation: theory of mind (ToM). "Theory of mind"

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[88] Unfortunately, while early manuals sought to expose well-known cheats, in some cases they only encouraged greater creativity in the sharpers. Exasperated, Cotton declares "it is impossible to shew you all the Cheats of this Game, since your cunning Gamester is always studying new inventions to deceive the ignorant" (120). Richard Seymour echoed the sentiment in his *Compleat Gamester* (1734): "But as soon as these Methods become known, new ones are invented; and it is most certain, that two Persons may discover to each other what Sort of Cards they have in Hand, and which ought to be first played, many different Ways, without speaking a Word" ("Part II," pp. 9-10). The theme returned again in *The Humours of Whist*, in the worries of Sir John: "I rather think [Hoyle's book] will make the Generality of them worse Players. It may confirm the Adept, but will only confound the Unskillful. And with respect to its Utility, where one will use it to prevent his being impos'd upon himself, I dare say a Hundred will study it in order to impose upon others" (16).

describes our ability to attribute minds to other people; to follow their thought processes and rationales; to presume that potential beliefs, desires, thoughts or feelings motivate behaviors; and understand their expressions or actions as generated by a mind.[89] We use our theory of mind when we interact with another person and assume that they, too, have a mind and that it works in a way we can interpret. Our theory of mind works quickly, often automatically, and is therefore also called "mind-reading." If I see someone at lunch purse their lips, I can reasonably conclude that they did so for some reason – perhaps their drink was unexpectedly tangy. They may not be conscious of the expression but I can assume there is some kind of justification behind the expression. When I read the action, I read their mind. To the uninitiated, the sharpers appear to read each other's minds. Our theory of mind does the same thing, for the most part unconsciously and without cheating.[90]

Lisa Zunshine's 2006 *Why We Read Fiction* made cognitive psychology available and relevant to literary studies. Her key theoretical concepts are "mind-reading" or "theory of mind" and "metarepresentation," basic cognitive functions exercised, as she argues, by reading literature because literature foregrounds the kinds of details attended to by theory of mind. Unlike the real world, books provide some confirmation of our interpretation: an omniscient narrator, for example, may confirm that tears really do mean sadness. On the other hand, books that test our brains and challenge their evolved cognitive architectures reassure their readers that "you are [good] at this maddening and

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[89] See Gallagher, "The Interactive Practice of Mind" pp. 206-236; Palmer, *Social* pp. 20-24; Zunshine, *Why* pp. 6-16.

[90] Zunshine approaches theory of mind by reminding us not to take it for granted: the autism spectrum affects just this aspect of cognitive architecture. To someone with autism, like the uninitiated at a rigged game of whist, others may appear "telepathic" (*Why* 9).

exhilarating social game. Did you know it? *Now* you know it!" (*Why* 21). The more speculative side of Zunshine's argument suggests that we enjoy reading literature, as Dupin enjoys whist: because it facilitates intermental activity, "those more important undertakings where mind struggles with mind" (Poe 4). Zunshine positions literature much as Poe does whist: books and cards provide fitting settings for meeting other minds.

Card sharpers left little to chance or actual ToM during a game of whist; but culturally, card sharpers were considered extremely observant individuals, relying on their reading of the dupe as much as their dexterous cheats. *The Humours of Whist* (1743), a satirical, Hoyle-inspired closet drama, opens by underscoring the superhuman theory of mind possessed by two card sharpers, Shuffle and Lurch. Shuffle, coming up behind Lurch, "[guesses] at thy Thoughts by the convulsive Emotions of thy Head and Shoulders, thou should'st be disturbed at something." Lurch replies: "Thou art a keen Discerner, Shuffle, to read a Man behind" (9). With textbook theory of mind, Shuffle attributes a state of mind to Lurch based on the physical evidence of his posture. Shuffle and Lurch read each other in extraordinary ways because their partnership works together in such ways all the time. Shuffle's accurate diagnosis, based on the back of Lurch's head, exaggerates everyday ToM but represents the sharpers as legitimate intellectual forces with enhanced cognitive powers. The author implies that Shuffle and Lurch do not need to cheat; in another life, Shuffle could be Dupin, exercising an above-average ToM during whist, overlooking minds, not just cards.

This dramatic representation draws on the reputation of the games-enthusiast as intellectually superior, a reputation extrapolated from the scientific methods of Edmond Hoyle; but Hoyle's method sacrifices key aspects of partner-style play in order to

frustrate the collaboration between sharpers. He shifts the site of reading from the other

players or their signals to the cards played on the table. Mechanically, Hoyle's whist still

required partnership, but strategically, Hoyle created an individually-oriented game based

on mental math.[91] As such, his methods imagine a solitary model of mind, one that

proved intimidating. *The Humours of Whist* follows the misfortunes of those who

superficially adopt Hoyle's system without fully understanding its science. Parodying

Hoyle's methods of odds and calculation, the inaptly named Sir Calculation attempts to

recount the math of a recent game: "The adverse Party had 3, and we 4 Tricks. All the

Trumps were out. I had Queen and two small Clubs, with the Lead. Let me see – It was

about 222 and 3 Halves to – 'gad, I forgot how many – that my Partner had the Ace and

King – let me recollect – ay – that he had one only was about 31 to 26. – That he had not

both of them 17 to 2, – and that he had not one, or both, or neither, some 25 to 32" (13).

The drama paints Hoyle's methods as provocative but potentially dangerous: players who

lack understanding or who have not fully memorized the tables of odds may play

overconfidently and lose more money than expected. The drama concludes with the

conventional moral that hazard doesn't pay, missing Hoyle's attempt to differentiate

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[91] Hoyle's system encouraged players to calculate the probability of their partner having
any card in order to deduce the amount of risk in playing their hand. Hoyle promised
that, should players adopt his system and memorize its mathematics, they could predict
the odds of their partner's having up to three certain cards (*Short* 2-4): "That he [your
partner] holds 1 of them only is about 325 for him to 378 against him, or about 6 to 7"
(3). Calculating play not only helped players count cards and the score but it gave whist
an aura of scientific method, an intellectualism to counter the dexterity of the sharpers.
In *The Humours of Whist*, Shuffle and Lurch lament their loss of profession in the wake
of Hoyle's publication: "if this damn'd Book of the Professor's answer, as he pretends, to
put Players more upon a Par, what will avail our superior Skill in the Game? We are
undone to all Intents and Purposes" (10). Hoyle's calculations solidified the reputation of
the successful game player as a person of genius and games as computational puzzles
while at the same time providing the necessary keys for all players to adopt his analytical
system.

whist from true games of chance; but in contrasting Sir Calculation's lonely recounting with the companionship of Lurch and Shuffle, the drama expresses discontent with the ways Hoyle's system depleted whist's staging of "those more important undertakings where mind struggles with mind" (Poe 4). Hoyle, in effect, exchanged the social thinking of mind struggling with mind for a solitary struggle with probability.

In the nineteenth century, however, whist manuals rejected Hoyle's system of calculation for methods of logic more attuned to partner-style play. Despite their respect for Hoyle – a "benefactor of his race," according to one – these authors considered his principles surpassed by those of their own day: "Hoyle, for more than half a century the only authority, has now become obsolete or imperfect in respect to several of the principle games, and more likely to mislead than instruct" (Bohn 38, v). Thomas Matthews felt "it may not be unnecessary to inform the reader, that most of Hoyle's maxims were collected during what may be called the infancy of Whist; and that he himself, so far from being able to teach the game, was not fit to sit down even with the third-rate players of the present day" (47). Matthews objected to Hoyle's emphasis on calculations by the individual instead of coordinating play with one's partner. In whist, after all, two pairs of partners sit across from each other so that they play alternately and work together to collect the most tricks. Matthews, therefore, instructs his readers in how to "demonstrate your hand to your partner" and advises against "[deceiving]" him or her in any way (11). "Be as careful of what you throw away" as what you keep, he warns; "if [your partner] finds the deuce in your hand, and you frequently deceive him by throwing down superior cards, it will destroy his confidence" (12). Confusing your partner with illogical play undermines the trust necessary to partnership and will leave your partner

feeling isolated, shut out from your mind. Matthews emphasizes the relational aspects of whist, as thinking shared by partners. The cards, therefore, serve as a conscious ToM, carefully chosen for strategic communication.

Reading the cards leads to knowing the mind of your partner through his or her understanding of how to play the game. Matthews explains strategic cases by minutely detailing the thought process behind each decision. For example, when holding both a king and queen, play the queen first because "his queen's passing demonstrates to his partner that the king cannot be in his left-hand adversary's hand, or the knave in his, … (whereas if he [the player] puts on the *king*, it leaves him [the partner] in ignorance as to the *queen* and *knave*)" (Matthews 4). Essentially, once the round has been played out, and the partner sees that neither adversary played the king to defeat the player's queen, and, knowing he doesn't have the king either, the partner concludes the player must have the king as well. The adversaries, by contrast, know that they do not have the king; but they cannot know for sure whether the king belongs to player or partner. This narrow margin of knowledge favors those intent on how the cards expose the thought-processes behind each play. By "letting your partner into the state of your hand, who will play accordingly," players virtually write out directives (Matthews 12-13).[92] True partners do not shield their minds but willingly turn out their thoughts with each correct play and

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[92] Later in the nineteenth century, James Clay put it this way: "Whist is a language and every card played an intelligible sentence" (qtd. in Parlett 222). As cognitive scientist Ray Jackendoff describes the link between language and thinking: "Language is just a vehicle for externalizing thoughts, it isn't the thoughts themselves. So having language doesn't enhance *thought*, it only enhances the *experience* of the thought.... [Furthermore] by virtue of being available to consciousness, language allows us to pay attention to thought" (19).

may expect the same in return. Matthews's handbook implies that the social mind can be known if it follows his prescriptions for scientific play.

Whereas Hoyle encouraged players to take note of *what* was played and to calculate accordingly, Matthews focuses on *how* the series proceeds. The logic underlining each play not only points to the cards but also reflects the mind of the thinker. Readers of Matthews's handbook see how he thinks in the recommendations he makes for solving whist's information problem and, by extension, players following his system now know, to a limited degree, the minds of their partners. The cards make the cognitive activity of mind-reading visible to the initiated and divides the decision making of the game into discrete, manageable inferences. Matthews's laborious articulation of his rationales depict thinking as a many-layered process of logical, linear deductions that can be socially shared.

Without saying so in so many words, Matthews's recommendations make mind-reading explicit within the context of strategic whist by allowing partners to read each other, quickly and effortlessly: "Where the sets are really good players, before half the cards are played out, they are as well acquainted with the material ones remaining in each other's hands as if they had seen them" (Matthews 7-8). Every card reveals information about the rest of the hand but also reveals whether the players are "really good": that is, if they have played with method long enough to do so quickly and easily, effortlessly.[93] Like Dupin, really good whist players play their "cards with as absolute a precision of purpose as if the rest of the party had turned outward the faces of their own" (Poe 5). As

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[93] Zunshine defines "effortlessness" in the context of cognitive science rather than literary studies (*Why* 13). She notes the contrast between the disciplines: whereas cognitive science emphasizes the surprising rate of success of the assumptions made by our theory of mind, literary scholars prioritize its ability to misinterpret (*Why* pp. 13-16).

the cards reveal the player's ability to think logically, in series, and socially, turning outward the faces of the cards turns outward the minds of the other players, for better or worse. Within a few hands, discriminating players can assess the mental capacity of the other players – or their familiarity with scientific whist. To experts, these were one and the same.

Matthews's approach to whist helps resolve current controversy in cognitive science over ToM. Most scientists agree that humans have some kind of theory of mind, but they disagree over how we obtain it and how it works. Two possibilities are called "Theory theory" and "Simulation theory" (Gallagher 206-207; Palmer 22). The first, "Theory theory," claims that theory of mind develops from innate, genetic, and biological sources; we are disposed for theory of mind at birth. It develops in a deductive, theoretical way. Once children realize that other people can hold different beliefs from themselves (around the age of four), they begin to infer the beliefs of others by observing behavior, expression, or statements, and then postulating about possible beliefs from the data they collect. The second, "Simulation theory," suggests that we infer other minds from the self-knowledge that we have of our own. Anyone familiar with Adam Smith's eighteenth-century conceptualization of social sympathy will recognize an analogue here: I imagine myself in the situation of the other and therefore infer what they might be thinking or feeling. In other words, according to this second model, theory of mind simulates the mind of another person rather than deducing it. Both Theory theory and Simulation theory share a view of the mind as highly organized, rational and deductive.

Cognitive phenomenologist Shaun Gallagher argues for a third option:

"Interaction theory."[94] Gallagher's commitment to embodied cognition seeks to

downplay the mentalistic assumptions underlying more traditional approaches to the

mind. He opposes Theory theory and Simulation theory from a phenomenological

standpoint and believes that theory of mind is not as primary to our understanding of

others as most scientific accounts make out: "The understanding of the other person is

primarily neither theoretical nor based on an internal simulation. It is a form of

embodied practice" (Gallagher 208). While humans certainly have theory of mind,

Gallagher argues that it plays a secondary role to "pragmatic interaction" (212). Instead

of using a detached stance to assess the situation or imagining ourselves in the other's

place, we typically engage with the other directly for more information. Gallagher calls

instances of highly rational, verbalized ToM, as currently conceived by the majority of

scientists, "rare" (208).

Matthews's whist strategy requires a mind that participates, consciously, in all

three theories of mind. His verbalized instructions direct readers in Theory theory-style

habits of thinking: if my partner won with his queen, he must have the king. Such

deductions also hinge on simulating the minds of the other players at the table. By

contrast, Hoyle's deductions only concern the cards likely to be in your partner's hand

based on your own. Hoyle's strongly rational system does not require any kind of

simulation of the other minds at the table or how they might play. The habits of the card

sharpers perform a highly arbitrary kind of interaction theory, where the partnership

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[94] Palmer also draws attention to recent developments in ToM and the adoption of
"Intersubjectivity" as a third alternative roughly comparable to Gallagher's "Interaction
theory" (22).

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comes scripted by a known code. In Matthew's system, by contrast, interaction depends on the moment of play. Players assess what their partners can do as play evolves, much like a conversation.

Like Matthews, Dickens imagines a more complex ToM that fails if it incorporates fewer than all three patterns. Consider how Dickens narrates Fagin's overwrought cognition in *Oliver Twist* (1838). Convinced that Nancy means to betray Sikes, Fagin plots to use her in his own schemes of revenge:

> Fagin walked towards his own home, intent upon the thoughts that were working within his brain. He had conceived the idea – not from what had just passed, though that had tended to confirm him, but slowly and by degrees – that Nancy, wearied of the housebreaker's brutality, had conceived an attachment for some new friend. Her altered manner, her repeated absences from home, her comparative indifference… all favoured the supposition, and rendered it, to him at least, almost a matter of certainty… (thus Fagin argued)…. Such brains are fertile in expedients. If… he threatened to reveal the whole history to Sikes… unless she entered into his designs, could he not secure her compliance? (*OT* 375-376)

Fagin's overactive mind-reading assembles cues "slowly and by degrees." Pleonastic phrases like "intent upon the thoughts" and "(thus Fagin argued)" foreground thinking as procedure not just content. Finding out that his "fertile" brain miscalculated throws Fagin further into overdrive: "his thoughts were busy elsewhere. …. passionate considerations[,] following close on each other with rapid and ceaseless whirl, shot through the brain of Fagin, as every evil thought and blackest purpose lay working at his heart" (*OT* 391). Fagin's assessment includes both deduction and simulation. He imagines Nancy, "wearied of the housebreaker's brutality," and adds the evidence of her "altered manner, her repeated absences from home, her comparative indifference." In Fagin's code, like a sharper's, certain signals have sure meanings. Unfortunately for Fagin, he never interacts with Nancy to determine the accuracy of his reading. Fagin's

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partnerships fail because he plays in anti-social ways, like Hoyle, not Matthews. Nancy's style of play confuses Fagin because it eschews his methods; she deceives her partner by "throwing down superior cards" – Sikes and Fagin – while protecting the deuce – Oliver.

Dickens justifies Nancy's choice, of course. In the moral reality of the novel, Oliver is the superior card; but Fagin, the latent gamester of *Oliver Twist*, plays according to his own rules. To train his band of pickpockets, Fagin instructs the boys with a "very curious and uncommon game" (*OT* 70). Fagin pretends to be a well-to-do gentleman while the boys attempt to pick his pocket without getting caught. The focalization of the scene wavers between Oliver and Fagin – is the handkerchief scene a game because it looks that way through Oliver's child-eyes? Or is it a game because the highly intelligent, cognitively-active Fagin sees and represents it as such? When the Artful Dodger wins at a game of whist, only he and Fagin know the secret of the "scientific rubber" (199). Dodger's training in the art of card sharping suggests that Fagin was once so employed.

Dickens has traditionally been labelled an author more concerned with the external than internal because he rarely exposes the psychological depths we associate with authors like George Eliot; I argue, however, that Dickens pays closer attention to the cognitive processes of the mind than to its content. Dickens seems just as interested in how his characters think as in what they may be thinking. Fagin's mental representation demonstrates the extent to which the mind of a gamer can be known. Dickens, like Matthews, studies how mind struggles with mind; but, whereas Matthews tutors his readers to know the minds of their partners and adversaries in order to play better whist, Dickens teaches his readers to attend to the workings of the human mind in order to better

understand social systems. As we will see, gamers like Fagin turn social systems into social games. This rapid, whirling, passionate mind, not just in Fagin, but in every whist player, is a social mind capable of social thinking. Dickens demonstrates his cognitive insight by showing his readers the whirl of Fagin's brain, as if Fagin had turned outward the face of his own mind.

II.   "Scientific" Whist in *The Pickwick Papers*

In 1846, Dickens rattled off a letter to his good friend, William de Cerjat: "Have you cut down any more trees, played any more rubbers, propounded any more teasers to the players at the game of Yes and No? …. Does Haldimand play Whist with any science yet? Ha, ha, ha! the idea of his saying I hadn't any!" ("My Dear Cerjat, 27 Nov. 1847" 164). Tucked into the middle of a list of newsy questions, Dickens's mention of scientific play would slip by, if not for his self-conscious laughter and defensive tone. Dickens's blustering indignation reflects his awareness of scientific whist as an evolving intellectual standard that enjoyed widespread and long-lasting popularity.[95] *Short Whist* by C.B. Coles, for example, went through eighteen editions from 1834-1865, a timeframe roughly parallel to Dickens's own career: 1836-1870. I will focus, however, on Thomas Matthews's *Advice to the Young Whist Player* (1818), published repeatedly from 1804 until 1828, because Matthews introduced the dominant paradigm of social thinking that

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[95] Elsewhere in his letters, Dickens expresses a decided preference for parlor games and Forfeits, the punitive process whereby party-goers were obliged to perform embarrassing or difficult tasks as penalties. See Beaver, *Victorian Parlor Games* pp. 130-139.

shaped nineteenth-century whist strategy.[96] The social thinking practiced in whist

partnerships also provided a model for social thinking on much larger scales. In 1860,

Dickens edited an article on whist for *All the Year Round*. The article is anonymous, but

describes whist as "the gauge of morals and the measure of mind.... so comprehensive as

to include the whole nation" ("Whistology" 480). Whether or not Dickens played whist

with any science, he incorporated a technical understanding of its scientific intricacies to

his novelistic representations of whist that underscores how strategic play fosters social

thinking, not just at the card table but also through gaming communities and the "whole

nation."

The Pickwick Papers is full of games – Mark M. Hennelly Jr. lists at least twenty-

one different forms of games and play in the novel ("Praise" 28). Critical accounts,

however, tend to analyze *Pickwick* with play theory and not the contemporary context of

scientific games literature. Hennelly reads *The Pickwick Papers* as so saturated by the

"theme of play" that "the tense cricket match is itself ultimately indistinct from the sacred

Christmas game of kissing under the mistletoe" and from the games played by "society's

institutions" ("Praise" 28, 29, 38).[97] In an early interpretation of *Pickwick*, W.H. Auden

used games as a moral category of innocent human interaction because a game is a

"closed world" for "pleasure": "Strictly speaking, a game in which the players are paid to

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[96] Matthews's text remained the foremost authority until his successor, Henry Jones,
known as "Cavendish," published a revised system in 1862. Jones published fifteen
editions of his first handbook, among others. Bibliographies of books on games appeared
in the late nineteenth century, such as Rudolph Rheinhardt's *Whist Scores and Card-table
Talk* (1887) and the first Hoyle bibliography, by Julian Marshall (1889). Dickens's own
publisher, Chapman and Hall, published *The Whist Player* (1858) by Colonel Blyth.

[97] Hennelly follows the lead of Johann Huizinga's influential analysis of the "play
element" in culture, *Homo Ludens* (1944). Huizinga looks for similarities across cultures
and time periods; therefore, he deploys a broad concept of play that can encompass
diverse cultural activities ranging far beyond literal games.

play, or in which they play for money stakes, ceases to be a game" ("Dingley" 75-76).[98]

Both of these critical approaches to games in *The Pickwick Papers* insightfully analyze

strands of the Dickensian worldview but also treat games as generic theoretical or

cultural constructs, not historically specific phenomena. Paying attention to the games

literature of the period, however, reveals that Dickens closely differentiates between

games, not only in their details of play but also in their cognitive applications. Dickens

uses whist to peer into the whirl of Mr. Pickwick's brain as well as to observe the social

side of cognition. Though mocking their seriousness, Dickens draws on the scientific

play of games manuals for their social and internal model of mind.

For Dickens, science and *play* were at odds and, therefore, the frequently

pompous manuals provided him with comic material. For an "old-fashioned card-party"

at Dingley Dell, servant-boy Joe puts out two tables:

> the one for Pope Joan, and the other for Whist. The Whist-players were, Mr.
> Pickwick and the old lady; Mr. Miller and the fat gentleman. The round game
> comprised the rest of the company. The rubber was conducted with all that
> gravity of deportment, and sedateness of demeanor, which befit the pursuit
> entitled "Whist" – a solemn observance to which, as it appears to us, the title of
> "game" has been very irreverently and ignominiously applied. The round-game
> table on the other hand, was so boisterously merry, as materially to interrupt the
> contemplations of Mr. Miller, who not being quite so absorbed as he ought to
> have been, contrived to commit various high crimes and misdemeanors, which
> excited the wrath of the fat gentleman to a very great extent, and called forth the
> good-humour of the old lady in a proportionate degree. (*PP* 82)

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[98] "No human being is innocent, but there is a class of innocent human actions called
Games. A game is a closed world of action which has no relation to any other actions of
those who play it; the players have no motive for playing the game except the pleasure it
gives them, and the outcome of the game has no consequences beyond itself. Strictly
speaking, a game in which the players are paid to play, or in which they play for money
stakes, ceases to be a game.... The closed world of the game is one of mock passions, not
real ones.... the pleasure of playing, of exercising skill, takes precedence over the
pleasure of winning" ("Dingley" 75-76).

Mr. Miller's mistakes are not mathematical but procedural; at the end of the hand, the other players quickly review what he "ought" to have played, a word Dickens repeats four times in the short dialogue following the passage above (82). Dickens pays more attention to the play of the game than the calculation of probability, thereby cueing Matthews rather than Hoyle for this old-fashioned card-party. Unfortunately, Mr. Miller reveals his mind to his partner and to their adversaries. His distraction compounds his ignorance of the cards whereas the others demonstrate their greater commitment to the game by their discussion of his mistakes. By contrast, the old lady proves especially adept at allocating her cognitive resources. In order to keep more of her mind on the game, she uses physical objects – some coins and a candlestick – to make a "memorandum" of the score (82-83).

Dickens's inflated rhetoric – "irreverently," "ignominiously," "high crimes" – mocks the ways games manuals seriously praised and penalized whist.[99] Matthews explicitly incorporates legal forms into his handbook by urging players to adopt a unified "code" to be "hung up in various club-rooms, as a classical authority to be referred to on all occasions" (55). Taking on the role of "proper [judge]," Matthews sets out various "cases" with "their decisions" from his bench, taking as a guide the "following principle of all laws, viz. That *penalties* should be in exact proportion to the *advantage possible* to accrue from the transgression" (55):

> The law I propose is this – "Whoever shall, by word or gesture, manifestly
> discover his approval or disapprobation of his partner's mode of play, or ask any
> questions but such as are specifically allowed by the existing Laws of Whist, the

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[99] Henry Bohn adopted Shakespeare's immortalization of Cleopatra as an epigraph on whist: "Age cannot wither it [whist], nor custom stale / Its infinite variety" (2).

adversary shall either add a point to his own score, or deduct one from the party so transgressing, at his option." (57)

Technically, Mr. Pickwick, the old lady, the fat gentleman, and Mr. Miller only discuss his play at the end of a deal, just as Matthews requires; but their restraint does not guarantee good feeling among all players. The scene twists Matthews's equation for justice: the *good-humor* of the old lady rises in "a proportionate degree" to the *advantage possible* from Mr. Miller's transgressions.

Late eighteenth-century and some nineteenth-century handbooks promoted partner-based play by legislating the interpersonal dynamic of the game. As a result, games manuals incorporated social etiquette into their rules. In 1791, Robert Withy concluded his short rules of the game with a brief exhortation: "and be sure to KEEP YOUR TEMPER" (Withy 16). Matthews escalated Withy's counsel by penalizing fits of temper: "If a person throws down his cards on the table, supposing the game lost, he may not take them up, and the adversaries may call them, provided he does not revoke" (Matthews 53). Significantly, as this means that the adversaries may choose when to play his hand, Matthews's penalty for temper alters the foundational mechanisms of whist. In essence, the four-person game becomes a three-person game, with one hand – called the "dummy" – face up. C.B. Coles, though less serious in general than Matthews, nevertheless extends the penalty for temper in the game into real life: "Whoever loses his temper, and scolds, should be cut, and never come again" (Coles 24). Etiquette signals the efforts of strategy manuals to make whist respectable but also the importance of social partnership to intellectual partnership. The challenge of whist requires a balance of both social and intellectual partnerships; thinking together requires being together. Emotional outbursts distract players from the task at hand: discovering other minds.

Dickens seems to wonder how whist can provoke any such fit of temper in the first place. When he imagines such a scenario, the absurd takes over: in response to Mr. Miller's revoke, "the fat gentleman [Mr. Miller's partner] burst into a state of high personal excitement which lasted until the conclusion of the game, when he retired into a corner, and remained perfectly mute for one hour and twenty-seven minutes; at the end of which time, he emerged from his retirement… with the air of a man who had made up his mind to a Christian forgiveness of injuries sustained" (*PP* 83).[100] Granted, to revoke – to not follow suit, despite having the cards to do so – is the most obvious error a player can make. It is Hoyle's most stringently penalized rule because it undermines the calculation of the other players and because it demonstrates a careless attention to one's own cards. That being said, Mr. Miller and the fat gentleman were already so far behind in the rubber that a revoke could make little difference to the ultimate outcome of the game. Though handbooks legislated against fits of temper, Dickens points to an overarching irony: scientific play raised the stakes of error and expertness to a point that could prove frustrating to better players. Partnership sounds cooperative but players had to tolerate their less scientific friends, or find new ones: "avoid as much as possible, at first, sitting

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[100] Juliette Smeed describes the "Pickwickian art of forgetting" as "the means by which friction or trouble is allayed and sociability and peace restored, a result that render the Pickwickian state of being an ideal one at odds with the real world" (224). She briefly glosses this confrontation and reconciliation as a "the mildest of lessons about the danger of resentment to sociability" (226). Ironically, she overlooks the primary source of forgetting, which is Mr. Miller's careless revoke. The fat gentleman, it should be noted, does not conciliate his partner, Mr. Miller, but instead takes solace with Mr. Pickwick, one of the more scientific players capable of understanding his frustration.

down with bad players. It is more difficult to eradicate erroneous, than to acquire just ideas" (Matthews 9).[101]

In contrast to scientific whist, "round games," like Pope Joan, accommodate any number of players and depend more on chance than strategy; their participants can afford to be boisterously merry. Dickens mentions laughter eight times in his description of the round game: "though the merriment was rather boisterous, still it came from the heart and not the lips: and this is the right sort of merriment, after all" (*PP* 84). The spinster aunt, her feelings hurt for being laughed at, quickly brightens up under the influence of Mr. Tupman's encouragement. Everyone behaves well because the merriment induces them to enjoy themselves but the narrator most appreciates how the round game nurtures dialogue, especially jokes, and wit in narration. In contrast to the technicality of the dialogue on the whist game, all readers can appreciate the mood and content of the round game, which fosters social rather than intellectual partnerships. Mr. Miller pays a high price, in Dickens's view; he must "absorb" his own game, which is grave and sedate. Like Mr. Miller, the narrator feels distracted by the lively round game, which can be enjoyed without playing your cards well and, in Dickens's opinion, promotes the "right sort of merriment."[102]

The advances in theoretical play widened the gap between experts and amateurs. Though a winner at Dingley Dell, Mr. Pickwick finds himself outpaced when he joins a whist table in Bath, the birthplace of both Hoyle's and Matthews's systems:

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[101] "Avoid at first playing with those who instruct, or rather find fault, while the hand is playing. They are generally unqualified by ignorance, and judge from consequences; but if not, advice while playing does more harm than good, by confusing a beginner" (Matthews 28).

[102] In its comparison between whist and a round game, this scene parallels Austen's from *Mansfield Park* as read in my Introduction, see pp. 18-26.

Poor Mr. Pickwick! he had never played with three thorough-paced female card-players before. They were so desperately sharp that they quite frightened him. If he played a wrong card, Miss Bolo [his partner] looked a small armoury of daggers; if he stopped to consider which was the right one, Lady Snuphanuph would… smile with a mingled glance of impatience and pity to Mrs. Colonel Wugsby, at which Mrs. Colonel Wugsby would shrug up her shoulders, and cough, as much as to say she wondered whether he would ever begin. Then, at the end of every hand, Miss Bolo would inquire with a dismal countenance and reproachful sigh, why Mr. Pickwick had not returned that diamond, or led the club, or roughed the spade, or finessed the heart, or led through the honour… and in reply to all these grave charges, Mr. Pickwick would be wholly unable to plead any justification whatever; having by this time forgotten all about the game. People came and looked on, too, which made Mr. Pickwick nervous. Besides all this, there was a great deal of distracting conversation near the table… All these things, combined with the noises and interruptions of constant comings in and goings out, made Mr. Pickwick play rather badly; the cards were against him, also, and when they left off at ten minutes past eleven, Miss Bolo rose from the table considerably agitated, and went straight home in a flood of tears, and a sedan chair. (482)

Mr. Pickwick takes the place of Mr. Miller and his partner, Miss Bolo, the place of the fat gentleman. Once again, the absurd emotional response of one contrasts to the severe discomfort of the other partner. The Bath scene magnifies the key scientific qualities of the parallel scene in Dingley Dell: more jargon, distraction, and greater censure for less serious errors.[103]

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[103] Hennelly suggests the "deadly seriousness" of the three ladies makes their whist into a "joyless, false game... which was really no game anyway" ("Praise" 38). Because Hennelly considers games as a subset of play and, therefore, defined by some degree of playfulness, he reads the whist game at Bath as a sign of other non-games in the novel, such as the political race at Eatenswill and the prison system at Newgate. Games manuals, such as Matthews's, however, encouraged just this kind of seriousness in their players. Dickens satirizes the over-seriousness of this whist game but it can be read on its own as a historical referent, not necessarily as a representational figuring of Dickens's "real" concerns. That being said, even to stop at the point of satire would be to overlook the thinking in the scene. Dickens targets game-manual culture but he also uses his satire to expose the varieties of thinking implied by the game and its setting.

Dickens plays with the idea of what it means to be a "desperately sharp" card player by intensifying the mind-reading at the card table. Not only do Lady Snuphanuph and Mrs. Colonel Wugsby understand how to play together but they easily interpret the states of mind visibly expressed by the face. Mr. Pickwick, meanwhile, can interpret their faces but not their style of play. In fact, Mr. Pickwick struggles to play well because he notices every look, smile, glance, shrug, cough, countenance, and sigh. Furthermore, the narration attaches particular narratives to each of these expressive signals, focalizing Mr. Pickwick's mental interpretations. Ironically, his sensitive theory of mind conflicts with the cognitive performance of whist which suggests a shared cognitive domain between the card game and theory of mind.

In Dingley Dell, Mr. Miller discovers his mistakes after the fact, once they are explicitly recounted by the other players. Though the same happens here – as Miss Bolo puts Mr. Pickwick on trial with her jargon – he has already read his failure in the faces of his opponents. This scene inverts the assumption undergirding a super-human theory of mind, like that possessed by Poe's Dupin, that more data is better. These three old ladies are a new brand of card-sharpers: they may not bend the rules but their advanced knowledge turns any outsider, "finding escape impossible" (*PP* 480), into a victim. Mr. Pickwick's social acuity comes at the expense of his intellectual concentration on the card game. These women have found a way to take advantage of Mr. Pickwick's attentive play: he is too busy reading their faces to read the cards.

In spite of the mirroring between these two scenes of whist, they differ dramatically in literary style. At Dingley Dell, the dialogue at the table bears the weight of representation but in Bath, the narrator focalizes Mr. Pickwick's experience. Initially,

it seems that the narration, like a minor character, overshadows Mr. Pickwick by minimizing his voice and spotlighting the behavior of the three ladies; but just as Matthews developed an alternative system for the problem of information in whist, so too does Dickens situate Mr. Pickwick's cognition elsewhere. The syntax of these sentences whirls like Fagin's brain and captures the cognitive action of Mr. Pickwick's mind. His having forgotten all about the game, indicates, ironically, just how hard his brain is working. At first glance, it seems the social partnership has overwhelmed the intellectual one, as Mr. Pickwick struggles to play the game because of the many social cues his brain processes; but the absence of the "right sort of merriment" reveals just the opposite. Internalized interpretation replaces the dialogue of Dingley Dell, underlining the dominance of intellectual energy that tips the balance of social thinking heavily towards its mental register. Poor Mr. Pickwick, indeed: these new sharpers upend the balance required by scientific whist.

In his later novels, Dickens inverts the card table dynamics of the *Pickwick* whist games. In *Oliver Twist*, *Bleak House*, and *Great Expectations*, one player dominates the other three, including his partner, and the games become increasingly dark. In *Oliver Twist*, the Artful Dodger practices to become a sharper by "taking dummy against Master Bates and Mr. Chitling. The countenance of the first-named gentleman, peculiarly intelligent at all times, acquired great additional interest from his close observation of the game, and his attentive perusal of Mr. Chitling's hand, upon which, from time to time, as occasion served, he bestowed a variety of earnest glances, wisely regulating his own play by the results of his observations upon his neighbor's cards…. all highly unbecoming to a scientific rubber" (*OT* 198). Dickens maintains a sense of playfulness as Dodger literally

over-looks his adversary's hand like a more practiced card sharp but the fact that he plays alone, with a dummy hand, prepares him for a lonely, isolated future. In *Bleak House*, Inspector Bucket, like a "famous Whist player... with the game in his hand," joins forces with Esther to find her mother but only succeeds in solving Tulkinghorn's murder (*BH* 817). In *Great Expectations*, the lawyer, Mr. Jaggers, plays whist with Pip, Estella, and Miss Havisham. Pip doesn't bother to record their seating arrangements for Mr. Jaggers "took our trumps" as if "[we were] three very obvious and poor riddles that he had found out long ago" (*GE* 186). Bucket, Jaggers, and Dodger forego partnership; their theory of mind, like Poe's analyst, Dupin, is so adept that they can play competitively by themselves. Dickens warns that scientific play, whether from Hoyle or Matthews, will result in the dominance of the most educated player at the expense of true social partnership.

Readers don't need to know the historical context of games manuals in order to recognize that Dickens prefers games to be fun, not scientific. Similarly, readers don't need to know that the cognitive aptitude for theory of mind automatically processes social interactions in order to engage with other people. That being said, both the historical context of games manuals and theory of mind help us toward a richer understanding of the cognitive stakes in these highly-detailed scenes of whist at Dingley Dell and Bath. The social mind necessary for whist must balance social and intellectual partnership and the best players find ways to maximize this thinking capacity. A cognitive-historicist take on games reveals why we need to differentiate between the variety of games that Dickens provides, as whist exercises different cognitive mechanisms than does Pope Joan. Though Dickens prioritizes the merriment of round

games as the right sort, these scenes contain less cognitive content. Only the scenes of whist turn out the minds of the players as they struggle with other minds. If we treat all games as varieties of play, we risk missing Dickens's highly attuned sense of the mind in play and partnership, the keystone of his game-based social metaphors.

III.   Dickens's Gamers

Scenes of scientific whist in *The Pickwick Papers* reveal how Dickens incorporates models of social thinking from strategy literature into novelistic representations of game play. Dickens builds on that basic foundation in two inter-related ways. First, he builds some of his characters from game-based thinking and, secondly, extends such thinking through those characters into metaphors for social systems. Dickens's "gamers," as I call them, not only play games but they treat real life interactions as games played on the same strategic principles as the literal counterpart. In *Our Mutual Friend*, for example, the scheming Lammles exchange "looks like partners at cards who played a game against All England": Mr. Lammle "seemed to say to Mrs. Lammle, 'Why don't you play?' And so, looking about her, she saw Miss Podsnap, and seeming to say responsively, 'That card?' and to be answered, 'Yes,' went and sat beside Miss Podsnap" (*OMF* 139). As the metaphor develops, readers realize that the Lammles are not seated at a whist table but are, in fact, observing the social gathering, where the guests figure as possible cards to be played. Their unspoken conversation mimics the kind of intellectual-social partnership Matthews fostered among his readership. Mr.

Lammle's question "Why don't you play?" implies he knows his wife's hand and

wonders why she doesn't play as expected. Mrs. Lammle's response follows by seeking

confirmation and execution. Their successful communication indicates a well-balanced

partnership. Dickens moves deliberately from literal games, *such as* whist, to social

games *as* whist, through the minds of particular characters. In other words, he does not

suggest that social games intrinsically share qualities with literal games as such but that

they do so because of the patterns of thinking that players transfer from one to another.

Understanding social systems as game-systems begins, in Dickens, with understanding

the gamer as a character type.[104]

Games had been associated with a particular type of character – the gambling type

– long before Hoyle but scientific play extended the type as an intellectual figure.[105] By

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[104] Modern neuroscientific accounts conceptualize character and identity as "basic cognitive cultural instruments" that constrain the complexity of reality in order to enable our brains to function (Fauconnier 250). Our brains take note of common behaviors, settings, roles, and types in order to generate knowledge patterns that structure our world. Fauconnier and Turner summarize it this way: remembering "regularities over different behaviors by the same person [builds] up a generic space for that person – a personal character"; while "[extracting] regularities over different behaviors by many people [builds] up a generic space for a kind of behavior" (252). Unfortunately, while such character-typing helps us navigate our social worlds it also contributes to racism (See archeologist Steven Mithen's work on the cognitive underpinnings of racism in *The Prehistory of the Mind*, qtd. in Fauconnier p. 27). It is therefore important to note that while our brains accept compressions and begin with templates, that has little to do with how templates are used or evaluated. Along with Fauconnier and Turner, I am "not debating the merit of assessing character by shifting frames... Rather our point is that making such assessments involves general imaginative routines" (252).

[105] Charles Cotton summed up the mythical perception of a gamester in *The Compleat Gamester* (1674), the first games manual in English: "Some say he was born with Cards in his hands, others that he will die so; but certainly it is all his life, and whether he sleeps or wakes he thinks of nothing else. He speaks the language of the Game he plays at, better than the language of his Country... he knows no Judge but the Groom-porter, no Law but that of the Game…. No man puts his brain to more use than he; for his life is a daily invention, and each meal a new stratagem" (21-22). The Groom-porter was in

1850, Henry Bohn's *Handbook of Games* described a whist player as an analytical mastermind: "He is a good player who, upon a sound theory, analyses and proves the best written systems, making them into the machinery of his schemes; but he is a superior player, who, equally practical, and as well informed of existing rules, sees when they ought to be violated, and has no hesitation in departing from them" (4-5). The description concentrates on mental ability and activity, not of an addict, but of a highly respectable, scientific specialist. Though the meaning of the category changed, a gamester still remained a type of character, one known for their risky addictions in contrast to scientific players, known for their mental ability. Dickensian gamers make the "best written systems," or scientific social thinking, into "the machinery of his schemes" – not only in game-based scenarios, to which Bohn alludes, but in real life. "Superior" Dickensian gamers, furthermore, "see when the rules ought to be violated and have no hesitation in departing from them." Dickens trades on the metaphorical ambiguity of life as a game in order to probe what kinds of violations occur: when do players transgress the scientific maxims of social thinking – the "rules" of whist – and when do they break other kinds of rules that may be in play in real life, such as moral codes? The Lammles, for instance, successfully carry out the social thinking of scientific whist without disturbing any social forms. Playing Miss Podsnap, however, violates the moral code imposed by the novel.

The Lammles communicate like expert whist players in everyday interactions because they share the same kind of mind. As they discover, shortly after their marriage, "We know one another perfectly…. the past knowledge that you have of me… is

charge of running the gaming tables at court and therefore the representative of legal gaming.

identical with the past knowledge I have of you" (*OMF* 130). In *The Way We Think,*

cognitive scientists Gilles Fauconnier and Mark Turner extend their analysis of character

and identity by suggesting that our brains seek out consistency in order to make

experimental, imaginative statements, such as "If I were you…" (255-258). "If I were

you" statements require some ratio of common ground, often the assumption made by

ToM: that the person being read has a mind to read that can be read. "If I were you"

statements extend the bounds of Simulation Theory. Whereas Simulation Theory

suggests that we come to know each other by comparing our observations with our own

experiences, "If I were you" statements indicate the brain's imaginative ability to conjure

scenes outside our experience for comparison and review. In this case, however, the

Lammles not only know each other because they both have minds but because they have

the same kind of mind, one predicated on partner-style whist. Their minds, not only their

actions, provide the source of the extended game metaphor used to describe their scheme

with Miss Podsnap. The Lammles are a perfect gaming partnership but their attempts to

treat life as a game only work in theory. At the last moment, Mrs. Lammle, like Nancy,

betrays her social-intellectual partnerships, protecting her deuce, Miss Podsnap, while

sacrificing her silent partner, Mr. Fledgby. Significantly, neither Fledgby nor Lammle

suspect her interference because they misread her motives. Like Fagin, they forget how

other players can change the game.

Dickens places one such gamer, Mr. Carker, as the manager of the economic firm

Dombey and Son. Carker "plays all games… and plays them well," including piquet,

backgammon, and chess (*DS* 286). With typical false humility, Carker downplays his

study of chess: "I have sometimes played, and won a game [of chess] – it's a mere trick –

without seeing the board.... To men like me, [such "little arts"] are sometimes useful" (286). Playing chess without the board for visual reference indicates a highly-trained and practiced mind, one that studies chess strategy and theory. Beyond the chess board or its literature, Carker builds his career and social relationships from modes of gameplay and mind-reading nurtured by chess. Aeron Hunt describes Carker as a highly-trained reader, drawing parallels between the ways "business texts and Carker's practices" figure character reading "as a shuttling process in which one understands the different layers and motivations of another character by reference to the depths one discerns in one's self" (62). Carker's self-knowledge, however, comes marked by his experiences and habits of thinking in chess. He reads himself against 64-squares of black and white and applies the same frame to others. While he literally plays a game of chess in this scene he also measures himself against the other player and his employer, Dombey, according to its intellectual standards. Dombey, who "plays nothing," ignores the game, lying on the couch with "his eyes half shut, during the whole of the play," and therefore loses an opportunity to read Carker and understand his manager's approach to intellectual partnership (*DS* 268). Appropriately, then, Dickens obscures Carker's chess game from the reader as well. In contrast to the whist scenes in *Pickwick*, we do not see how Carker plays. Dickens positions the reader on the couch with Dombey, eyes half shut, so that the scene formally takes on aspects of representation amenable to Carker's chess.

Carker's ability to win chess without the visual prompt of the board indicates the kind of mental vision traditionally associated with the mastermind in a Machiavellian narrative. Blakey Vermeule categorizes Machiavellian narratives as those that feature a mastermind and key tropes, including games, in order to probe "an especially intense

kind of reasoning" (81). As figures "that point the way to deeper registers of reflection,"
a "deeper game," these common tropes – labyrinths, riddles, puzzles – are "eventually
absorbed into the story" (96). Using Vermeule terms, Carker's chess ability indicates his
Machiavellian plot; but in Dickens's novels, games indicate kinds of minds, not one
brand of narrative. Carker's chess underlines his adversarial relationship with Dombey
but also cues the game-specific ways he structures his real-life interactions. In this way,
Dickens reverses Vermeule's formulation: games are not present in his novels because
his novels feature masterminds. Instead, his novels feature masterminds because those
characters play games. Carker is not merely *like* a chess player (because he knows how
to out play others) but is a chess player in life because he actually plays chess. Carker
also expects that his cognitive training in games like chess, piquet, and backgammon will
guarantee success in the games he plays in real life. He expects to outwit and outplay
because he can out-maneuver and, in chess, out-see. Ultimately, Dickens builds his
representations of game-based social systems from this principle: the *character of the*
system does not arise from itself but from the minds of its players, its *constitutive*
characters and their cognition.

Dickens pays close attention, therefore, not only to the key differences between
types of games but to the differences in the minds playing those games. As a result, his
observations take him beyond the game-based thinking imagined by games literature. In
the fairground atmosphere surrounding the race track at Hampton, the narrator of *The Life*
and Adventures of Nicholas Nickleby pauses to observe the man running the Rouge et
Noir table and indulges himself with a short atmospheric sketch including the familiar
figures of a gaming table, an environment rife with "peculiarly good specimens of a

class" (*NN* 494).[106] Significantly, Dickens does not describe the game from the

standpoint of the gamblers – a familiar type – or use it to make a point of moral

commentary.[107] Instead, Dickens highlights the great skill and presence of mind in the

anonymous *Banquier*, or dealer: "This game was constantly playing. Perhaps twenty

people would be staking at the same time. This man had to roll the ball, to watch the

stakes as they were laid down, to gather them off the colour which lost, to pay those who

won, to do it all with the utmost dispatch, to roll the ball again, and to keep this game

perpetually alive. He did it all with rapidity absolutely marvelous; never hesitating, never

making a mistake, never stopping" (495).

The emphasis on constant motion gives the impression of machine-like action,

habitual, automatic; but what makes this man remarkable is that he is able to maintain

constant flow despite constant change – in stakes, in who wins, in changing money.

Dickens uses this "passing notice" to nuance the "specimen" he describes: Rouge et Noir

is a simple game of hazard for the gambler but requires "marvelous" presence of mind

from the Banquier, even more so in the distracting environment of the racetrack than in a

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[106] From Dickens's description, mentioning a ball, he appears to describe something similar to Roulette but in my research, variations of roulette are not called Rouge et Noir. A French game, also called *trente et quarante*, Rouge et Noir is similar to but more complicated than Black Jack. The dealer shuffles six packs of cards before turning over two lines of cards, one under red and the other under black. Players bet on whether red or black will be closest to thirty-one. The game requires no strategy and the odds are slightly in the dealer's favor over a very long series (H—. 34-47). In Rouge et Noir, the dealer is called the Banquier; in Roulette, the dealer is the Banker or Tailleur and there can be more than one.

[107] This is the tack taken by Horace Smith's *Gravities and Gaities* (1825), a collection of essays that Dickens read before writing *The Pickwick Papers* (Hennelly, "Praise" 32). In volume two, "Rouge et Noir" tells the story of a young man who becomes addicted to the game and finally pays a painful price (pp. 238-255). It is similar to Maria Edgeworth's "The Lottery" in that it is a cautionary tale concerned with the morality of gaming from the perspective of the gambler. This makes the approach taken by Dickens's more unusual for its emphasis on cognition rather than social morality.

high society gaming house. Dickens's appreciation for the cognitive ability of the Banquier illuminates the priority he places on bringing different kinds of minds to the attention of his readers and removes the usual obscurity of the Banquier. With awareness of the cognitive skills employed by games, the narrator focuses on a kind of mind passed over in typical readings of the gaming table, such as George Eliot's famous opening to *Daniel Deronda*, which describes the Banquier as a mere "automaton" (*DD* 8). Dickens actually reverses the typical motion of plot associated with the gaming table; plots usually follow the players to and from the table, passing over the dealer as part of the environment. By observing the Banquier, the narrator discovers a surprising amount of mental activity in a simple game of hazard that distinguishes the Banquier as the true gamer worthy of narrative attention.

The models of thinking developed by strategic games literature provided dynamic templates of social minds for Dickens's gamers. Turning to early psychology, however, situates Dickens within the eighteenth-century concept of mind-as-entity, as Michael Kearns suggests. While most proto-psychologists visualized the mind as an entity, primarily a passive substance capable of receiving inputs, "new metaphors used by some nineteenth-century novelists," like George Eliot and Henry James, re-imagined the mind as something biological, sentient, "something other than a relatively static, impressible entity" (Kearns 39-40). Some of Dickens's characters, as Kearns explores, fall under the mind-as-entity metaphor dominant in the eighteenth century; but Dickens's gamers have a more dynamic model of mind generated by their association with game playing. Considering how Dickens draws on the types of minds made available by the popular literature of games manuals situates him as a unique transitional figure in Kearns's

schema. Paying attention to the games in Dickens's fiction uncovers a wide range of

mental activity, from an anonymous Banquier to an established schemer like Carker.

Dickens imports game-based thinking into his novels and maintains the sense of the

individual gamer but he does so in order to extend the figure of the game-table as small

unit to the level of social domain, the system-as-game, populated by many gamers so that

the system does not become mindless.

IV.   Games in "Anti-optimal" Conceptual Blends

Dickensian gamers export game-based thinking into real life by using games as

guiding frameworks for their social interactions. As players extend the social thinking

from the game table into real life, literal games become social games. For example, in

the first chapter of *Nicholas Nickleby*, Mrs. Nickleby encourages her husband to improve

their economic circumstances by speculating, or playing the stock market. After raising a

few doubts, Mr. Nickleby, persuaded by his wife's superior reasoning, declares

confidently that he will speculate. The narrator then describes the consequences this

way: "Speculation is a round game; the players see little or nothing of their cards at

starting; gains *may* be great – and so may losses. The run of luck went against Mr.

Nickleby; a mania prevailed, a bubble burst, four stock brokers took a villa residence at

Florence, four hundred nobodies were ruined" (*NN* 4). Specificity – speculation, in this

case, not just "games" – helps Dickens craft highly-compressed conceptual blends. His

game-based blends are not "optimal"; that is, they are not dead metaphors, well-worn in

the cultural imagination (Fauconnier 393). Instead, drawing on the technical awareness

made available by games literature, Dickens urges his readers to reevaluate the

relationship between vehicle and tenor in game-based metaphors. Doing so, Dickens

suggests, develops the kind of "searching vision" he turned on London and Victorian

society (Alter 48).[108]

Dickens, of course, has a long-standing reputation for creative language use,

neologisms, and avant-garde metaphors. Suzanne Kemmer and Michael Israel cite

Dickens as an exemplar of a trend in the nineteenth century to adapt the "way metaphor"

with increasingly unusual verbs. Authors experimented with altering how the "way"

might be taken; in 1837, Dickens added "corkscrewed" to the list: "Mr. Bantam

corkscrewed his way through the crowd" (qtd. in Fauconnier 381-382). Such avant-garde

metaphors certainly contributed to the long-standing idea that metaphor constitutes

literary language more difficult to process than literal, non-figurative statements. Not

until the 1980s did cognitive scientists begin to understand metaphor as a more basic,

foundational aspect of everyday understanding and even basic mental operations as

"highly imaginative" (Fauconnier 18). In *Metaphors We Live By* (1980), George Lakoff

and Mark Johnson suggest that some metaphors "are so natural and so pervasive in our

thought that they are usually taken as self-evident, direct descriptions of mental

phenomena. The fact that they are metaphorical never occurs to most of us" (28). For

example, when we encourage a friend to "stand up" for herself, we most likely do not

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[108] Raymond Williams situates Dickens's "way of seeing the kind of system that is
imposed" as what the form of Dickens's novels "*made* central" (161). Metaphor plays a
key role in that way of seeing: "The key to Dickens's searching vision of the cityscape is
his use of figurative language.... [that is] vividly original, often startling, and [gives] the
impression of having been struck off in the white heat of improvisation" (Alter 48).

mean for her to literally get to her feet. Even asking someone to "put their ideas down on

paper" draws on metaphor to express materialization and direction (*down* from the head).

Technically, the writer puts down words or images, not his ideas. In doing so, he also

accesses a spatial metaphor in putting his words or images *down* at all. We have tended

to underestimate the presence of metaphor both in language and thought.

Fauconnier's and Turner's theory of conceptual blending describes the cognitive

procedure by which our brains combine information from two different domains in order

to achieve more complex concepts and meaning.[109] This automatic cognitive process

helps us make sense of a wide range of meanings, such as basic familial relations, by

understanding what it means to say that Paul is Sally's father, intuiting how to use a

computer desktop, a virtual-reality blend, or positing imaginary numbers (Fauconnier

120, 131, 270-274). As they note, the "cognitive capacities needed to construct these

[everyday] integrated meanings are the same as those needed to interpret the supposedly

exotic examples" (355-356). Fauconnier and Turner believe that the ability to achieve

double-scope blends, or higher-order conceptual blends, is the cognitive advancement

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[109] Conceptual blending theory contains a strong mentalistic bias. Fauconnier and Turner
break down their examples into highly complex, analytical processes. They claim that
our brains do all this "magical... imaginative work" in an "unconscious" moment
(Fauconnier 44). In effect, Fauconnier and Turner slow down the cognitive process in
order to see it consciously, just as Matthews slows down the pace of gameplay to show
why playing a queen lets your partner into the state of your hand. Fauconnier and Turner
do not insist on formulaic precision of conceptual blends; personal or cultural experience
can alter the meaning of an input space and influence the blend for users. Nevertheless, a
proponent of embodied cognition, like Shaun Gallagher would point out that their highly
analytical model consists of purely mental activity; there is no sensory or emotional input
space, for example. There is little hard evidence to suggest where and how the biological
brain actually carries out such computations as Fauconnier and Turner enumerate.
Cognitive literary studies have an advantage in this debate because whether or not our
brains actually blend in this highly rationalized way, Fauconnier and Turner's model aids
literary analysis, as we will see in this section.

that makes us human that contributed to the cultural explosion of human development 50,000 years ago. Conceptual blending advantageously saves cognitive energy by means of acceptable shortcuts and substitutes: "Over the last 50,000 years [since the cognitive development of double-scope networks], cultures have developed many systems for saving people from the work of inventing all the useful blending schemes from scratch" (369). The ultimate goal of blending is to "achieve human scale," that is, to compress and contain the diffuse or global in ways that can be more readily understood from our perspective (92, 312).

Conceptual blends create unique scenarios by combining elements from two distinct input spaces. Fauconnier and Turner give the example of a philosophy professor who ventriloquizes Kant during a lecture and imagines what each might say to the other in a debate: "If Kant were here… And then Kant said…" (Fauconnier 59-61). One input space holds the original Kant, circa 1784; the other holds the professor, circa 1995. The "generic space" between the two inputs holds common ground: both are philosophers musing about time. The blend, however, pulls the German-speaking Kant from 1784 to 1995 and creates an imaginary scenario where these two professors actually meet and debate their ideas. The professor can speak for Kant – as if he were Kant – from his knowledge of Kant's writings. Of course, the blend acknowledges that this is not the "real" Kant but, instead, an imaginative scenario run for the purpose of gaining new meaning; in this case, helping the class assimilate Kant, who they don't know very well, to their professor, who they may know better. Over time, some blends become more familiar and culturally entrenched. Fauconnier and Turner call such blends "optimal": "The cultural search for an optimal blend, which can last for many years or even

centuries, explores huge numbers of possibilities and retains only those that fit the governing principles optimally for the purpose at hand" (393).

Optimal blends provide computational shortcuts to larger semantic categories. Cognitive psychologist Sam Glucksberg explains why, counter to expectations, scientists have found that test subjects understand metaphors more quickly and easily than similes. One might expect that, as similes only suggest a partial comparison, our minds would more quickly accept the truth-claim being made: my lawyer is only *like* a shark, after all. As this turns out not to be the case, Glucksberg suggests that metaphors offer greater interpretive flexibility by allowing for access to a broader category. The metaphor vehicle carries a "dual reference function," pointing to the original vehicle and to larger categories to which the vehicle belongs (Glucksberg 78). For example, the phrase "my lawyer is a shark" connects "shark" to the larger category of "predators," instantly supplying a generic character-type for the lawyer. Our brains, Glucksberg suggests, like metaphors because their dual reference function creates a semantic shortcut. Once we know that "shark" stands in for "predator," the specific vehicle ceases to matter. Hearing that Carker plays chess, for example, connects to the larger category of games and allows anyone unfamiliar with the details of chess to still understand enough to know that Carker plays life as if it were a game. This link provides enough knowledge for everyday scenarios and communication but can lead to a loss of nuance. Dickens, of course, encourages his readers to move beyond optimal blends and read his game-based metaphors for their specific reference and cognitive functions. In other words, for Dickens, it matters that Carker plays chess – and furthermore, plays it blindfold; readers

who quickly access the optimal blend "game" will not truly understand how Carker thinks.

Games provide such optimal blends that we are apt to forget that they are just blends, an error satirized by *The Humours of Whist*. In an enthusiasm of association, the Professor (Hoyle) lectures that whist "is one of the noblest and most useful Games in the Universe, Sir: All good Citizens ought to study it. Partnership in Whist is an Emblem of Partnership in Trade: It shows how much depends upon good Partnership, and I will venture to say, that a good Whist Player will make both a good Partner and a good Merchant" (*Humours* 24). Using vocabulary from Fauconnier and Turner, we might say that the Professor's blend draws on two input spaces, Whist and Trade; the blend shares Partnership in the generic space. Whist and Trade also prompt key Roles: Partner for Whist and Merchant for Trade. As long as the Professor considers Whist as "an Emblem," his analogy succeeds. But the Professor pushes his analogy beyond the symbolic territory of metaphor when he alleges that because Whist and Trade share Partnership, the key Roles (Whist Player and Merchant) also correlate. This error merges Whist into the generic space making it both vehicle and tenor. Carrying his logical fallacy to its extreme, the Professor extends his blend to "all the World" – "Religion, Government, Law, Physic" – concluding that "He who is a good Whist-Player would equally make a good Politician" (25). Lord Rally points up the limits of the Professor's blend by inverting its causation: "Ha! ha! ha! I take it for granted then, our great Men at the Helm are all Players of the First Rate?" (25).

Ironically, the Professor's logical fallacy derives from his relatively banal characterization of whist. As we have already seen from our examination of *Advice to*

the Young Whist Player and *The Pickwick Papers*, partnership in whist takes highly

specific forms, both intellectual and social. Unless being a merchant involves counting

cards, remembering trump, or playing a queen before a king, there is little to guarantee a

good whist player success in trade. Just as Dickens uses the rising intellectualism of

strategic gameplay to expose the minds of his characters, so he also uses the discourse

associated with specific games to challenge generic game metaphors. The very manuals

that Dickens protests in his satire provide Dickens with the resources he needs to produce

more complex conceptual blends and to challenge culturally entrenched game-based

metaphors. He does so, however, in the interests of better understanding social systems

that function like games, not out of a desire to preserve the integrity of the games

themselves. Better awareness of the social-thinking signatures of various games help

Dickens better diagnose the kinds of social systems he observes; therefore, Dickens

teaches his readers to pay close attention to the specificity of his uses of games –

especially when his characters do not.

Consider again the game-based blend that Mr. Nickleby fails to understand:

"Speculation is a round game; the players see little or nothing of their cards at starting;

gains *may* be great – and so may losses. The run of luck went against Mr. Nickleby; a

mania prevailed, a bubble burst, four stock brokers took a villa residence at Florence,

four hundred nobodies were ruined" (*NN* 4). "Speculation is a round game" is a very odd

metaphor because Speculation literally *is* a round game, like Pope Joan.[110] In

"Speculation," a "noisy round game, that several may play," players are dealt three cards

and have the option to bid for a trump card (Jones 185-186). Players reveal cards one at a

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[110] Jane Austen's favorite game and one she uses in *Mansfield Park*. See the Introduction
in this dissertation pp. 18-26.

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time and whoever has the highest trump card during the game may auction it off. The trick is to know when to auction off your own potential winning trump and when to bid aggressively to win another's trump to yourself in order to hold the highest trump card at the end of the game. In this case, Dickens does not extend the metaphor so much as extend its literal application: players *do* see little or nothing of their cards at starting. In fact, he pushes the target domain – speculation – further towards the source domain – round game – by giving some detail as to the play and outcomes of the game Speculation. Ultimately, however, what makes speculation a round game is that Mr. and Mrs. Nickleby think of it as such – at least until they see, too late, that economic speculation is not a round game, but only *like* a round game, after all. Dickens underlines their downfall with a sharp pun: Mr. Nickleby needed to read "Speculate?" as *spec-u-late* (*NN* 4). As gamers, the Nicklebys fail to understand the nuances of the game they play and its limits as an optimal blend.

Dickens's metaphor is not only surprisingly literal but deceptively simple. Applying conceptual blending theory helps us unpack the many layers, or cognitive compressions, within this little phrase: "speculation is a round game." To understand the uniqueness of Dickens's blend, let's start working with a more generic form: investing is a gamble. The "Investing" input space draws on a financial frame: money, banks, stocks and bonds, security, market, Wall Street.[111] "Gamble" suggests: betting, poker, money, cards and dice, debt, luck. These input spaces share a significant amount of overlap in the generic space. There are analogous Roles, such as player/investor, dealer/banker

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[111] These are obviously American and modern references for the sake of exposition but it underscores the point that to get a historical blend, we can't substitute modern equivalents without the risk of changed meaning.

(Banquier); and analogous Locations, such as casino/bank, Los Vegas/Wall Street. Both inputs are systems that facilitate the transfer and exchange of money. Both deal in anticipation of future payout and result in despair at potential failure.

Blending investing and gambling, however, also produces new, emergent structure. The gambling frame compresses investment to "human scale": unlike investing, players can see the other gamblers and their chips. The game is contained by the table. The gambling frame compresses the time it may take to earn or lose money through investment. The emotional connotations from the gambling frame color investing with more negative connotations than investment has on its own. For instance, the sense of property and security of investment is lost because the equivalent structure in gambling – putting chips into the pot – remains an ambiguous, unowned space. This effect is magnified if we substitute "Playing the stock market" for "Investing" in the blend because "playing" pulls more from the gambling input space and "stock markets" have a riskier reputation than other kinds of investing, such as bonds.

Readers unfamiliar with "Speculation" or "round games" who convert Dickens's formulation to a more generic blend, as I have done above, lose emergent meaning. Dickens's target – speculation – is more ambiguous than investing, while his source – a round game – is more specific than gambling. A round game is more benign than gambling. Players risk smaller sums and there is an element of fun and merriment that we typically do not associate with more serious gambling. Recall the round game of Pope Joan from *The Pickwick Papers*, described above. Saying that investing is like Pope Joan would give a very different blend because Pope Joan would not bring the anxiety of loss, debt, or high-stakes failure to the blend. If investing truly were Pope

Joan, it would be an enjoyable way to pass an evening with friends. Finally, "speculation" as economic gambling is itself a blend. "Speculation" compresses the "investing is a gamble" blend into one word. Mr. Nickleby's mistake is overlooking that crucial blend within a blend and his substitution of one category of gaming for another.

Speculation becomes an exploitative social system when enough people treat the highly specific conceptual blend as if it were an optimal one. In fact, Mr. Nickleby – or, more accurately, his wife – is the source of this misleading, deceptively simple blend. The narrator tells us that "Speculation is a round game" and even explains the connection by extending the metaphor; but, in truth, this is only a blend that Mr. Nickleby – and four hundred nobodies – takes for reality. He allows his wife's compression to overrule his better judgment. For the reader, Dickens destroys the compression of the blend over a semicolon: the "run of luck" common to round games and economic speculation shifts from the card game to the "mania" of a financial bubble. In the sense that round games accommodate any number of players, speculation may be considered a round game; but Dickens and the narrator remain keenly aware that Mr. Nickleby thought of himself as one of the players at the table when, in fact, there were only four stockbrokers, each of whom ends up with a villa residence in Europe. If the four hundred nobodies realized that speculation is not Speculation, the bubble could not have burst. As an organizing system, therefore, speculation proves especially destructive when its gamers think optimally. The character of the system derives from its constitutive players and the way those players deploy games as conceptual blends. In the case of "Speculation is a round game," the familiarity of "game" as a cultural metaphor – an "optimal blend" – and the lack of historical awareness of games culture makes it easy to miss the depth of

Dickens's metaphor without the minute unpacking offered by an analysis with conceptual blending theory.

Fauconnier and Turner describe unconscious, cognitive activities, like blending, as "child's play for human beings," "games [that] run deep" (50). Their choice of a generic, optimal blend, "games," provides a sharp contrast to Dickens's highly specific usages. Games literature provided Dickens with more specific templates both of gameplay and cognition that he applied to his metaphorical use of games in order to push beyond culturally evolved, familiar, optimal blends; games literature helped Dickens make flat metaphors round again. Dickens deploys a source of compression, games, in specific ways facilitated by the literature of games, in order to make us alert to our automatic cognitive habit of inernalizing optimal blends. Readers can quickly pass over his metaphor by substituting a more generic version; but those willing to pay closer attention to the odd specificity of Dickens's choices will catch their cognition in the act of conceptual blending, and, at the same time, will see social games anew. Finally, Dickens nuances his use of game metaphors with specific games in order to extend his scheme of game-based characters to social systems. Dickens's social minds meet at the game table but also undergird social structures. When gamers "live in optimal blends," game-based systems result. Even if Dickens's social systems remain relatively faceless they do not remain mindless.

V.   Individuals, Systems: Social Minds as Communities

Games literature imagined its readers as a national community, everywhere compressed into representational units during gameplay. That is, representing one whist table, chess board, or score card conjured many others, representing whole systems of gaming. Such figures, however, not only coordinate numerical quantities but also, thanks to the emphasis on social and intellectual partnership in games literature, represent many minds involved in social thinking – "thousands of minds" ("Chess Tournament," *MP* 3). Thus, when Dickens uses game-based metaphors to describe social systems, he populates those systems with many minds, all thinking more or less socially. The individual, from this point of view, represents other individuals without losing his or her own game-based character. In contemporary historical games literature and the models of mind it generated, Dickens found tools that coordinate the thinking of individuals within systems. Dickens uses the compressions available in game-blends but never loses awareness of the larger system at work, which he keeps track of with the novel form. Dickens transposes his use of metaphor for mind into social metaphor because games capture both the cognition of the individual and the group. As a result, Dickens emphasizes systems as lived communities, not as abstract, ideological structures.

Dickens's approach compresses social systems into forms that look like they are run by a mastermind while multiplying the number of minds involved. In 1855 Dickens wrote to Austen Layard:

> There is nothing in the present time at once so galling and so alarming to me as the alienation of the people from their own public affairs. I have no difficulty in understanding it. They have had so little to do with the game through all these years of Parliamentary Reform, that they have sullenly laid down their cards, and

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taken to looking on. The players who are left at the table do not see beyond it, conceive that gain and loss and all the interest of the play are in their hands, and will never be wiser until they and the table and the lights and the money are all overturned together. ("Dear Layard, 10 Apr. 1885" 391-392)

The players at the table believe themselves to be masterminds, the students of scientific play. They are living in the blend, as Fauconnier and Turner like to say, blind to the compressed role they serve. The people, at least from Dickens's point of view, do not disappear; in fact, they remain capable of material interference. They may not understand the scientific play at the table, but they understand they are no longer involved in playing the game. Dickens has "no difficulty in understanding" the political state of his nation because he has compressed the nation to a gaming table without sitting down at the table himself. Like the Banquier, Dickens remains involved without becoming compromised by the game.

Dickens's political metaphor reflects the same implications of minor characterization that Alex Woloch finds in his novels. Woloch's seminal monograph, *The One vs. the Many* (2010), considers the "character-space" of the novel as a limited resource divided among protagonists and minor characters that functions as a primary vector of roundness and flatness. Dickens reminds us, Woloch argues, that minor characters always "belong to a larger group," mostly invisible to the wealthy and educated social classes (170). In terms of the metaphor of the political card table, above, the minor characters in most novels lay down their cards and merely look on; Dickens, however, unlike the major players at the table, cannot ignore his minor characters – or the vast base of the social pyramid such minor characters represent.

Woloch's assessment of Dickensian minorness captures Dickens's concern with ratios of social inequality as well as his self-awareness of what other players at the table

overlook.[112] As Raymond Williams put it in *The Country and the City*, Dickens's "power

of dramatizing a social and moral world in physical terms" (161) as the "unknown,

perhaps unknowable, sum of so many lives" exposes the "centre" of the city's "social

experience" (164). Woloch and Williams account for the "sum of so many lives"; but

when Dickens figures social systems as particular games he alters the formulation to the

sum of so many *minds*. Reflecting on the delay of the second reform bill in 1867,

Dickens suggested to his friend, Cerjat, that the "more intelligent part of the great

masses" were only "awaiting the better intellectual cultivation of numbers of their

fellows" ("My Dear Cerjat, New Year's Day 1867" 269). The templates of social

thinking and social minds offered by strategic games literature extends the sensitivity to

quantity identified by Woloch and Williams to more dynamic registers. In effect,

Woloch and Williams point out that Dickens recognized that pip cards outnumber face

cards – and pawns, power pieces – two to one; but in fact his analysis is qualitative as

well as quantitative. The models of community present in strategic games literature and

culture provide the templates of intellectual agency for changing the game: when "they

and the table and the lights and the money are all overturned together."

The publication of games literature created a culture of gameplay that emphasized

whist as a figure of representational magnitude. Scientific play praised whist as "a game

of such extensive combinations" (Matthews 63). In *The Handbook of Games* (1850),

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[112] In 1867 Dickens wrote to Cerjat: "As to the Reform question, it should have been, and
could have been, perfectly known to any honest man in England that the more intelligent
part of the great masses were deeply dissatisfied with the state of representation, but were
in a very moderate and patient condition, awaiting *the better intellectual cultivation of
numbers of their fellows*.... The perpetual taunt, 'Where are they [the great masses]?' has
called them out with the answer: 'Well then, if you must know, here we are'" ("My Dear
Cerjat, New Year's Day 1867" 269-270, my emphasis).

Henry Bohn marvels at the thought of "the entire population of the world... [dealing] packs of cards, Whist-fashion, never quitting their employment.... The possible combinations are almost beyond arithmetic, and absolutely out of the reach of words" (2). The relative infinity of whist does not intimidate Bohn. Instead, the endless variety and magnitude of the game inspire him with enthusiasm. Bohn knows he will never personally witness every variation at whist; but his awareness of whist's potential inspires him in every hand that does materialize. Recently, Elaine Auyoung has described how *Bleak House* repeatedly reveals the presence of "something more" only to reflexively consider its own constraints of limited representation ("Standing Outside" 182). The difference between the potentially unlimited "something more" of literary fantasy and the "something more" articulated by games literature is that the constraints of the game provide knowable, or at least, predictably imaginable, patterns of meaning, images, and configuration. The possible combinations of whist may be "out of the reach of words" but whenever a queen appears, players know she fills one of four suits.

Strategy manuals attracted a widespread, national readership and made that readership aware of its participation in a gaming community. Players enjoying an evening at scientific whist could feel confident that there were others, many others, elsewhere in England passing the time in the same way. Whist bibliographer Rudolf Rheinhardt recalls being inspired by old scorecards to publish his own book for the gaming community:

> Some three years ago, at a little Whist-party that I had the pleasure of attending, the score was kept on the back of a visiting-card, which was tucked partly under the marble slab of the table on which we were playing. When the rubber was finished, our hostess brought forth from under this same slab other cards containing the scores of many games at Whist that had been played at that table during the preceding winter. She explained to us whom the initials designated,

and had a number of items of interest to tell concerning the various Whist-parties and their play. We were delighted with it all, and there came to me the idea that a little book prepared to receive just such items as these… would be a welcome thing in every Whist-circle, to every Whist-player. (7)

The scorecards record the table's history of whist playing, a material memorial of other players, other hands, not fully known, but still present by their initials and scores. As a result, Rheinhardt can't help but think of "every Whist-circle, every Whist-player" in the present who might like to read his future publication. He knows an audience exists for his book. The inaugural issue of *Lasker's Chess Magazine* stated its purpose as bringing "correct information of all doings in the chess world, to cultivate a sound taste for the efficient and the beautiful in chess and to spread the love for chess among all peoples speaking the English tongue" (Lasker, "Editorial" 121). Whether chess or whist, specialist literature fostered this imagined community, in Benedict Anderson's sense of the term: "*imagined* because the members of even the smallest nation [or whist party] will never know most of their fellow members, meet them, or even hear of them, yet in the minds of each lives the image of their communion.... a deep, horizontal comradeship" (Anderson 6-7). Scientific whist created a sense of its gaming community as a "world," shifting national borders to game-based ones through its literature, language, and strategic thinking.

Dickens deploys this imagined community for the climax of *A Tale of Two Cities*. Sydney Carton persuades a virtual stranger, the spy, Barsad, to accommodate his scheme by speaking a shared language, that of "A Hand at Cards," as Dickens tellingly titles the chapter. Sydney lays his proposal on the table "in the tone of one who was really looking over a hand at cards" and asks Barsad to "look over" his own (*TTC* 153-154). Dickens does not specify whist in this instance but Sydney expects Barsad to play with some

science, asking Barsad, for instance, if he "followed" the hand to "understand [my] play" (154). When Barsad looks at his own "hand," he finds it "was a poorer hand than he suspected. Mr. Barsad saw losing cards in it that Sydney Carton knew nothing of" (154). Barsad does his best to bring in Mr. Lorry or Mr. Cruncher as a partner, but to no avail – this is yet another of Dickens's three-on-one games at cards. Significantly, the conversation foregrounds themes of identity, nationality, and disguise prominent throughout the novel while making clear that the language of a card game provides a common base of understanding. Sydney speaks the language of Barsad's "world" because he understands strategic play. Thus Dickens reifies the game of life metaphor: game-based thinking constitutes Barsad's world in the chaos of the French Revolution because it remains a relatively stable and viable form of social thinking.

Games literature not only reimagined whist as a figure of magnitude and sponsored a national audience for its publications but also represented itself as just such an imagined community. A good example comes from an article titled "Whistology" that Dickens edited for *All the Year Round*. The anonymous author proposes whist as a fitting "measure of mind... so comprehensive as to include the whole nation" and imagines that nation as an empire: "I'd be pleased to think that even in our own colonies, scattered as they are over the universe, a rubber could always be found; and that when I write these lines – it is now nearing midnight – men were scoring the honours at Newfoundland, and marking the trick in Aukland" ("Whistology" 480, 481). In Bath, Mr. Pickwick's table, after all, is just one of many: "the hum of many voices, and the sound of many feet, were perfectly bewildering…. hovering around the card-tables, were a vast number of queer old ladies and decrepid [sic] old gentlemen" (*PP* 477-478). This imagined community, a

vast number "out of the reach of words," at least in the constricted character-space of

Dickens's novel, was more minutely represented through game-related genres, such as

initialed score cards and matches recorded in newspapers or club journals (Bohn 2).

Games literature encouraged the kind of systemic model that we find in Dickens's

fiction: many minds populate complex systems, to the point of lost individuality, while, at

the same time, maintaining character individuality at the local level and as a kind of

caveat to systemic analysis.

The imagined gaming community placed individuals within various classes of

excellence or scientific genius without reducing any individual to a mere symbolic figure,

as readers may be apt to do with characters. Woloch notes that many scholars tend to

overload minor characters with symbolic significance as representatives of a class or

theme (126); and Dickens, it appears, acknowledges this approach. In the preface to

Nicholas Nickleby, Dickens reports that "Mr. Squeers is the representative of a class, and

not of an individual. Where imposture, ignorance, and brutal cupidity, are the stock in

trade of a small body of men, and one is described by these characteristics, all his fellows

will recognize something belonging to themselves, and each will have a misgiving that

the portrait is his own" (*NN* vii-viii). A more careful reading only suggests, however,

that Mr. Squeers does not bear the likeness of any one individual, without invalidating his

own personal character as a potential individual. In other words, Dickens makes the

point that many men may recognize themselves in Squeers without necessarily turning

Squeers into an allegorical figure. To do so would be a kind of logical fallacy, a false

conflation leading to the kind of symbolic interpretations Woloch rejects. Dickens does

not need to know any one Squeers as long as each schoolmaster recognizes himself in the

portrait. Squeers, then, though fictional, takes his place as one among many. This phenomenon – the individual character that represents but is not replaced by many – only occurs in the context of some larger system or "world." In the business world, Carker speaks to the role of the manager more broadly – he represents a class, as Hunt details – but, nevertheless, Carker remains Carker.

Dickens's carries this principle into his journalistic portrayal of the New Detective Police, especially in terms of their intellectual activity. The detective force is "always sharpening and being improved by practice, and always adapting itself to every variety of circumstances, and opposing itself to every new device that perverted ingenuity can invent…. For ever on the watch, with their wits stretched to the utmost, these officers have… set themselves against every novelty of trickery and dexterity that the combined imaginations of all the lawless rascals in England can devise" ("Detective" 261). "One and all" show "unusual intelligence," "with an air of keen observation and quick perception" enabled by their "good eyes" (248). The narrator, also adept at attentive observation, reads in their faces "traces more or less marked of habitually leading lives of strong mental excitement" (248). Having laid a foundation of great cognitive activity, Dickens compares the work of the detective police to "games of chess, played with live pieces" (261). That these new detectives set themselves against the "imaginations" of their foes emphasizes the mental engagement between detective and criminal and evokes the intellectual standardization promoted by scientific handbooks. Dickens implies that the work done by these detectives will be mental work and, therefore, that the system of crime they police must be a mind-filled one.

The resonance between Dickens's journalistic detectives and his fictional detective, Mr. Bucket of *Bleak House*, helps dispel the impression that *Bleak House* separates its masterminds, like Bucket, from its systems, like Chancery. At first glance, *Bleak House* appears divided between Palmer's systemic mind and Vermeule's mastermind; whereas Palmer abstracts the mind of an individual so that a large social unit, such as a town, has a mind of its own, Vermeule concentrates intellectual capacity so that all other registers, such as games, serve as tropes of the focal mastermind. On the one hand, Chancery has a life of its own. It is truly a social presence, what Palmer considers a mind, because of its influence in the world and on individuals. On the other hand, Inspector Bucket concentrates great cognitive activity in a single individual, the mastermind detective. Examining the games in the novel, however, reveals the many points of cognitive compromise between what at first glance appear to be the mindless and the Mind. After all, Mr. Bucket is a whist player and Chancery is "a great gaming system" (*BH* 265). At the same time, however, we must distinguish the two: Chancery's gaming lacks whist's science. The relationship between Mr. Bucket, the individual, and Chancery, the system, reflects Dickens's "poetics of misalignment" (Woloch 160), not just in terms of character-space or ideology but in the sense that these inputs do not share the expected generic space: the game of Chancery – gambling – differs from that of detection – whist. Different kinds of minds and characters play each, expressing different mental habits.

Dickens prioritizes Bucket's individualism as game-trained cognition: "From the expression of his face, he might be a famous Whist-player for a large stake – say a hundred guineas certain – with the game in his hand, but with a high reputation involved

in his playing his hand out to the last card, in a masterly way" (*BH* 816-817). Like a

whist-player, Bucket begins with very little information but slowly accumulates more

clues. A "first-rate player," after all, knows how to make such plays "at Whist (which,

considering that cards are unseen, and their positions only presumed, equals a masterly

move at chess)" (Coles 68). As Matthews predicts, quoted above, "where the sets are

really good players, before half the cards are played out, they are as well acquainted with

the material ones remaining in each other's hands as if they had seen them" (7-8). The

famous whist-player appears "superhuman" and "magical" to those outsiders who lack

the scientific training of the player (Miller 79). Bucket's masterly review of the game

exposes his scientific play, rather than undermining his rationalism. After all, "there's

not a move on the board that would surprise me," he assures Sir Leicester (*BH* 818).

And yet, Bucket admits that before having evidence of any kind, "it flashed upon

me, as I sat opposite to her at table and saw her with a knife in her hand, that she had

done it!" (*BH* 833). Unwittingly, Madame Hortense lets Bucket into the state of her

hand; their positions at the table make them ironic partners. David Ben-Merre argues that

Bucket's sudden recognition "forsakes the novel's epistemological system of verifiable

inductive reasoning and ends up substituting desire for truth" (61). Thus, Ben-Merre sees

Bleak House as substituting its earlier commitment to rationalism with an ideological

power play that puts readers on their guard, rather than seducing them. His

reconfiguration of D.A. Miller's earlier thesis provides a loophole that appreciates more

savvy readers without denying the ideological stakes of the novel: "The institutional

instrument – Bucket, for example – can still pin a murder on someone because of

personal desire (that's power), and centuries of national and regional abuses have shown

us just how it works. And yet such power can be questioned by the very same discursive structures that sustain it" (Ben-Merre 64).

Ben-Merre's positioning of Bucket's deduction as desire overlooks his characterization as a game-playing detective. Bucket's mind-reading abilities are those of the analyst from Poe's *Murders in the Rue Morgue*. Like Dupin, Bucket reads the faces of those around him. Thus, he breaks off his explanation of the case to address Madame Hortense because while he has discoursed he has read her mind: she plans to attempt escape through the window. "My dear, don't you give your mind to that again," he tells her (*BH* 833). His cognitive advantage, however, arises from his connections with whist, not innate genius. Like Poe's analyst, "first two or three rounds having been played, he is in full possession of the contents of each hand, and thenceforward puts down his cards with as absolute a precision of purpose as if the rest of the party had turned outward the faces of their own" (Poe 5). Bucket's intuition represents a habitual life of deduction, a sign that Bucket belongs to a set of really good players: before half of Madame Hortense's cards are played out, he is as well acquainted with those remaining in her hand as if he had seen them, to paraphrase Matthews. Bucket's dedication to scientific play gives him the advantage over Madame Hortense, who in turn defeats the traditional mastermind, the lawyer Tulkinghorn. Though "a hundred may study it to impose upon others," Dickens trusts Bucket to catch them before they do so (*Humours* 16).

In the Dickensian world, the individual does not symbolically stand for the system as a whole; instead, the individual represents one of the system's many parts. D.A. Miller's brilliant reading of *Bleak House* reads the individualism of Mr. Bucket as a sign

of the system, rather than the other way around. The "relatively friendly treatment that

Bleak House accords to the Detective Police is qualified by a number of reservations

about the nature and effects of its power. Most of these, like other aspects of the police,

are carried in the characterization of Inspector Bucket" (Miller 94). Bucket functions

symbolically as a repository of trace anxieties concerning the power of the Detective

Police. In a way, Miller reads Bucket as Vermeule reads games as tropes for

Machiavellian narratives. Both Miller and Vermeule read a concrete subject as pointing

to something else, as a means for the author to underline something else as the primary

target of inquiry.[113] By contrast, Dickens sets his fiction against Miller and Vermeule's

inductive abstraction. Instead, supplementing Bucket with the detectives from Dickens's

journalism – Inspector Field and Sergeant Witchem, among others – helpfully corrects

Bucket's status in *Bleak House* as an isolated individual or symbol. Dickens unmasks the

many minds, like Bucket's, that populate some larger system, like the Detective Police.

Contrary to our expectation, Dickens does not see these large social games as mindless

systems. Rather, Dickens works to uncover the game-type minds that work behind the

system and make it appear to be a self-running entity.

Though Dickens certainly describes systems like Chancery as beyond the control

of any individual, he nevertheless very carefully provides insight into the individuals

behind the scenes that help to make it that way, like Mr. Vholes. A "vole" means

winning every trick in a card game, such as Quadrille, Écarté, or Ombre, usually at great

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[113] Woloch situates his work against the trend in Dickens criticism to read minor
characters as thematic or symbolic repositories (126-127).

risk (OED). To "go the vole," for instance, means to risk everything for great reward.[114]

As Richard Carstone's financial adviser in the Chancery suit, Vholes takes all the tricks

for himself, leaving Richard with nothing. As we might expect, Vholes conducts his

Chancery business in the language of the gaming table: "Sir, Mr. C is playing for a

considerable stake, and cannot play without – need I say what? … to be honest with

you… money is the word. Now, sir, upon the chances of Mr. C's game I express to you

no opinion, no opinion…. But, for the onward play, more funds must be provided…" (*BH*

779-780). Taken out of context, Vholes might as well be describing a game of hazard as

a suit at law. The metaphors that Vholes uses to describe the system also contribute to

that system's character. Though Vholes uses the kind of generic terminology that might

lead people like the Nicklebys to think that Chancery is just a round game, Dickens

cleverly undermines the effort by naming Vholes with technical language that reveals

Chancery, like speculation, to be a very different kind of game. Similarly, in *The

Pickwick Papers*, when Mr. Pickwick goes to trial, the clerks at Dodson and Fogg's

describe ongoing cases as "a game" (*PP* 260). These characters with game-minds are the

players who make the systems they populate into games. Dickens draws our attention to

the minor characters who are indispensable for running large social games and who have

provided a collective character for the system. Their metaphors of choice reveal how

they think and how they perceive their work.

Alan Palmer does not discuss Chancery in his chapter on *Little Dorrit* in *Social

Minds* but he does briefly consider "large intermental units," like "the speculators, the

Marshalsea [Prison], and "Society"" (117). Palmer finds the representations of "joint

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[114] To "go the vole" also means to try a number of occupations without settling down,
which is how Richard Carstone ends up getting so involved in Chancery.

thought... relentlessly negative," characteristic of a world where individuals "lose their identity" (117).[115] When it comes to these groups, Palmer argues that individual actions "make more sense... when they are regarded as part of a joint action because people have become caught up in a group mind made up of wildness, reproach, and invective. They are behaving differently from the way in which they would behave as individuals because they have become part of this shared mind" (141). Palmer's repeated reference to the singular "mind" shared by the group reflects his commitment to reimagining the human mind as, at times, a collective entity but also exposes the extent to which his analysis obscures the many minds thinking in the composite. When Dickens figures social systems as games, however, he suggests an opposite vision, one of many social minds thinking according to prescribed templates, the most visible of which were found in handbooks for strategic whist.

Games literature imagined its reading community in ways that Dickens translated into his representation of social systems, from Chancery to the detective police to investing and trade. As such, his systems are not mindless institutions supported by "discursive structures," as we often tend to imagine them. Rather, he represents systems as far less abstract, populated by mindful individuals, social gamers, capable of playing and sustaining social games. For Dickens, the social mind plays whist, its intellectual partnership dependent in large part on social partnership. His counter-optimal blends

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[115] Williams observes the same effect in *Hard Times* but notes its ephemeral superficiality: "But whatever the adequacy of this uniform view as an image of a new and unnatural industrial order, it implicitly contradicted Dickens's own way of seeing people and their actions. Indeed it is tacitly dropped at every other point even in *Hard Times*" (Williams 153).

turn out the face of the social mind, revealing the intricate ways that mind struggles with

mind at both local and global scales.

VI.   Conclusion

The phrase "according to Hoyle," still current today, "means by the book," or,

according to the standard rules. It might be more historically accurate to say, "according

to Matthews," as those who followed Hoyle vastly expanded on the number of rules

regulating play; but the phrase "according to Hoyle" resonates more specifically with the

ways I've been unpacking gaming in Dickens. By the early nineteenth century, the

original "Hoyle" had become many "New Hoyles," as other authors, like Charles Jones,

borrowed his name for their games treatises. The man became a literature, a brand

known for standardization. Whist culture, therefore, followed a figure of metonymy

throughout the nineteenth century that repeatedly reinforced a sense of multiplication, as

every hand at whist, though unlike any other, nevertheless could represent countless

hands played elsewhere by players similarly devoted to scientific play. Dickens

incorporates this sense of the individual, as both a significant player in a single game and

as a meaningful piece of the larger collective, the gaming community, to national social

systems that typically challenge human comprehension. Dickens, according to Hoyle,

exposes the role played by social minds in social systems through templates of social

thinking in games.

As a popular genre, games literature formulated game-specific models for thinking that players also transposed across social and cultural domains. One advocate described whist as the "intelligent recreation" that most fully "repays in interest the trouble spent upon it; and there is certainly none in which the degree of perfection attained furnishes a better test of the mental powers. An eminent statesman once said that he would be content to choose a prime minister by his Whist-playing" (Pole, *Philosophy* 79). As a cognitive presentist, Dickens probes this contemporary formulation of the thinking mind: to what extent does cognitive training enter social domains? The question offers exciting possibility in the case of uncovering anonymous reservoirs of cognitive power in an overlooked Banquier at the gaming table but it also presents frightening realities in systems like Chancery. What seems promising for individuals proves corrupted at global levels by the increase in scale and practice. Additionally, Dickens points up the highly-contrived scenarios of social gaming. The mind can be known through systematic strategy but only if all the players play the same game in the same ways. Competing systems of strategy made this difficult to achieve even within the selective populations of the clubs, much less a possibility for unimpeded social cognition.

Reading contemporary games literature alongside Dickens's fiction and letters ultimately reveals his interest in the interior workings of the mind; suggests that although he failed to offer many practical solutions for the social problems he observed, he nevertheless did use games to grapple with the comprehension of the scale of those problems while at the same time perfecting a model of games through his fiction that could transfer the sense of both the individual and the collective group of games players from games culture to society. Scientific whist introduces social thinking into mental

practices normally understood as anti-social, such as deduction and observation. The context of strategic games literature exposes the extent to which we have limited mind-science to institutionally recognized fields, like psychology, and encourages literary critics to historicize the mind in alternative ways.

Edgeworth and Dickens both focus on the thinking processes of games as procedural configurations; in Edgeworth's case, as structure informing plot and, in Dickens's case, as a social network that coordinates the sum of many minds. Wilkie Collins, on the other hand, pursues the results produced by thinking with games. Like Edgeworth, he turns games on his own literary practice as mode of reader engagement. Rather than the form or structure of thinking with games, however, Collins deploys the metacognitive parameters imposed by games on thinking. He further develops thinking with games populated by characters, shrinking down the social gaming community to one within any given novel. His emphasis on games built on metacognitive thinking and distributed within character networks participates in rational sensation, a model of sensation differing from nervous sensation but one familiar in the gaming community. Collins earned his reputation as a "literary chess-player" by bringing gaming into his novels, both as a meeting place where mind struggles with mind and as a mode of sensation that reviewers and gamers alike recognized as contingent on strategic gameplay.

CHAPTER THREE: RATIONAL SENSATION: WILKIE COLLINS AS A "LITERARY CHESS-PLAYER"

Throughout Wilkie Collins's career, reviewers often compared his novels to puzzles, conundrums, riddles, and games: a reviewer for the *Nation* even likened *The Moonstone* to the game Button, in which children conceal a button and then guess who has it (Page, *Critical Heritage* 173). *The Moonstone*, this reviewer suggests, "is so like in its essential features to this child's-play, that it might very well have been suggested by it. Mr. Collins's art consists, in this particular case, in converting the button into a yellow diamond... in calling the players Hindoos, detective policemen, reformed thieves, noble ladies, and so on, and in thus more effectively distracting his reader's attention from the puzzle itself" (173-174). This reviewer goes so far as to claim that calling *The Moonstone* a novel "is an absurd misnomer" for "[there] is nothing new in Mr. Collins's stories, if the reader has ever read a book of puzzles" (174). In effect, this reviewer assigns *The Moonstone* to another category of literature altogether – games literature. This chapter takes up this reviewer's suggestion, demonstrating Collins's interest in dramatizing cognition, an interest shared by strategic gaming, and the ways Collins develops his interest as an immersive feature of his sensation fiction.

Button may be only "child's play," as the Nation noted; but other reviewers compared Collins's work to chess, the game that set the intellectual standard for

Victorians who considered it "worthy the most serious attention of THE LEGISLATOR, THE

PHILOSOPHER, and THE DIVINE" (Walker, *Easy* vi). In his obituary for Collins, M. W.

Townsend declares that *The Woman in White*, *No Name*, *The Moonstone*, and *Man and*

Wife show Collins "exactly as he was, – that is, as a literary chess-player of the first

force" (Page, *Critical Heritage* 249). For Townsend, "literary chess-player" summarizes,

and perhaps limits, Collins's identity as a writer – Collins "exactly as he was" – but also

distinguishes him from other authors. Interpreting Townsend's comment from a literary-

historical perspective suggests that he ranks Collins as a top sensation novelist; but from

the perspective of games literature, Townsend's remark indicates a different kind of

categorization. Like the comparison to Button, Townsend's comparison to chess blurs

the boundaries between popular genres of games and fiction; but, more specifically, the

comparison to chess suggests shared intellectual, and even cognitive, factors pertinent to

both literature and games. Townsend elaborates:

> [Collins was] a literary chess-player of the first force, with the power of carrying
> his plan right through the game and making every move tell. His method was to
> introduce a certain number of characters, set before them a well-defined object...
> and then bring on other characters to resist and counterplot their efforts. Each
> side makes moves, almost invariably well-considered and promising moves; the
> counter-moves are equally good; the interest goes on accumulating till the looker-
> on – the reader is always placed in that attitude – is rapt out of himself by strained
> attention; and then there is a sudden and totally unexpected mate. It is chess
> which is being played; and in the best of all the stories... *The Moonstone*, the
> pretence that it is anything else is openly discarded. (250)

It may be tempting to interpret Townsend's metaphor by familiar analogies between

players and characters, moves and events; but doing so passes over the nuances of his

insight that link Collins's fiction specifically to the kinds of thinking privileged by

scientific chess, thinking that commands such interest that spectators are "rapt out of

themselves by strained attention." The accumulated interest occurs not just because of the action of the plot or characters but most profoundly from the intellectual interest generated by the contrast between the on-lookers' strained attention and the sudden and unexpected mate.[116] Any author may surprise the reader by an ending – deus ex machina – but a literary chess-player, particularly one of the first force, does so literally aboveboard. Just as importantly, Townsend implies, the literary chess-player maximizes – "strains" – the attention of the reader.

Scholars of the popular literature of the 1860s, of course, know the familiar timeline, codified, as Jonathan Loesberg points out, almost immediately by contemporary reviewers: that *The Woman in White* (1860), *East Lynne* (1861), and *Lady Audley's Secret* (1862) catalyze a genre of literature predicated on sensational material, suspense, and nervous energy that now characterizes the decade in literary history (115). During the same time period, strategic whist and chess both saw significant changes in their play and popularity. In the years leading up to 1860, a "knot of young men at Cambridge" formed what became known as The Little Whist School "with a view to its [whist's] complete scientific investigation" (Pole, "Modern" 56). The Little Whist School emphasized empirical methods, notetaking, and investigating whist theory in practice. In 1861, the group's leader, Henry Jones, read an article in *Macmillan* recommending that examples of whist hands be published, following the current method of teaching chess ("Our Portrait Gallery" 191). Jones contacted the author, William Pole, and showed him the copious notebooks compiled by The Little Whist School containing hundreds of

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[116] Townsend's notion that Collins displays the "power of carrying his plan right through and making every move tell," echoes an article in the *Cornhill Magazine* on chess players of the "first class," those having "an intelligible plan for the campaign, and [holding] the thread of it in his hand until the end" (Breakey 590).

demonstrable hands ready for publication. Pole encouraged Jones to publish his findings

and, in 1862, Jones published the first edition of *The Laws and Principles of Whist* under

the pseudonym "Cavendish." With the immediate success of his treatise, Jones left his

practice as a surgeon to become a professional whist writer. At the end of the century,

Pole reflected that the updates and scientific consolidations "effected between 1860 and

1870... mark therein a distinct stage of progress, as establishing for the first time a

positive theoretical basis for the mode of play" (*Evolution* 73). From Hoyle onwards,

formulations for memory and simplified calculation inspired more advanced, thoughtful

play; but in the 1860s, whist theorists addressed the *form* of their instruction, realizing

that visual aids, played-out hands, and memory-rich language could improve play just as

much as the right technique. I am not suggesting, of course, a correlation between whist

literature and sensation fiction based solely on their overlapping historical timelines;

however, the historical contingencies between these two forms of popular literature do

provide ways of seeing each anew. Reading these two kinds of literature against each

other, games literature becomes sensational and sensation literature becomes cognitive, in

relation to modes of deliberate, rational thought emphasized by strategy handbooks.

Literary chess exercises a counter-intuitive kind of mental excitement. This is

distinct from D.A. Miller's paradigmatic account of nervous sensation, the "excitement

that seizes us" and "renders our reading bodies... theaters of neurasthenia" and

"adrenalin" while reading sensation literature (146).[117] The vibrant energy of nerves that

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[117] Nicholas Dames notes that sensation fiction particularly suited the physiological
interests of Victorian novel theory (*Physiology* 13). He highlights Alison Winter's "vivid
illustration of the physiological discourses surrounding the publication and reception of
Collins's *The Woman in White*" (footnote 24, p. 13). See Alison Winter, *Mesmerized:
Powers of Mind in Victorian Britain* pp. 322-329.

Miller describes seems far removed from the silence of whist and the studious quiet of

the chess club but Townsend's sense that in scientific chess "the interest goes on

accumulating till the looker-on… is rapt out of himself by strained attention," suggests

potential congruence between the nervous, unconscious, and irrational aspects of

sensation and the somewhat ordinary, even relatively slow processes of deductive,

rational thinking associated with the study of scientific gameplay and its literature. As

Patrick Brantlinger reminds us, sensation has always included "artifacts other than

novels," such as related advertisements, newspapers and penny press, dramatic sets and

melodrama (4). When we take seriously the ways that games literature provoked and

sustained a mid-century sensation, our inquiry ultimately returns to more fully explore

overlooked aspects of sensationalism and expands upon a neural model like Miller's to

include other varieties of mental activity. Together, nervous and rational sensation create

an overall cognitive sensation that coordinates diverse cognitive textures, sometimes

probing the nerves, sometimes logical, conscious thinking, in order to strain the reader's

attention to the utmost.

Despite his explicit denomination as a literary chess-player, Collins only rarely

incorporates scenes of game-playing or even specific game-related terms. Unlike

Dickens, who deploys a stunning variety of games with distinct cognitive implications,

Collins uses games more conventionally, as tropes foreshadowing the plot as games

between characters.[118] In *The Woman in White*, for example, Marian Holcombe

introduces herself to the narrator, Walter Hartright, as his legitimate "match" in games: "I

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[118] A good example which I do not discuss in this chapter would be Collins's *Hide and Seek* (1854), a novel about a blind girl who is separated and then recovered by her family. The game, hide and seek, has nothing to do with the novel except as a metaphor for its plot.

can match you at chess, backgammon, écarté, and (with the inevitable feminine drawbacks) even billiards as well," she claims (*WW* 35). This information foreshadows her boldness and resilience as she engages Count Fosco, the novel's evil genius. Collins underscores the terms of their confrontation when they play chess together: "For the first two games he [Count Fosco] politely allowed me [Marian] to conquer him; and then, *when he saw that I had found him out*, begged my pardon, and, at the third game, checkmated me in ten minutes" (231, my emphasis). The actual chess game matters less to Collins then the future plot it exposes; but it also foregrounds the kinds of insight both Fosco and Marian bring to bear upon later contests. Even though Marian loses this chess game quickly, she proves more evenly matched with Fosco in the novel's games because she sees what he sees *before* he sees that she sees. The point of interest here, in terms of character and plot, concerns the relative intelligence of Marian and Fosco – *who sees what when* and how such inference determines their interactions. Unlike Dickens, therefore, Collins does not overtly position himself in relation to the gaming community – his reviewers do so instead.

I read Townsend's comment, then, along the terms he suggests – how Collins created games in his texts for his characters and for his readers – but also along the terms of contemporary developments in strategic gaming. Rational thinking rarely solves the problems in games between characters the way it can in a game of chess or whist; nevertheless, rational thinking constitutes an important, often consequential, dynamic both in plot and sensation for Wilkie Collins.[119] In *The Serious Pleasures of Suspense*,

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[119] See Hennelly, "Reading" pp. 94-95. "From first to last," Lyn Pykett notes, "[Collins's] novels explore the multiplicity of factors which shape or motivate human actions" (165). In *Thinking Without Thinking* (retracted by the Johns Hopkins University

Caroline Levine argues that "plots structured entirely around the activity of guessing and testing" provide pleasure in "the experience of anxiety, the uneasy sense that the world may not conform to predictable outcomes" (46-47). Levine asks modern scholars of Victorian literature to reconsider the suspense plot as a figure of significant, meaningful delay, not just a means to a comfortable resolution.[120] Levine links the realist suspense plot to scientific methods, the cultivation of a "thorough-going skepticism to counter the powerful temptation to trust our own conjectures and inclinations" (199). I will extend Levine's argument through the science of strategy gaming, a science well-suited to metacognitive dimensions of sensation. The best nineteenth-century chess or whist players, such as Howard Staunton and Henry Jones, also authored games literature and invented new pedagogical methods for teaching the gaming community modes of strategic thinking necessary to more successful play. For Collins, literary chess involves managing the reader's attention in ways practiced by strategy literature so that the thinking behind the game surprises by its unexpected mates while being completely legible to readers. Collins makes thinking visible for readers through minute

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Press), Vanessa Ryan discusses the importance of unconscious action and the "failure and unpredictability of memory" to both early psychologists and Collins (32). Ryan showcases an instance of "unconscious cerebration" from *No Name's* Mrs. Lecount, noting that she "cannot voluntarily, through conscious efforts of her own, follow or reproduce the steps" of rational deduction (38). Mrs. Lecount cannot, perhaps, but Collins can; in fact, he continues to demonstrate that what appears to be an irrational intuition actually proves highly sensible. The unconscious, it seems, proves more rational, in some respects, than Mrs. Lecount. For more on Collins in the context of psychology and science, from phrenology and mesmerism to vivisection, see Lyn Pykett, *Wilkie Collins*, "Psychology and Science in Collins's Novels," pp. 165-191.

[120] Levine offers *The Moonstone* as a kind of test case (46-55). "Just as science gives a serious epistemological value to plotted suspense, then, suspense lends power to the scientific experiment" (51). For a discussion of Collins and Victorian theories of feeling and psychological delay, see Michael Tondre, "The Interval of Expectation": Delay, Delusion, and the Psychology of Suspense in *Armadale*," especially pp. 589-595.

explanations of rational processes and by integrating cognitive strategies into both plot and text, for characters and readers, respectively. Investigating what I call Collins's "rational sensation" balances out the critical perspective on Collins as an author who prioritizes unconscious play and shows why Victorian reviewers linked his fiction to actual games, not just modes of play.

I.   Rational Sensation

Both nervous and rational sensation engage the reader's attention but whereas nervous sensation courts subjective, embodied immersion, rational sensation exposes the strain of conscious deliberation. Since D.A. Miller's essay on *The Woman in White*, few would contest that for sensation, "modern nervousness... is as fundamental to this genre as its name" (107).[121] All characters, Miller writes, share the same nervous body, marked by familiar signs: "blood curdles, the heart beats violently, the breath comes short and thick, the flesh creeps, the cheeks lose their color" (109). Miller's nervous body incorporates the brain as a neural system and emphasizes the mind's unconscious dimensions, its reliance on "ungrounded connections" (115). By contrast, strategic games literature explores the mind's grounded connections and differentiates *strained attention* from the absorbed interest of current accounts that describe how sensation fiction works to "tantalize the reader" (Brantlinger 1). In chess, and, by extension,

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[121] This chapter was first published as an article: Miller, D. A. "Cage Aux Folles: Sensation and Gender in Wilkie Collins's *The Woman in White.*" *Representations*, no. 14, 1986, pp. 107–36. *JSTOR*, doi:10.2307/2928437.

literary chess, *strained attention* means focused attention, strained to reasonable, rational limits, not strained to the breaking point of insanity. Rather than overwhelming nervous energy, this kind of strain supports rational thinking, deduction, and memory, turning the reader into the on-looker of a chess contest. The strained attention of scientific play, therefore, abides by the measured, analytical process of strategic thinking but still produces sensational content. This perspective on sensation highlights the mental work involved in reading a sensation novel, the kind of mental work performed by characters and extended to the reader. Investigating literary chess exposes the counterpoint to Miller's nervous sensation, one surprisingly rational, analytical, but still capable of absorbing and straining the reader's attention due to its cognitive demands.

"Whistology," an anonymous article published, appropriately enough, just after an installment of *The Woman in White* in *All the Year Round*, describes the thrill of rational sensation as a direct effect of deductive reasoning. Whist, the author explains, "is a perfect illustration of the law of evidence": "Whatever be the card [played], the question of evidence is opened, and as speedily do you ask yourself, 'What does this imply?' ....
You perceive immediately the indication of strength in a certain colour, consequently, the likelihood of weakness in some other suit... and thus thinking, your imagination soars upward on the speculation of that strength and weakness" ("Whistology" 481-482). The passage revels in hyperbole, endowing the smallest of detections with glowing significance, testament to a rational mind at work. Second-person pronouns confer the success of mental achievement to the reader while quick, short phrases formally replicate the "speed" and immediacy of the player's deductions. The passage directs the reader through each step of the thinking process all the while congratulating the reader on her

sagacity. By making the "question of evidence" vibrant and legible, this author hopes to demonstrate the appeal of whist's rational sensation. Both whist and chess, though exercising different intellectual skills, invest in advertising the appeal of rational excitement supported by scientific play.[122]

Townsend singles out *No Name* (1862) as playing chess "of the most open kind" in part because its experimental form pursues the strained attention of rational sensation rather than the absorbed interest of a sensational Secret (Page, *Critical Heritage* 250). *No Name* diverges from Collins's earlier novels, as he alerts readers in his preface: "it will be seen that the narrative related in these pages has been constructed on a plan, which differs from the plan followed in my last novel.... The only Secret contained in this book, is revealed midway through the first volume.... my present design being to rouse the reader's interest in following the train of circumstances by which these foreseen events are brought about" (*NN* xxvii-xxviii). Collins literally stages this construction by dividing the novel into seven theatrical "scenes," each punctuated by epistolary sections titled, "Between the Scenes."[123] In scene one, two sisters discover their illegitimate birth, the secret "revealed midway through the first volume." The elder, Norah, accepts her fate and becomes a governess; the younger, Magdalen, more deeply wronged by the discovery, vows revenge and seeks recovery of their inheritance. Collins identifies this

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[122] The *Quarterly Review* asked its readers to remember that "Seven cards may be played 5040 different ways. Think, then, reader, what it must be, to analyse all the most likely variations in the conduct of so many [chess] pieces, seven moves deep on each side!" ("Chess" 93). The Reverend B.H. Nadal warned that "If all the time spent in studying the silly profundities, in threading the barren labyrinths of chess were devoted to the interests of souls, a grander, nobler problem might surely be worked out, and the devil, who plays for our life, be check-mated" (134).

[123] For more on *No Name* as a Victorian Theatrical Novel, see Lauren Chattman, "Actresses at Home and on Stage: Spectacular Domesticity and the Victorian Theatrical Novel."

"train of circumstances," Magdalen's schemes, as designed to "rouse the reader's interest" particularly in the cognitive act of "following" by strained attention. His unusual plan of construction prioritizes the strained attention of literary chess over the shocking interest in a sensational Secret. Rather than a "lack of suspense," *No Name* simply cultivates different kinds, especially those predicated on open play rather than hidden or opaque circumstances (Bolus-Reichert 23).[124]

Collins exhibits rational sensation by narrating the thinking pursued by Captain Wragge, the Dickensian, wily, scallywag mastermind of the story. Wragge stumbles upon a mystery: a printed handbill describing a fifty-pounds reward for information pertaining to the whereabouts of the missing Magdalen Vanstone. Wragge gathers some further intelligence, then turns to pace the Esplanade and "consider it [the handbill] in all its bearings":

> He tucked the umbrella under his arm, crossed his hands behind him, and lowered himself gently into the abyss of his own reflections. The order and propriety observable in the captain's shabby garments, accurately typified the order and propriety which distinguished the operations of the captain's mind. It was his habit to always see his way before him through a neat succession of alternatives – and so he saw it now. Three courses were open to him in connection with the remarkable discovery which he had just made. The first course was to do nothing in the matter at all. Inadmissible, on family grounds: equally inadmissible on pecuniary grounds: rejected accordingly. The second course was to deserve the

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[124] Christine Bolus-Reichert reads this preface as a commitment to a "lack of suspense... After the secret is revealed, *No Name* is not a novel of disclosure or discovery, but of inexorable movement toward a foreseen conclusion – with a single important exception [the stranger who meets and marries the fallen heroine]" (23). This kind of reading exposes the over-emphasis of today's critical model of sensation on the sensational secret, in this case, illegitimate birth. *No Name's* "foreseen conclusion" is only so in the sense that all chess games are such – there can only be one winner. The interest comes, in fact, from not knowing who will win and, especially in terms of scientific play, *how* the winner wins. This, in fact, seems to be Collins's point: not that *No Name* decreases in suspense or sensation, but, to the contrary, that the sensation will take a less recognized form, "in following the train of circumstances."

gratitude of the young lady's friends, rated at fifty pounds. The third course was by a timely warning, to deserve the gratitude of the young lady herself, rated – at an unknown figure. Between these two last alternatives, the wary Wragge hesitated.... 'I feel for this misguided girl,' mused the captain, solemnly strutting backwards and forwards by the lonely river-side. 'I always have looked upon her... in the light of a niece.' Where was the adopted relative at that moment? In other words, how was a young lady, in Magdalen's critical position, likely to while away the hours...? .... Not in the crowded thoroughfares, to begin with. Not viewing the objects of interest in the Minster, for it was now past the hour at which the cathedral could be seen. Was she in the waiting-room at the railway? She would hardly run that risk. Was she in one of the hotels? Doubtful, considering that she was entirely by herself. In a pastrycook's shop? Far more likely. Driving about in a cab? Possible, certainly; but no more. Loitering away the time in some quiet locality, out of doors? Likely enough.... The captain paused, *weighed the relative claims on his attention* of the quiet locality and the pastrycook's shop; and decided for the first of the two.... While the light lasted, the wise course was to use it in looking for her out of doors. Where? (*NN* 152-153, my emphasis)

Captain Wragge once more deduces a location from a "neat succession of alternatives" and within ten minutes confirms his reasoning process by finding Magdalen walking alone along the city walls.[125]

This passage lays a foundation for the kinds of rational suspense that Wragge ushers into the narrative. The rhythm of walking underscores the movements of Wragge's thoughts, his various arrivals, shortcuts, and dead-ends in reasoning. Syntactic syllepsis – Wragge tucked the umbrella, crossed his hands, and lowered himself into thought – lends a sense of physical motion to intellectual maneuvers. Focalization and moments of free indirect discourse simultaneously delay the narrative's recovery of

[125] In *Social Minds in the Novel*, Alan Palmer briefly mentions *No Name* as participating in external thought, much like a Dickens novel, for "There is hardly any direct report of internal thought in this novel, but there is a good deal of highly visible thinking" (166). In his attempts to eschew traditional forms of internal narration, Palmer's account, I would argue, does not pay enough attention to passages of free indirect discourse, or, perhaps more accurately in this case, passages where the narrator directly reports thoughts or thinking activity.

Magdalen and carry forward the momentum of Wragge's mental perambulations. Note how the system of "successive alternatives" concedes to the linearity of reading: were Wragge mapping his thoughts on paper, he might write out all three options before evaluating their potential; but here, Wragge rejects the first before proceeding, a process more literally rendered by its narrated form. Collins both describes and demonstrates Wragge's reasoning process as orderly, systematic, and conclusive. An omniscient narrator, like Collins, need not consider the Minster as does Wragge but doing so demonstrates the thoroughness of Wragge's deductions. Wragge interrogates potential by question and answer, pausing over each. When Wragge hesitates over which choice to make, he turns aside to a supplementary problem: Magdalen's whereabouts. Identifying and prioritizing his deductions highlights Wragge's intellectual ability to reason about his own reasoning. The key phrase, "weighed the relative claims on his attention," provides insight into Wragge's success. He quickly moves past unlikely possibilities – not the crowded thoroughfares, not the Minster – before circling back around to more promising suggestions – the pastrycook, the quiet locality. By pitching the comparison in terms of strained attention, Collins heightens the cognitive resonance of Wragge's mental activity. In other words, Wragge recognizes his own intellectual limits and knows how to best maximize limited cognitive resources. Any trial and error occurs within the confines of rational thought. That he successfully finds Magdalen in the city of York within the necessary time certainly belies some authorial contrivance; but by narrowing his chances, Wragge makes the more probabilistic choice and he does so in a fashion that assures the reader will actually follow, lowered with Wragge into the abyss of his reflections. Through Wragge, Collins simplifies the cognitive demands placed on the reader for the

task of locating Magdalen. Wragge's "order and propriety" organize his thoughts so that the reader understands, rationally, how he finds Magdalen. Following Wragge's deductions strains the reader's attention without overburdening her with the responsibility of choice.

In effect, the reader studies Wragge much as students of chess learn from studying games manuals. Chess commentaries, such as Howard Staunton's *Chess-player's Handbook* (1847) recorded illustrative games played by masters and provided instructive commentary. Staunton teaches the reader by playing through example games, move by move. Furthermore, he uses alternating type-face so that readers may first learn straightforward forms of attack and defense before returning to "the study of the many beautiful and suggestive variations which are given in the smaller letter" at his or her "leisure" (*Handbook* vi). Staunton lists out the first four moves in large print, followed by a possible variation in smaller type (see fig. 3.1). His commentary indicates possible alternatives and evaluates their strength. Wragge's methods parallel Staunton's in the sense that Wragge thinks through alternatives and entertains both sizes of type-face. He plays out both white and black in his mind and, like the sample game provided by Staunton, notes the points of variability throughout. As Staunton's breakdown reveals, "Black's game is hopeless" and Wragge determines Magdalen's whereabouts with a similar certainty. Like Staunton, Collins shows the reader *how the moves move through Wragge's focalization*; that is, the options and thinking that ultimately determine the game. Wragge, therefore, introduces the kind of intellectual activity under which, as Townsend put it, the reader becomes "rapt out of himself by strained attention."

Staunton, and other authors of chess manuals, expected nothing less from their own

readers.

GAME THE FIRST.

WHITE.	BLACK.
1. P. to K's 4th.	1. P. to K's 4th.
2. K's Kt. to B's 3rd.	2. P. to K. B's 3rd.*
3. Kt. takes K's P.	3. P. takes Kt.

After this capture of the Knight, Black's game is hopeless.
His best move is 3. Q. to K's 2nd, as will be shown here-
after.

4. Q. to K. R's 5th (ch.)	4. P. to K. Kt.'s 3rd.

This is his best move; if instead of it he play K. to his 2nd,
you obtain a speedy victory; thus,—

	4. K. to his 2nd.
5. Q. takes K's P. (ch.)	5. K. to B's 2nd.
6. B. to Q. B's 4th (ch.)	6. P. to Q's 4th (best)
7. B. takes Q's P. (ch.)	7. K. to Kt.'s 3rd.
8. P. to K. R's 4th.	8. K's B. to Q's 3rd.
9. P. to K. R's 5th (ch.)	9. K. to R's 3rd.
10. P. to Q's 4th (dis. ch.)	10. P. to K. Kt.'s 4th.
11. P. takes P. (in passing, dis. ch.)	11. K. takes P

And you give mate in two moves.

5. Q. takes K's P. (ch.)	5. Q. to K's 2nd.
6. Q. takes R.	6. K's Kt. to B's 3rd.

He might also play—

	6. Q. takes P. (ch.)
7. K. to Q's sq. (best)	7. P. to Q's 4th.
8. B. to Q. Kt.'s 5th (ch.)†	8. K. to Q's sq. (best)
9. R. to K's sq.	9. Q's B. to Kt.'s 5th (ch.)
10. P. to K. B's 3rd.	

And you win easily.

7. P. to Q's 4th (best)	7. Q. takes P. (ch.)
8. Q's B. to K's 3rd.	8. Q. takes Q. B's P.

He had better have returned with his Q. to K's 2nd again.

9. Q. takes Kt.	9. Q. takes Q. Kt.'s P.
10. K's B. to Q. B's 4th.	10. K's B. to Q. Kt.'s 5th (ch.)

Here, too, it would have been prudent for him to check with
the Q., and then bring her to the succour of the King.

* This move occurs in the old work of Damiano, who gives some inge-
nious variations on it.   Lopez, and later authors, have hence entitled it
" Damiano's Gambit."
† Better than taking the Kt. with Q., on account of Black's check,
with Q's B. at K. Kt.'s 5th, by which he would draw the game.

Figure 3.1 Howard Staunton's Chess-Player's Handbook *(1847) with alternating type-face: the first four moves are followed by a suggested 5-11 in smaller print, should the opponent not play according to the prediction made in 1-4.*

Rational sensation, therefore, indicates a "mind strung to the utmost tension" by

the cognitive demands of the task at hand ("Chess-Bores" 52); and, significantly, one that

can be shared and appreciated by a viewer or reader as revealed by narrating

consciousness. Characters like Wragge perform rational sensation along the lines of

Garrett Stewart's model of the conscripted reader. Watching a character think forms a

model of rational sensation for the reader. Such displays often occur at the beginning of

texts, laying a foundation for patterns of thinking to follow, as in *The Law and the Lady*

(1875). The narrator, Valeria, recounts her first meeting with her future husband as a

rational template that establishes the appropriate mental attitude for the reader. Walking

along a river bank, Valeria observes a man fishing:

> the angler followed the captured trout, now letting the line run out, and now
> winding it in again, in the difficult and delicate process of "playing" the fish.
> Along the bank I followed, to watch the contest of skill and cunning between the
> man and the trout…. Still following the stranger, with my eyes intently fixed on
> every movement of his rod and line, and with not so much as a chance fragment
> of attention to spare for the rough path along which I was walking, I stepped by
> chance on the loose overhanging earth at the edge of the bank, and fell into the
> stream in an instant. (*LAL* 14)

Collins stacks the layers of strained attention beginning first with Eustace, "playing the

fish," a "difficult and delicate process" that involves physical skill but also heightened

mental awareness. He then adds Valeria, intently fixed on rod and line. The sexual

imagery suggests the extent to which all of Valeria's capacities and desires focus on

Eustace and justifies her declaration of maximized cognitive resources. "Followed" –

repeated three times – condenses the physical and the mental as both Valeria and Eustace

literally follow and observe their targets. That double meaning then extends, Collins

implies, to the reader as the embodied act of following performed by the characters

becomes absorbed in mental imaging and concentration of reading.[126] As the on-looker,

literally "rapt out of herself by strained attention," Valeria attributes her fall to her lack of

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[126] As Mark M. Hennelly describes the "journey" of detection in *The Woman in White*,
readers "[travel] from the usual, initial motive of exciting escape into sensationalism and
melodrama, through a stage of purely intellectual exercise, to a final level of enlightened
entrapment" ("Reading" 88) – or, in this case, a fall into the river.

even "a chance fragment of attention" for the path she walks. Like Wragge, Valeria monitors her own resources of attention, at least in hindsight, and attributes her misstep to the quality of her concentration. Valeria's interest, in fact, rises from her previous study of the subject, an "enthusiasm for field sports" shared with her Uncle (*LAL* 14). She follows Eustace physically but also mentally because she understands why and how he plays the fish. Her example shows the reader how to understand and follow *her*, a skill that will be necessary later on as Valeria narrates her reinvestigation of her husband's trial for murder.

Angling might seem a strange exemplar for the kinds of cognitive demands made by chess; but Richard Penn's *Maxims and Hints on Angling, Chess, Shooting and Other Matters* suggests otherwise.[127] In Penn's view, chess and angling share cognitive requirements that also apply to real life situations. Mental faculties, such as "undivided attention," provide a common denominator between what appear to be diverse activities (Penn 79). Penn lists out 35 maxims for the angler in a manner reminiscent of Hoyle and Matthews. Each maxim suggests some advantageous tip to be carefully remembered and practiced that improves upon the "old school" of anglers (17). Turning to chess, Penn primarily focuses on the conduct that accompanies the game, including how to interact with on-lookers. His maxims assume that chess games will be watched by persons in addition to the players. He defends chess as a training ground for good character and mental qualities such as coping with "the necessity of abandoning... favourite schemes" once "they can be no longer pursued with safety," "[exercising] his judgment in cases of complicated difficulty," and "fixing his undivided attention on the business in which he is

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[127] This new edition (1842) was advertised at the head of the *Quarterly Review's* article on "Chess" (in 1849) but it was earlier printed in 1829.

engaged" (78-79). Collins trades on this categorical fluidity to move from literal games to games of literary chess constructed between characters and extended to readers.

The historical context of games literature showcases an important element of rational sensation missing from accounts that focus on nerves and bodily experience. The mental experience, even at its most analytical, provides skilled and knowledgeable players with the kinds of excitement and intellectual absorption associated with other forms of brain-based sensation. Strained attention, therefore, becomes a delicate kind of balance for sensation fiction, an element that must be pushed but not overwhelmed. Thinking of games in terms of moves maps easily onto the series of events that structure sensational plots; but rational sensation extends beyond plot to include the mental positioning of the reader and attunes the reader to habits of thinking germane to games manuals. Cognitive resonance between sensation fiction and games manuals, as related to strained attention, suggests an emerging awareness that mental resources might be managed and developed to greater extents *by means of such management*. In the following sections, I develop three components of rational sensation that help define Collins's distinction as a literary chess-player of the first force, especially as it relates to the management of cognitive demands. First, Collins priorities competition between intellectual masterminds as sensational exhibitions of analytical thinking. Secondly and thirdly, he incorporates two cognitive strategies, metacognitive directives and mnemonic devices, as rational means for managing the reader's strained attention.

II.   Following Masterminds

Nervous sensation depends on *not* knowing how the brain works; hence invisible

nerves make an excellent figure for its aims. By contrast, rational sensation examines the

mind in its conscious awareness, a trend Collins exemplifies in his masterminds. "Highly

Machiavellian narratives often feature somebody who sees farther than anybody else –

the mastermind," Blakey Vermeule writes; "The mastermind dominates other people

through analytical reflection" (86). In Collins's literary chess, however, the mastermind

may dominate other characters, but Collins grants readers privileged insight into how and

why analytical reflection succeeds or fails.[128] Collins literally makes thinking visible by

relying on tropes of vision as intellectual sight, tropes often rehearsed by the gaming

community. Vermeule's conception of the mastermind aligns more strongly with

nervous sensation because her masterminds perceive those plots otherwise invisible and

obscured from the reader. Her argument depends in part on an assumption, standard for

cognitive literary studies, that brains prefer a challenge; that, when it comes to neural

exercise, working harder *is* working smarter.[129] In some respects, games literature

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[128] Vermeule's discussion, by contrast, focuses on masterminds who see farther than
everybody else, including the reader, as her discussion of Edgar Allen Poe's "The
Purloined Letter," demonstrates.

[129] This assumption has driven some of the earliest and most foundational work in
cognitive literary studies. For example, in *Why We Read Fiction*, Lisa Zunshine
considers the "cognitive rewards of reading fiction," which "may mean that our
enjoyment of fiction is predicated – at least in part – upon our *awareness* of our 'trying
on' mental states *potentially available* to us but at a given moment *differing* from our
own" (17). She later compares reading detective literature to exercising muscles to
explain how this genre of literature "[trains]" the mind (124). Zunshine continues: "I am
using the far-from-perfect bodybuilding analogy on purpose to stress that just as not
everybody is an avid bodybuilder – though everybody has a body and is in principle able
to lift weights to train isolated muscles – so also not everybody is an avid detective-novel

supports this same assumption, promoting diligent study and dedicated practice; but, at the same time, strategy manuals recognized the amount of time a thorough course of preparation requires.[130] In effect, strategy literature did not take for granted the brain's readiness for difficult challenges and, especially throughout the 1860s, evolved pedagogy to better facilitate advanced gameplay. Collins, I will argue, pursues a hybrid approach: he both tests reader engagement with demands on attention but he also broadly supports those demands from within the text. Specifically, he alters Vermeule's formulaic mastermind, creating characters that deliver the "unexpected mate" while engaging in "play of the most open kind." As a result, Collins prioritizes following the mastermind as a kind of intellectual guide, one that both thinks for readers and with readers. By easing the cognitive burden of following the mastermind's game, Collins incorporates more complicated configurations of strategic play, drawing on and combining mental modes from both chess and whist, sometimes simultaneously.

Nervous sensation assumes that a mastermind's schemes generate sensation because they are hidden, as Vermeule suggests: "what [Machiavellian narratives] show is almost always less important than what they don't show. Machiavellian narratives suppress obvious tropes of reflection.... The figures of the deep game are sloughed off in favor of a deeper game, the deep truth of which is imageless.... games or puzzles... point the way to deeper registers of reflection that are eventually absorbed into the story" (95-

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reader" (124). She concludes "In this respect, detective narratives may be said to parasitize on our metarepresentational ability: they stimulate it without providing the kind of "educational" benefit that we still implicitly look for in what we read. Delight they do, but instruct they don't, at least not in the traditional sense of the word *instruction*" (125).

[130] "[We] say to the student, you must be convinced that you have something to learn" (Pole, *Philosophy* 80); but learn the elementary rules and "All the blindfold hap-hazard stumbling has disappeared; everything you do has now a clear meaning and object" (84).

96). Certainly, sensation condones ambushes of all kinds, the "unexpected mate" most of all; but the success of as sensational ambush may cause us to overlook how analytical, rational thinking contributes to sensation fiction. In fact, Collins overturns nearly all of Vermeule's specifications: he tells as much as he shows and does not suppress tropes of reflection or mental vision. In *The Woman in White*, for example, Walter Hartright stops to "[verify], at my leisure, the conclusions which I had hastily drawn in the earlier part of the day" (*WW* 504). The coffee-room of his hotel provides "a perfect solitude" and dusk's failing light limits further inquiries (504). "Left to reflect," Walter slowly revisits earlier hypotheses and, eventually, "the same mental process which had discovered the locality of the concealed crime, now lodged the register, also, in the vestry of Old Welmingham church" (505). Upon coming to this conclusion, however, nothing happens. Walter, presumably, goes to bed having formed his plans for the next day. We might expect the conventional obligations of sensation fiction to force Walter out into the night for a Gothic encounter in the decrepit church.[131] Instead, Collins inserts the narrative equivalent of a full-stop and allows Walter's ruminations to rest as independently as a complete sentence. Hennelly insightfully labels the reader-Walter composite an "armchair detective" ("Reading" 92). Here, quite to the contrary of the

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[131] This scene serves as a counterpoint to the most famous scene in the novel, when Walter first meets Anne, the woman in white, through a thrilling touch on his shoulder. Alison Winter discusses the novel as a kind of "experiment in mental influences and nervous stimulus in a more literal sense than readers might assume" (327). This was possible in part, she explains, because readers "shared a vocabulary and a framework for understanding the psychological and physiological phenomena that accompanied reading in general" (327). My argument supplements Winter's by suggesting that these same readers also shared a vocabulary and a framework for understanding thinking shaped by the practices and literature of the gaming community. Collins's novels experiment with rational, deliberate thinking and its representation as much as they do with "mental influences and nervous stimulus."

expectations of a Machiavellian narrative, Collins indulges in obvious tropes of reflection. What Walter shows matters *more* than what is *not* shown, such as the ruminations of Sir Percival Glyde.

Perhaps, one might argue, Walter only shields the reader from the true mastermind, thus fulfilling the objectives of a Machiavellian narrative. Certainly, were this Walter the timid artist of the opening chapters, such might be the case; but this Walter, bronzed and hardened by a stint of colonial adventuring, has developed into an opponent worthy of the novel's top mastermind, Count Fosco. Preparing for a final confrontation, Walter thinks through each step of his plan, in much the same manner as he does earlier, in the coffee-room of his hotel. Walter's open-handed exposition of the match situates him in the position of intellectual superior capable of producing, like Collins, the "sudden and unexpected mate."

Significantly, Walter's solitude converts his ruminations into a variety of blindfold play, a category of special honor in the chess world. The *Quarterly Review*, for example, considers playing blindfold – that is, without a board – an "intellectual phenomenon" that requires "great practice, and a thorough acquaintance with the board" ("Chess" 93-94). To play blindfold chess "thoroughly well – to play within a pawn or so of one's usual strength... demands further a peculiar natural gift, without which the great mental effort made produces but a lame and impotent conclusion" (94). The author relates anecdotes of blindfold play, each sensational: "La Bourdonnais, the most ingenious player of his day, whom it is said to *have killed*"; and Philidor, the French

master, who once emerged victorious in a "*triple contest at blindfold chess*" (94).[132]

Blindfold chess was also a phenomenon on display in the nineteenth century: Johannes

Zukertort, one of the best European chess players of the 1860s, 70s, and 80s, travelled

around Britain playing exhibition matches blindfold at chess clubs ("Great Chess"). He

created a sensation in Dublin where he played twelve simultaneous matches without

physically viewing the boards; newspapers made the Polish player a familiar figure in the

chess world and throughout Britain. Walter's description of his "blindfold" inquiries

(*WW* 519), therefore, means that he moves with uncertainty but also that he invites the

reader to participate in a rigorous intellectual exercise requiring "great practice" and

"peculiar natural gift." As Townsend remarks, in *The Woman in White*, "deliberate play

is less manifest, because all through one side plays blindfold" (Page, *Critical Heritage*

250).

In *No Name*, Collins pushes his openhanded treatment of rational thinking to an

extreme by removing all blindfolds. When Collins says, "it was [Wragge's] habit to see

his way before him through a neat succession of alternatives," he sounds a keynote that

echoes repeatedly throughout *No Name* and underscores vision as a trope for thinking

(*NN* 152). Magdalen, the younger sister, pursues her schemes for revenge and the return

of her fortune with the help of Captain Wragge. After a series of failures, Magdalen

realizes her only solution involves marrying the heir, her cousin, Noel Vanstone, a

miserly invalid. Unfortunately, a formidable caretaker watches over the vulnerable Noel:

Mrs. Lecount. Mrs. Lecount, determined to protect her own pecuniary interests in

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[132] Despite the concerted efforts of his opponents, Philidor "was never in the smallest
degree embarrassed" but played as if he could see the board and "showed not the smallest
fatigue after an exertion so extraordinary" (*QR*, "Chess" 94).

bequests from Noel, suspiciously counters the attempts by Captain Wragge to insert

Magdalen into Noel's affections. A series of well-contested confrontations between

Wragge and Lecount structure *No Name's* fourth "scene," the keystone of the novel, as

each out-maneuvers the other for control of Noel and his fortune. These four form the

"open" card party: Magdalen and Wragge partner against Lecount and Noel.

Throughout their contests, Wragge, Magdalen and Lecount each figure their

mental efforts in terms of foreseeing, or "seeing one's way." Wragge questions

Magdalen, "'You see your way? Of course, my dear girl, you see your way?' 'Yes,' she

said quickly. 'I see my way'" (*NN* 276). Outwitting means out-seeing, and the pressure

Collins places on this verb increases with its repetition. Wragge admits to Magdalen that

"'I can't see my way plainly to Mrs. Lecount's next move.... If I stop that

communication, I put an obstacle in her way at starting – or, as we say at cards, I force

her hand. Do you see the point?' Magdalen saw it plainly" (*NN* 319). Far from playing

out a certain plot, Wragge takes intermediary measures to stall Lecount. His non-action,

in fact, turns to some account as Lecount finds herself unable to detect a plot where none

exists. To borrow Wragge's phrasing, Lecount reveals the "trump-card in [her] hand"

and shortly thereafter, Wragge "now saw his way safely to the end of the enterprise"

(326, 329). As in any good game of whist, each hand evolves the amount of information

and strategy available to each partnership: "It will thus be seen what a constantly varying

demand is made on the attention and the skill of a player" (Pole, *Philosophy* 14). The

pacing of the game depends on who sees what and what there is to see.

Vision developed into a gameplay trope for both whist and chess as strategy

evolved during the nineteenth century. Hoyle directed players' attention to their own

hands but later authors advised "[Keeping] your eyes constantly fixed on the table; it is there the game is played, the battle fought" (Blyth 27). Good players, therefore, know where to direct their gaze and see what others do not so that literal vision translates into mental acuity. Matthews famously declares that "Where the sets are really good players, before half the cards are played out, they are as well acquainted with the material ones remaining in each other's hands as if they had seen them" (7-8). Penn reminds his readers that "When you receive the odds of a piece from a better player than yourself, remember he sees everything which you see, and probably much more.... Take all his pawns quietly, *if you can*, and see your way clearly before you attempt to check-mate him" (69-70). Seeing one's way provides a point of evaluation and commentary: "It is the foreseeing of this move, as part of the coup, which made Staunton's 28th move so good" (Beeby 22); "Bad move; not seeing till too late that he should play R Q R6" (26). Games literature provided the commentary and direction necessary to appreciate rational sensation: with study and understanding, "All the blindfold hap-hazard stumbling has disappeared; everything you do has now a clear meaning and object, and you are enabled to appreciate the play of a hand as no longer a mere jumble of chance events, but as a connected series of combinations guided by intelligence and design" (Pole, *Philosophy* 84).

Games literature evolved strategies for increasing its readers' mental vision and Collins turns his narration of consciousness to the same effect by directly reporting the running commentary of his masterminds' thoughts. Perhaps the best exemplar of this occurs when Captain Wragge and his arch nemesis Mrs. Lecount entertain themselves for an afternoon. Each knows the other knows the farce of their "easy and pleasant

conversation": "'I know you ma'am!' thought the captain" (*NN* 314). Mrs. Lecount, for

her part, knows the "rascal is playing with all his own cards under the table; and he will

win the game to a certainty if he sees my hand at starting" (309). Collins's narration is

"of the most open kind": direct thought report; or, to borrow Dorrit Cohn's appropriately

theatrical terminology, quoted monologue. The narration foregrounds their unspoken

thoughts as asides to the rapt audience while the actual conversation forms the

background of their encounter. Vermeule singles out free indirect discourse as peculiarly

suited to Machiavellian narratives because it "demands of the reader a signal critical

attention" (76); but here, Collins's choice of quoted monologue, suggests the cognitive

task lies in processing two conversations, one verbal, one mental, rather than interpretive

issues raised by free indirect discourse. More particularly, Collins only describes their

actual conversation in general terms: "they talked fluently on general subjects, on public

affairs, on local scenery..." (*NN* 314). He reserves priority of representation for the

dialogue of their thoughts, spoken in mind but heard only by the reader. Collins

deliberately inverts the model of the mastermind wrapped up in her own skull, turning

out the minds of Lecount and Wragge for the reader just like any good whist player.

Though Wragge and Lecount lead the action throughout this scene, Magdalen and

Noel also contribute as their relative partners. Like a good card sharper, Wragge

establishes a "code of signals" to communicate with his partner, Magdalen (*NN* 294).

Noel's stupidity puts Mrs. Lecount at disadvantage from the first; his cunning only helps

Captain Wragge. Collins amplifies suspense when his characters reach points of mental

blindness which he balances between the players. First Wragge: "All human penetration

has its limits. Accurately as Captain Wragge had seen his way hitherto, even his sharp

insight was now at fault. He finished his cigar with the mortifying conviction that he was totally unprepared for Mrs. Lecount's next proceeding" (*NN* 318). Then Lecount: "Look anxiously as Mrs. Lecount might along the course which she had hitherto followed, she failed to see her way through the accumulated obstacles which now barred her advance" (356). Collins draws embodied parallels between their mental stalemate when Wragge "established himself, on watch for events at Sea-View, precisely as Mrs. Lecount had established herself, on the watch for events at North Shingles" (384). The phonetic pun on *See*-View again hyperbolically underscores the position of characters who physically enact their mental activity, imaging in their own bodies and watchful supervision the analytical power applied from within. In this way, suspense arises not only from the actions or plot taken by characters but also from their mental processing, insights or blindness.

Collins changes the terms of the game played between Wragge and Lecount, however, by introducing elements of partnership between Wragge and Magdalen. In effect, he converts a more straightforward chess match into a hybrid game of whist-chess. The wily Captain Wragge thinks to himself in terms of whist and Collins reports his thoughts directly: "I mark the trick, ma'am!.... The trump card in your hand is a sight of my niece; and I'll take care you don't play it!" (*NN* 326). His maneuvers often take forms familiar from whist, working in groups of four further subdivided into partnerships of two. His antagonist, Mrs. Lecount, however, thinks in terms of chess. While Wragge manipulates the cards, Mrs. Lecount prepares a "Check-mate for [Captain Wragge]!" and considers the "battle... over – the game is played out" (383). Neither explicitly play whist or chess in the novel but their evident knowledge of each game shapes the social game

between them. Collins increases the dynamic forms of cognitive play in the novel by drawing on and engaging together different strategic games to form a new, hybrid contest between his gamers.

During the 1860s, whist strategy emphasized the "advantage of cooperation" more than ever before (Pole, *Philosophy* 18). Pole considered playing as one, the "*combination of the hands*," the primary objective for whist partners: "The modern game aims at carrying out this principle to the furthest extent possible. It forbids the player to consider his own hand apart from that of his partner, commanding him to treat both in strict union, and to make every step conducive to the joint interests of the pair" (19). The revised system claimed to make good on Matthews's ideal that players would know their partner's hands by observing his or her style of play. In a very real sense, then, it promised direct access to the mind of one's partner and shifted the chess-based model of the mastermind to a distributed mind shared by partners at whist. Townsend's aptly named "looker-on" points up this double emphasis on mental vision as insight, further joining the abilities of the mastermind to those of the reader as of a teacher to a student.

Though Collins implements the ideals of legible thinking into his rational sensation he does not always follow its basic principles of cooperation. Writing in his diary, Wragge once again "lowers himself" into his thoughts and weighs his options: "I am the man to see my way through a neat succession of alternatives; and here they are," he reminds us in his own voice (*NN* 200). Readers may recall yet another similar passage when Wragge successfully sees his way to making money off Magdalen; but this time, his confidence leads to oversight: "I AM SWINDLED!" – and by his own partner, Magdalen (204). When Wragge engages Lecount, therefore, readers know that his

analytical deliberation, powerful though it may be, can be compromised and that without any forewarning, especially from within his own ranks. By investing each of the four players – Wragge, Magdalen, Lecount, Noel – with overriding self-interest and showing each partnership willing to deceive and undermine from within, Collins maintains the height of suspense. Neither partnership seems guaranteed to perform their best, yet both succeed in several taking several tricks. The lack of confidence, cooperation, and "strict union" imposed by Pole on modern whist brings the interpersonal dynamics of chess to bear on the forms of whist. Literary strategies for direct narration allow Collins to maintain open minds without always guaranteeing stable partnerships so that his rational sensation contributes to his nervous sensation.

Collins compromises the success of deliberate, rational thinking frequently in his novels; but he does not do so consistently. Otherwise, readers could always mistrust conscious thought. Instead, Collins keep rational thought in play as a sometimes reliable, always fascinating display of cognitive function. The sensation of reading one of his novels includes the sensation of seeing minds at work and being amazed, not just by their mysterious, surprising intuitions, but also by their everyday, conscious thinking. Unsurprisingly, reviewers frequently accorded Collins status as a mastermind. The *Morning Post* called *Hide and Seek* (1854) the "matured work of a master mind" (Page, *Critical Heritage* 60). *Train* assured readers that Collins "never enters upon a story until the plot, in all its ramifications and bearings, has been thoroughly weighed and digested in his own mind; and also, that when once he has set to work, his original intention is never departed from" (Page, *Critical Heritage* 67). Another predicted of *The Woman in White*, "not a chance success or caprice of genius," that "the author has been long

engaged in preparatory studies, and that the work in question is really the elaborate result of years of labour" (Page, *Critical Heritage* 116).[133] Insofar as *The Woman in White* or *Hide and Seek* might be considered "highly Machiavellian narratives," according to reviewers, these novels feature *Collins* as the "one who sees farther than anybody else." With his author's privilege in mind, therefore, the rest of this chapter will unpack two cognitively specific strategies familiar to gaming that guide the reader's thinking: metacognitive directives and mnemonic devices.

III.   Metacognitive Directives

Collins's most capable thinkers exhibit *metacognitive* traits, thinking about thinking in the terminology of thinking. Metacognitive strategies support the thinking carried out by these rational thinkers; but, as modern scientists have found, metacognition proves cognitively expensive. Users practice metacognition on simpler tasks and develop its skills over long periods of time. Collins had no knowledge of metacognition as such, its study only developed in the late twentieth century; but his use of metacognitive strategies participates in highly-directive, learning-based models current in contemporary games literature. Successful strategy handbooks recognized the amount of support required by strained attention and adjusted their texts, particularly the form of their texts, to meet this need. Similarly, the metacognitive impulses in Collins's novels often

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[133] According to William Baker, these reviewers were correct. An analysis of *No Name's* manuscript, for instance, shows that Collins carefully planned the events of his novel but made many extensive changes in wording and passages. See William Baker, "The Manuscript of Wilkie Collins's *No Name*."

simplify the reader's strained attention in order to enable a more productive distribution of cognitive resources.

Interest in metacognition first arose in the 1970s as investigations into *metamemory*: how knowledge and language about memory impacted its performance. Eventually, scientists expanded the study of metamemory to *metacognition*, including all aspects of thinking about thinking: "the concept has been broadly and rather loosely defined as any knowledge or cognitive activity that takes as its object, or regulates, any aspect of any cognitive enterprise" (Schneider 55).[134] In scientific usage, "meta" indicates a structural hierarchy of command. If cognition orders or acts on human activity, for instance, metacognition orders or acts on cognition. Metacognitive studies seek to better understand cognition through self-reflexive approaches. For instance, to learn more about how memory functions, scientists probe how memory can be manipulated, trained, and educated then infer from such metadata how memory functions. The classroom, especially the teacher-student dynamic, provides a setting for many metacognitive studies because the learning process foregrounds the kinds of behaviors and processes meant to act on cognitive function; that is, metacognitive processes applied to improve student learning.[135] The pedagogical aspects of metacognition connect directly to the styles of gaming strategy for chess in the nineteenth century and whist in the 1860s. In an effort to better act on player cognition, Jones and Pole revised how players learned whist by following metacognitive parameters. Collins's rational

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[134] For more on the history of metacognitive studies, see Wolfgang Schneider, "Metacognition and Memory Development in Childhood and Adolescence" in *Metacognition, Strategy Use, and Instruction*, pp. 54-81.

[135] See Peter Orstein, et. al, "Teachers' 'Mnemonic Style' and the Development of Skilled Memory" in *Metacognition, Strategy Use, and Instruction*, pp. 23-53.

sensation, therefore participates in metacognitive discourses developed by the pedagogical advances of gaming literature.

Whereas conventional accounts of sensation focus on the hidden, opaque, illegible aspects of the genre, literary chess emphasizes open, direct legibility because it makes explicit how thought processes work, a trend Collins pushes to metacognitive extremes. Here, I will explore one metacognitive dimension – using questions – across several novels before turning to a late novel, *The Law and the Lady* (1875). *Woman in White's* Walter Hartright quickly introduces the reader to a few varieties of questions:

- Philosophical: "Are we, I wonder, quite such genuine boys and girls now as our seniors were, in their time? Has the great advance in education taken rather too long a stride...?" (*WW* 10).

- Narrative: "Had the forlorn creature come to any harm? ....Where had she stopped the cab? What had become of her now? Had she been traced and captured by the men in the chaise?" (29).

- Rhetorical: "How can I describe her? How can I separate her from my own sensations, and from all that has happened in the later time? How can I see her again as she looked...?" (48).

- Metanarrative: "Am I trifling, here, with the necessities of my task? am I looking forward to a happier time which my narrative has not yet reached? Yes" (490).

In the first-person narration of *Woman in White*, questions convey hyper-cognitive activity by foregrounding the thought-processes of the narrator. They are, in this way, implicitly metacognitive in that questions recall the uncertainty of the story's past in a narrative present while, at the same time, re-performing the narrator's mental assessment. Third-person narration amplifies the self-reflexive aspects of questions and addresses the reader's metacognitive relationship to the text by asking the reader to perform narrative-based tasks of reflection and foresight. Narrated questions directly address the reader, regardless of point of view. The frequent refrain "What did it mean?" reverberates

throughout *No Name*, *Armadale*, and into *The Moonstone* and *The Law and the Lady* even though they are in the third and first person, respectively.

Critics have long recognized the central role played by questions for sensation fiction without acknowledging the extent to which those questions control and direct readers. Brantlinger's account of the sensation novel turns on the way sensation handles the question mark: "The forthright declarative statements of realistic fiction are, in a sense, now punctuated by question marks" (Brantlinger 2). Brantlinger's comparison between the "forthright" full-stop of realism and the question mark of sensation suggests that sensation fiction favors the question mark for its ability to usher uncertainty, openness and doubt into a previously self-confident storyworld. Questions, in Brantlinger's assessment, invite the reader to wonder and, therefore, contribute to the uncertainty and lack of resolution that marks one pleasure of nervous sensation.

Collins, we might say, punctuates his fiction with question marks *literally*; but his literal questions function at odds with the reading of openness and doubt Brantlinger offers.[136] Collins rarely lets a question rest unanswered and his questions often constrain potential brainstorming; in fact, their apparent openness only enables distinct foreclosures. Take, for example, "What does it mean?" This question sounds like a genuine, open-ended question; and, if readers were to pause, they could participate in the

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[136] Describing Collins specifically, instead of sensation fiction in general as Brantlinger does, Janice Allan writes that "the lure of meaning-like desire itself draws us on but is destined to remain unfulfilled; endlessly circulating in the liminal space between perceived oppositions and, in the process, disrupting established norms and boundaries.... the sensational impact of Collins's novels may, in part, be traced back to such liminal qualities" (251). For Allan, the liminality in language ensures "instability of meaning" (253). Her reading echoes the well-known formula of sensation fiction as the shadowy counterpart to realism's "forthright declarative statements."

kind of speculation Brantlinger expects. In *The Moonstone*, however, narrators ask

"What does it mean?" only to offer an immediate answer. Gabriel Betteredge sees Miss

Rachel "in a rage one moment, in tears the next! What did it mean? I told the

Superintendent it meant that Miss Rachel's temper was upset by the loss of her jewel" (*M*

86). "What did it mean?": Mr. Bruff briefly allows the question to stand but, "unequal to

grapple with the difficulty," continues to his dressing room "little suspecting that the way

to my dressing room, and the way to discovery, meant, on this particular occasion, one

and the same thing" (278). Miss Clack pushes this trend to a humorous extreme: "'What

does it mean?'.... The inevitable explanation followed. No! Let me be scrupulously

particular. Sal volatile and water followed.... The explanation came next" (197). "What

did I want?" Gabriel Betteredge asks the reader; "I didn't tell him [Franklin Blake]; but

I'll tell *you*, in confidence" (34). Questions, even the most apparently open-ended, still

invite the "forthright declarations" Brantlinger associates with realistic fiction.

Of course, Collins often uses these "answers" to demonstrate that the question

may only be partly, temporarily, or even falsely answered. Betteredge, for instance,

wants an easy, obvious solution to Rachel's emotional moodiness and, as we later find

out, his answer is wrong; but in third person narratives we cannot so easily attribute

foreclosure to misguided characters. In *No Name*, for example, we find Collins

participating in the same patterns of foreclosure before any characters arrive on the set:

"Who were the sleepers hidden in the upper regions? Let the house reveal its own

secrets; and... let the sleepers disclose themselves" (*NN* 3). "Was the secret, thus far

hidden impenetrably, hidden for ever [sic]? Nothing in this world is hidden forever"

(25). Collins asks leading questions: "Magdalen! It was a strange name to have given

her?" (9); questions based around concise alternatives: "What did it mean? A false statement...? Or a second mystery...?" (20); and, more often than not, yes or no questions: "Whom did it affect? ....What did it mean? Did it mean Mr. Vanstone died without leaving a will?" (88). Even philosophical questions, apparently open, can be literally answered with a simple yes or no: "Does there exist in every human being... an inward, invisible disposition, which is part of ourselves; which education may indirectly modify, but can never hope to change?" (115-116). The question wavers between yes and no, tugged towards yes by Miss Garth's anxious fear of inevitable nature but pushed towards no by rhetorically excessive language like "every" and "never"; but, apart from this hesitation, the question opens no third alternative. It lacks the imagination to see beyond oppositional poles. Collins's partisan questions force readers to choose arbitrary sides; or, at least, allows readers to remain comfortably perched in binary consciousness, avoiding the deconstructive activity Brantlinger claims for sensation fiction. Metacognitive foreclosure suggests that Collins actually avoids, to some extent, straining his reader's attention with interpretive ambiguity.

Recognizing the rhetorical tendencies within Collins's own postures of ambiguity should cause literary scholars to reflect on the allowances made for Collins, especially in terms of deconstruction. Turning from his fiction to an essay on art criticism, "To Think, or Be Thought For?" – a title, of course, very much invested with the familiar binary form used in his novels – highlights the striking similarity between a purposefully rhetorical argument and fiction. Collins wants viewers to – but this can be guessed from the verb construction of the title – think for themselves: "Does a really good picture want you to be a judge? Does it want you to have anything but eyes in your head, and the

undisturbed possession of your senses? Is there any other branch of intellectual art which

has such a direct appeal, by the very nature of it, to every sane human being as the art of

painting?" ("To Think" 212). Collins, in fact, shifts seamlessly from his own claimed

territory – viewer as critic or judge – to a statement about the "direct appeal" of painting

to all sane persons; Collins gracefully leaves madness for any dissenters. Collins, at

least, makes no pretense of his agenda and makes no plea for ambiguity. Typical

readings of Collins's novels, however, often make the opposite case: that parody, play,

subversion, impersonation, and ambivalence form the heart of his fictional practice.[137]

Sundeep Bisla's article on the subversion of marriage vows in *No Name* closes with a

"series of questions" only to offer a very Collins-inspired "resounding No" in answer

(Bisla 14). Even though he states that with Collins we can "never be sure" (16), Bisla

seems very sure himself. Considering Collins as a player of literary chess and,

furthermore, recognizing how he deploys metacognitive parameters in his novels,

reminds us of the ways deconstruction and postmodern readings overvalue play as an

open-ended, eternal figure. By contrast, reading for metacognitive parameters in

Collins's novels uncovers the ways that playing literary chess depends upon just the

opposite: highly directed management of the reader's already strained attention.

The ways that Collins's questions foreclose or direct thought may not exemplify

post-structuralist ideals of play but they do participate in metacognitive parameters.

Studies have shown that metacognition requires more reductive circumstances in order to

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[137] See Allan, quoted above in footnote 136. Sundeep Bisla argues that "In *No Name*,
Collins shows the representation of "truth"... to always already have been based on
pretense" (Bisla 9). Bisla's reading elaborates Mark Ford's introduction to the Penguin
edition, which he quotes twice: "a highly unsettling novel... one of Victorian fiction's
sharpest, most wide-ranging critiques of the society's prevailing codes and structures, and
the moral values that supposedly underpin them" (*NN* xvi).

become engaged. Studies in developmental psychology have linked metacognitive

language used in the classroom to increased memory skills in children. Developmental

psychologists Peter Ornstein, Jennie Grammer, and Jennifer Coffman differentiate

between high and low mnemonic styles in classroom environments. Their investigation

starts from research that has established improved memory with age and deliberate

memory strategies (Ornstein 25-26). Older children and adults more easily assimilated

instructions to remember, thereby leading researchers to wonder where and how the test

subjects learned to follow such directions, especially memory-related talk.[138] The study

found the increased metacognitive language used by the teacher increased the student's

"knowledge about memory processes and the demands of various tasks that require

remembering" (30). Ornstein, Grammer, and Coffman distinguished five components of

mnemonic style in the teachers they observed including strategy suggestions,

metacognitive questions, and organizational techniques, such as requesting recall while

providing additional help in the recall task (38). "High mnemonic teachers" used more

"memory-relevant language" than low-mnemonic teachers and their students spent more

time using memory such as association, categorization, object talk, and visual

examination (39, 42). Games literature ranks as highly mnemonic because its maxims

and rules deploy memory-relevant language: "bear in mind," "pay attention," (Pole,

Philosophy 88); "mentally name the best card of the suit still unplayed. This is a great

assistance to memory" (Blyth 26); "Be sure to remember the trump card," "you must

remember," "bear this in your mind" (Baldwin 43). All these phrases perform

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[138] Study of the impact of memory language: children in the experiment group received
an "elaborated demonstration of these strategies that included explanations of why each
would be helpful" (Ornstein 32).

metacognitive functions by explicitly articulating the mental activity involved, even to the point of commanding it from readers.

Collins uses his prefatory notices to set the metacognitive stage for the novel to follow. Before *The Law and the Lady*, for instance, he instructs the reader with memory-rich language, such as requests to "bear in mind" and commands "to remember" (*LAL* "Note"). Furthermore, Collins provides justifications that wrap his memory-relevant language in explanatory material, such as reminding readers that the "truths" of the preface "occasionally escape your memory when you are reading a work of fiction" and concluding that "[having] said these few words, I have said all that seems to be necessary." Collins educates his readers by fortifying their weak memories. He lists the forgotten truths – firstly, secondly, thirdly and lastly – in a "neat succession," marking each off with a parenthetical cue for easier assimilation and, he hopes, remembrance.

Valeria Macallan narrates *The Law and the Lady* using questions rhetorically familiar from Collins's other novels, questions offering restricted alternatives, prompting yes and no, and providing immediate if unsatisfying answers. When it comes to her investigation, Valeria applies questions to the minutiae of inquiry. She overcomes the hesitations of Major Fitz-David by asking him yes and no questions in a game of hot-and-cold hide and seek. Janice Allan describes Valeria's process as "frenzied movement" (254); but the text emphasizes Valeria's "calmness" (*LAL* 76). Systematically, Valeria searches the library, beginning with the card-tables and describing their contents in detail, even though these objects have no direct bearing on the search. Her lengthy description of nonessential objects reflects the time-consuming labor her search entails. Indeed, other objects in the room "occupied a much longer time" with the same result (78).

Again and again, Valeria turns up potentially meaningful items only to arrive nowhere. The effort proves tiring and frustrating: "I had thoroughly searched everything that had presented itself to my notice" (87). Her slow, methodical search tests cognitive load and the determination of salience. Valeria's search suggests a revaluation of the speed of sensation along Tondre's apropos comment that "Recent criticism on the sensation novel...has seized upon the trope of textual speed" (585). Her questions follow the slower pace of deliberate thought, not the "frenzied" rapidity of nerves, because as metacognitive tools, her questions ease the cognitive burdens presented by the labor-intensive tasks of her investigation.[139]

Jenny Bourne Taylor notes that Collins's later novels "seem to be concerned not with creating a range of possible meanings, but with narrowing meanings down, although this still includes parody and play" (211). For many literary scholars, a tendency towards closedness or foreclosure often indicates an underlying agenda, perhaps ideology. In any case, "narrowing meaning" runs counter to much that literary criticism has come to value, especially in its postmodern paradigms. Taylor's caveat, that Collins "still includes parody and play," functions as a kind of defense or redemptive note for later novels that have otherwise declined in sophistication. Scientists, however, have found that these

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[139] One of the problems facing scientists of metacognition concerns how to distinguish it from normal cognition. Newell (1990) suggested thinking about cognition in terms of time and proposed "[assigning] a time band to each level" of thought (Lories 3). The "social band" of thinking requires the most time, anywhere from days to months; tasks within the "rational band" might consume one minute to hours; the "cognitive band" includes micro-tasks and quick deliberations lasting up to ten seconds; and, finally, the "biological band," composed of neural circuits, performs its tasks in fractions of seconds. From this model, one might say that "nervous sensation" occurs in the biological band while "rational sensation" occurs in the rational and sometimes social bands. For more on the relationship between metacognition and other kinds of cognition, see Guy Lories, "From Social Cognition to Metacognition" in *Metacognition: Cognitive and Social Dimensions* pp. 1-15.

conditions prove necessary for the use and development of metacognitive strategies. Researchers found that third graders used metacognitive strategies on easier rather than more difficult tasks. It seems that adding metacognitive parameters requires a portion of cognitive load and therefore it proved "easier for third graders to rehearse several items together when the effort required to carry out the task is reduced" (Ornstein 27).[140] Eventually, metacognitive strategies can be applied to more difficult tasks; Collins's highly mnemonic and directive strategies, therefore, speaks to his sense of asking his readers to do something new with a long-term goal of increasing cognitive acuity.

Valeria's metacognitive strength, however, also proves to be her point of weakness. When Miserimus Dexter deceives her to protect the secret of the first wife's suicide, his own metacognitive awareness lends believability to his account. Dexter assures Valeria that "I got back to my room and thought it out quietly. Where could she be? Certainly *in* the house, somewhere. Where? I had made sure of the other rooms.... She could only be in Mrs. Macallan's room" (*LAL* 256). Helped along by her jealousy of Mrs. Beauly, Valeria trusts Dexter's conclusions because she sees each link in his chain of deductions. Ironically, as readers later discover, Dexter's confidence obscures the truth: Mrs. Beauly is not *in* the room but completely *out* of the house. When Dexter asks Valeria "What do you think of these circumstances? .... Do you see your way to the guilty person?" he already knows the answer to his questions (257). Having established a metacognitive baseline for readers, Collins uses those structures against them. Dexter's reasoning, so reminiscent of Wragge's, rationally and methodically works its way to

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[140] See also Wolfgang Schneider, "Metacognition and Memory Development in Childhood and Adolescence"; Guy Lories, "From Social Cognition to Metacognition"

misleading conclusions. Collins, therefore, does not hesitate to take advantage of his pupil's attendance.

Dexter manipulates Valeria by turning her own metacognitive strategies against her. Once Valeria begins down the wrong trail, biased by her own prejudices, Dexter plays along:

> Had he been pondering over the secret of my interest in Mrs. Beauly, and had he guessed? He had!
>
> 'Answer me on your word of honour!' he cried. 'Don't attempt to deceive me. Is it a woman?'
>
> 'It is.'
>
> 'What is the first letter of her name? Is it one of the first three letters of the alphabet?'
>
> 'Yes.'
>
> 'B?'
>
> 'Yes.'
>
> 'Beauly?'
>
> 'Beauly.... Are your ideas, my ideas? Is it possible that you suspect Mrs. Beauly, too?' He made this remarkable reply: 'Suspect? .... There isn't the shadow of a doubt about it. Mrs. Beauly poisoned her.' (250-251)

The delayed process of this catechism lends it credence as Dexter acts out what Valeria already thinks he knows. She immediately suspects that he had guessed the secret but he still cautiously approaches the subject, feeling his way towards what then feels like an obvious solution beyond "the shadow of a doubt." This scene demonstrates Palmer's notion of intermental thought, where thinking occurs between characters rather than

within the mind of one person.[141] In this case, what appears to be a simple act of intermental discovery turns out to be more sinister as Dexter purposefully leads Valeria astray by pretending she uncovered his own thoughts when, all along, she only uncovers her own. By taking on the role of questioner, Dexter manipulates Valeria into confirming her own suspicions as his, thereby protecting what he knows to be the true solution.

On her own, Valeria struggles with Dexter's metacognitive manipulations; but under the tutelage of a typical Collins lawyer, Mr. Playmore, Valeria learns in a more controlled environment. In a strange scene of amplified vision and metacognition, Mr. Playmore asks Valeria to observe his thought process by reading over his shoulder as he transcribes his own thoughts on paper: "'Sit here and look over my shoulder while I make my notes. You will see what is passing in my mind, if you see what I write.' ....He began as follows: – 'The poisoning at Glennich. Queries: In what position does Miserimus Dexter stand towards the poisoning? .... He has ideas which are secrets. He suspects that he has betrayed them...'" (*LAL* 275). Playmore works his way through a series of questions and immediate answers, recording this thoughts as a cognitive artifact for Valeria to follow. Like Wragge, Playmore thinks in an orderly, systematic fashion. And, like Collins, Playmore shares those thoughts in written form with a reader. As her partner, Playmore instructs Valeria but also needs her in developing the very ideas and sequences he teaches. Together, Playmore and Valeria build a case by alternating

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[141] See Palmer's discussion of shared memories and thinking, p. 43. In a common example, he records how "James Wertsch tells the story of how his daughter lost her shoes and he helped her to remember where she had left them. Wertsch asks, Who is doing the remembering here?" (Palmer 43). As Palmer explains, the memory act subsists of inputs from two sources and therefore forms a dyadic structure, an intermental unit. "The history of sensation in the nineteenth century is above all a history of ideas about the relation between mind, brain, and environment" (Tondre 589) – in other words, we might say it is a history of the extended mind.

exchanges of information until Valeria "began to see the end to which the notes were drifting" and Playmore tells Valeria, with satisfaction, "Very well answered! You mark the trick" (276, 280). This scene proves a fitting sequel to the scene where Valeria watches her husband angling. In both, Valeria's eyes follow the activity of another but now, working in partnership with Playmore, Valeria takes a more active role. She observes mental rather than physical activity and, aided by Playmore's metacognitive questions, helps him articulate the retelling of the evidence necessary to see an overlooked alternative. Ultimately, the very questions that foreclose open-ended consideration lead to new intellectual territory so that Valeria "was free to play my last card in the game" (319). Valeria reproduces this metacognitive framework yet again when she authors the narrative; this time, taking Playmore's place, the reader looks over *her* shoulder at a table of contents including chapters titled "First Question," "Second Question," and "Third Question." From angling, to whist, to detection, to reading, Valeria hones metacognitive awareness predicated on partnerships and conflicts with other masterminds.

Taylor writes that "Collins's fiction does decline – the late work does not either have the narrative complexity or the cognitive sophistication of the 1860s" (209). In *The Law and the Lady*, however, Taylor argues that "Collins approaches the cognitive complexity of *The Moonstone* and develops his most bizarre and contradictory image of insanity in the figure of Miserimus Dexter" (221).[142] Taylor's analysis, therefore, links "cognitive complexity" to the representation of mental states, such as insanity and, in *The*

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[142] For more on Collins and insanity, see Andrew Mangham, "Mental States: Political and Psychological Conflict in *Antonina*" in *Wilkie Collins: Interdisciplinary Essays* pp. 90-106.

Moonstone, the unconscious. If we consider the novels from a metacognitive

perspective, however, we find the correlation Taylor draws between decline, narrative,

and cognition disrupted. In this case, narrative "decline" leads to cognitive increase – not

only, as Taylor suggests, in psychological representation; but in metacognitive prompts

for the reader. *The Law and the Lady* may not be Collins's most mysterious plot – a

second wife clears her husband's reputation by uncovering the first wife's suicide – but it

engages highly metacognitive strategies for its readers. Though Collins occasionally

overturns those strategies at points crucial to narrative suspense, he more frequently

awards the reader's strained attention by using metacognitive strategies to ease cognitive

load. While deceiving the reader at times, Collins also prioritizes training the reader,

exercising strained attention by revealing rather than concealing the mental work

performed by his intellectual characters, a trend carried out even more explicitly when it

comes to aids for memory work: mnemonic devices.

IV.   Mnemonic Devices

Metacognition is cognitively expensive because of the cognitive resources it

requires; what it costs initially, however, metacognition repays by increasing learning and

memory support. Games literature recognized this and whist in particular evolved its

strategy of instruction in the 1860s. Changing the form of instruction, authors hoped,

would benefit students learning the game's intricate maneuvers. Debates concerning

mnemonic strategy and the role of memory in strategic play inform Collins's use of

memory as a sensational rubric, especially in *Armadale* (1866). Collins conflates

memory with its mnemonic supports in order to train the reader in habits of memory

conducive to metacognition, primarily linking habits of memory to acts of strained

attention. Collins tests reader recall but he also teaches his readers through the

performative mnemonic engagements of his characters. In some ways, therefore,

characters take on the role of the instructor, "turning up their faces now and again to see

if you [the reader] admire the skillfulness of their moves," since games literature

recommended players, especially students, to watch games in order to learn (Page,

Critical Heritage 250).[143] Ultimately, mnemonic scenes highlight that active role played

by memory, both in terms of significant recall as well as deduction and foresight.

Wragge's deductions and Valeria's intense observation each reflect cognitive

demands on their attention in the present moment but rational sensation also engages the

past and future. Collins stages such moments between characters as templates for

readers. Allan Armadale Jr., for example, supplements his weak memory with a string of

memory aids. He needs to remember to answer a letter so he puts the letter in a jar he is

sure to open in the course of the day; but, in case he forgets the jar, he ties a knot in his

handkerchief; and, in case he forgets the knot, he asks his friend to remind him about the

letter: "You have a wonderful memory, my dear fellow. Perhaps you'll remind me in the

course of the day, in case I forget the knot next" (*A* 110). The way Allan includes his

friend in the chain of reminders links human memory to both physical objects and the

guarantee that the memory aids will fulfill their intended function. Collins pokes fun at

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[143] "When you see an acknowledged judge of the game play in a manner you do not
comprehend, get him to explain his reasons, and while fresh on your memory, place the
same cards before you; when once you comprehend the case, you will be able to adapt it
to similar situations" (Matthews 10).

the idea of a static memory device, especially one taken so far out of context. This lighthearted moment provides a foil to future narrative events where mnemonic strategies fail to support memory work in suspenseful situations. At the same time, it also stages the complicated temporality of active memory, the kinds of memory acts meant to return and impact future events. Here again, Collins makes metacognitive activity explicit through the demonstration and discussion of his characters. In this case, however, instead of a mastermind, Collins uses a foolish character whose attention is easily strained. The reader and Collins know better. Collins ironizes Allan's methods but will nevertheless expect the reader to perform similar cognitive feats throughout the novel.

Wragge, Valeria, and Alan Armadale each manage various forms of cognitive engagement; or, in today's vocabulary, *cognitive load*. Human brains command limited resources; we constantly make subconscious choices about what to ignore in order to pursue salience.[144] In "How Language Helps Us Think," Ray Jackendoff proposes that language "allows us to *pay attention* to thought" (19).[145] As he describes it, attention "[distributes]" the brain's resources in order to solve tasks of greater detail, to "stabilize" the objective in memory, and to "anchor" the percept for consideration now and later (21). "We can pay attention," he argues, "only to something we are conscious of" with at least some degree of awareness (22); language, Jackendoff suggests, contributes to raising awareness so that our brains manage whatever task the language mediates with greater efficiency. The more complicated the task, the more resources demanded, the more our brains seek ways to offload portions of its work. The philosopher of mind

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[144] See Daniel Dennett, *Kinds of Minds* pp. 134-135; Donald Norman, *Things that Make Us Smart* p. 246.

[145] For more on the role of language and cognitive load, see Clark, *Supersizing* pp. 44-60.

Andy Clark claims this kind of willingness to seek help and pursue efficiency marks a human evolutionary advantage.[146] Brain and body work together "in ways that simplify neural problem solving" and "recruit, on the spot, whatever mix of problem solving resources will yield an acceptable result with a minimum of effort" (*Supersizing* 17, 13).

These problem-solving resources include *cognitive artifacts*.[147] Computer scientist Donald Norman, the director of The Design Lab at the University of California, defines cognitive artifact as "an artificial device designed to maintain, display, or operate upon information in order to serve a representational function" ("Cognitive" 17). A checklist or other memory aid – like tying a string around your finger – functions as a cognitive artifact: the aid simplifies the memory task by changing the task itself. Instead of remembering each item on the checklist, one need only remember the checklist (20-22). Other examples of cognitive artifacts include language and writing, computers, maps, graphs, or even mnemonic devices.[148] The common themes shared among these traditional cognitive devices are that they are physical or representational objects (for the most part) that change tasks and, as a result, distribute cognition across action and time

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[146] Daniel Dennett has written extensively on this topic, notably in *Consciousness Explained* (1991) and in his newest book: *From Bacteria to Bach and Back: The Evolution of Minds* (2017).

[147] An artifact is a tool; a cognitive artifact is any tool used by the mind. Since the 1970s, cognitive scientists have explored how cognitive artifacts aid or enhance cognition and debated what counts as a cognitive artifact. Andy Clark's *Natural-Born Cyborgs* (2003) makes the case that "Human thought and reason emerges [sic] from a nest in which biological brains and bodies, acting in concert with nonbiological props and tools, build, benefit from, and then rebuild an endless succession of designer environments. In each such setting our brains and bodies couple to new tools, yielding extended thinking systems" (197). See also Edwin Hutchins, "Cognitive Artifacts" in the online *MIT Encyclopedia of Cognitive Science*.

[148] See also, Edwin Hutchins, "How a Cockpit Remembers Its Speeds" and "Material Anchors for Conceptual Blends"; For a more radical application of cognitive artifacts, see David Herman, "Stories as a Tool for Thinking."

(22).[149] From the Dewey Decimal System to objects such as calculators, cognitive

artifacts permeate our lives and assist everyday cognition. Our brains better manage the

demands of *cognitive load* by turning to *cognitive artifacts*. The variety of cognitive

artifacts deployed by Allan Armadale – physical objects, like the knotted handkerchief,

location, like the jar – ironically increases his cognitive task by elongating the chain of

artifacts. Collins, therefore, demonstrates our need for cognitive artifacts in order to

manage cognitive load; but he also questions artifact-based solutions, thereby enhancing

the uncertainty of memory or other cognitive tasks. The necessity yet uncertainty of

thinking forms a keystone of rational sensation.

Lydia Gwilt's diary is the most significant cognitive artifact in *Armadale*. She

admits that "my head is too weary to calculate without help.... it would be madness to

trust my memory" and so turns to her diary for mnemonic support (*A* 423); however, she

does not treat her diary as a mere record of the past but as a tool primed to help her in the

present and future. Her diary serves a number of purposes. Lydia hopes it will "help me

to shake off these impressions" of doubt so that she can see more clearly what comes

next: "Would it help me to shake off these impressions, I wonder, if I made the effort of

writing them down? .... I must be free to think of other things, or I shall never find my

way through the difficulties at Thorpe-Ambrose that are still to come. Let me think.

What haunts me, to begin with? .... What next? The murder in the timber-ship? No....

What am I sure of that really concerns myself? .... Would he say No...? Shall I...? or shall

I go on writing? I will go on writing" (424-425). Ultimately, her diary proves key to

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[149] For a discussion of cognitive artifacts in a health care setting, see Christopher Nemeth
on "Discovering Healthcare Cognition: The Use of Cognitive Artifacts to Reveal
Cognitive Work," especially pp. 727-729. For Tetris as a cognitive artifact, see Kirsh and
Maglio, "On Distinguishing Epistemic from Pragmatic Action."

solving her dilemma: "The end is hidden no longer.... I see it! I see it!" (444). "The whole thing has been in my Diary, for days past, without my knowing it!" (446). "When I had got on, line by line, to those words, it burst on me like a flash of lightening. In an instant I saw it as plainly as I see it now" (445). For a time, Collins allows her questions to stand unanswered but readers might reasonably expect just this outcome, that Lydia finds answers embedded within her previous questions. The diary becomes the material link to mental vision that allows her to see in a "flash of lightning." Her success belies the ways that her diary has failed, such as times when she was too weary to make an entry and the fact that although her diary contained the "whole thing... for days past," Lydia still needed to see it herself.

By contrast, Marian's diary in *The Woman in White* functions primarily as a source of recall. Characters constantly affirm Marian's memory. Laura tells her "My powers of memory, Marian, are not like yours" (*WW* 287). The diary testifies to Marian's powers of memory, as Fosco proclaims; she justifies Laura's assurance that "You would have remembered it, word for word" (303). Despite this commendation, Marian's diary proves penetrable. D.A. Miller even describes its reading by Count Fosco as a rape, both of Marian and the reader (163-164). Fosco's reading of Marian's diary represents an invasion of memory through her cognitive artifact that consequently disrupts her mnemonic strategies. As a result, Marian stops writing in her diary and is forced to resume the cognitive load it relieved. Fosco not only invades Marian's privacy, he effectively removes one of her best weapons. By disarming Marian, she no longer matches him in the chess-match they play. Significantly, and unlike Lydia, Marian uses her diary as a kind of record, not a tool for processing future events. Collins evolves his

approach to the diary as a cognitive artifact so that in *Armadale* the work performed by the diary includes active memory, the kind applied to present and future problems. Marian's diary serves a mnemonic purpose but does not develop the kinds of metacognitive structures present in Lydia's. Walter's assumption of the chess game with Fosco, therefore, indicates Marian's metacognitive weakness. The form of Marian's diary reveals that even though she thwarts the Count for a time she will not defeat him.

Collins's interest in memory problems parallel those addressed by scientific games literature. Handbooks for whist in particular highlight the role of active, working memory and present a model of collective, social memory through the figure of partners at the game table.[150] The first strategy manual for whist, published by Hoyle in 1742, recommended methods that focused on rote memory.[151] Its recommendations emphasize memory as a record of events, much like Marian's diary. Remembering, under Hoyle's system, means remembering the cards in order to calculate the probability of best playing one's own hand. The treatise itself, however, inadequately prepared players for the difficulty of the memory task, even with notations guiding the reader's efforts. Hoyle's second publication, his *Artificial Memory* (1743), provided readers with a method of arranging one's cards, "assisting the memory" to more strategic play.[152] As a cognitive

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[150] By contrast, "In chess the memory must not be called in. It has nothing to do with the business, absolutely nothing. The working faculty is the understanding. You must study an opening to see what it means" (Breakey 593).

[151] His treatise lists out tables of odds to be memorized and applied to various hands of cards. Hoyle himself recognized the magnitude of this task, marking key calculations so that readers "need only charge their memories" with those "upon which the whole Reasoning of this Treatise depends" (*Short* 2).

[152] The conclusion of Hoyle's treatise anticipated the course of strategic memory in the nineteenth century: "Those who would attain to the playing of Whist to perfection, must... be a very punctual Observer of such Cards as are thrown away, both by his Partner and Adversaries, and at what time" (*Short* 86).

artifact, the system of the artificial memory off-loaded some of the memory work from player to cards thus freeing up more memory space for the rote memorization of Hoyle's probability tables. Hoyle's insight recognized memory as a limited resource, much like attention, and one that could be supported even by seemingly superficial means of organizing a hand of cards. In *No Name*, Wragge recommends the same method when he urges Magdalen to memorize their scheme by mnemonic device: "I dare not write them [their plans] down, for fear of accidents. Try the system of artificial memory – count your instructions off, after me, on your thumb and four fingers" (*NN* 368). Here, the literal hand supplants the hand of cards as a material memory aid.

Whist strategists in the nineteenth century slowly abandoned Hoyle's emphasis on calculating odds but maintained his emphasis on memory aids, including the methods of artificial memory.[153] Matthews recommended visual reinforcement for the study of whist: "Study all written maxims with the cards placed before you" (Matthews 9). Later handbooks, such as Colonel Blyth's 1858 handbook, take advantage of advances in printing technologies to improve upon the visual method by offering illustrations, "contrived as to do away, in great measure, with the necessity of conspicuously strewing a pack of cards on the table" (x). Blyth sanguinely "[imagines] that the memory will be materially assisted by recalling these pictured impressions" (x, see fig. 3.2). Nineteenth-century whist strategists realized that the cards constituted a material anchor as a

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[153] "It is possible to assist the memory by the mode of placing the cards remaining in your hands" (Matthews 25); "Some recommend sorting the hands in a particular manner, and altering the position of the cards as the suits are played.... The greatest assistance to memory is the habit of counting your hand by suits as you take it up" (Coles 71-72).

cognitive artifact.[154] The patterns, sequences, and divisions into suits eased the cognitive

load of the game. Imagine, for instance, playing whist without the aid of the cards;

remembering your hand as well as what's been played without the visual reinforcement

of each hand.[155] Whist balances the amount of help its players receive: limiting how

many cards can be seen and at what times they are revealed, such as playing each trick

one card at a time until four are seen together, then removed from play. No matter the

method, handbooks advised their readers to "contrive a system of Whist mnemonics for

themselves, as most likely to become habitual" because the "player who can recollect the

cards played with exactness has a decided advantage" (Coles 71-72).

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[154] Cognitive scientist Ed Hutchins describes how "material anchors" help to stabilize
complex concepts ("Material Anchors" 1573). He writes that "Conceptual structure must
be represented in a way that allows some parts of the representation to be manipulated,
while other parts remain stable. The complexity of the manipulations of structure can be
increased if the stability of the representations can be increased" (1557). Cards aid in this
function because of their standardized layouts. In this way, cards become cognitive
artifacts, or objects that reduce cognitive load.

[155] Clark draws explicit parallels between visual prompts and the thinking process, even
going so far as to argue that our eyes evolved in part because of their centrality to the
thinking process: "This framework depicts conscious visual perception as depending on
forms of encoding and representation optimized for (or simply specialized for) their role
in reasoning, choice, and action selection rather than for their role in actual sensorimotor
engagement" (*Supersizing* 190). For more on thinking and vision, see Clark, *Supersizing*
pp. 169-195.

Figure 3.2 Example of illustrations from Blyth's handbook. Blyth's illustrations demonstrate concepts, such as the sequence in spades, pictured first. The sequence of hearts visually reinforces when it is best to lead the king. Note that modern decks have made cards more visually efficient by including numbers in the corners.

Visual reinforcements, such as Blyth's, aimed at helping players see the game anew but authors expected, of course, that readers would translate literal visualization into metaphor as mental vision. Similarly, in their investigation into Lydia Gwilt, Allan's lawyer, Pedgift Jr., attempts to teach Allan how to foresee. Pedgift Jr. "asked whether Mr. Armadale saw his way now, or whether it would be necessary to test his patience by making an explanation. 'See my way?' repeated Allan in bewilderment. 'I see nothing but a cab-stand.' Pedgift Jr. smiled compassionately" and gives the explanation (*A* 339).

The student-reader Allan still needs direction and guidance from his teacher-author Pedgift Jr. Collins aligns Pedgift with characters like Wragge – "It was his habit to always see his way before him" (*NN* 152) – and Valeria – "[watching] the contest of skill and cunning…. with my eyes intently fixed" (*LAL* 14) – whereas Allan lacks mental insight. Slipping from internal to external, mind to vision, the composite mind's eye serves as a paradigm for managing cognitive load catalyzed by cognitive artifacts in order to carry out complex computations.

Armadale shares an emphasis on moves and counter-moves with other Collins novels; but, in *Armadale*, Collins engages the reader's memory in pedagogical ways reminiscent of 1860s whist literature. *The Laws and Principles of Whist* (first published in 1862) by Henry Jones changed the way the game was learned and played by providing reference images for each hand, almost as if the cards were being laid in front of the student in an actual game. Jones names the four players W, X, Y, and Z (see fig. 3.3). As "W," the reader sees only one hand of cards in full. Jones then plays out the hand, playing for the entire table and punctuating his visualization of cards played with "remarks and inferences" that cross-reference the general principles from part I. By pointedly differentiating between types of commentary, remark and inference, Jones distinguishes different types of cognitive application, adding explicit, metacognitive instruction. Step by step, Jones leads readers through the process of whist principles in action, tying theory to practice. By this method of instruction, players learn "the complete *language* of the game" rather than individual maxims (Pole, "Modern" 69). Chess handbooks had long printed sample boards as cognitive artifacts for their readers but whist literature had not addressed the cognitive load assumed by its students with

visual reinforcements. By interspersing step-by-step instruction with images of each hand, Jones extended the application of images from illustration, as in Colonel Blyth's handbook (fig. 3.2), to a systematic, cognitive artifact. Such instruction, explains Pole, "simplifies the exercise and application of the mnemonic faculty, by showing *to what points it is most important to direct attention*" (*Philosophy* 86-87); or, in other words, maximizes cognitive efficiency by minimizing cognitive load through metacognitive supports.

HAND I.

A very simple elementary hand.

W's Hand.

Queen, Ten, Five, Three of . . ♠
Ace of . . . . ♡
Ace, Seven, Six, Three of . . ♣
King, Knave, Nine, Two of . . ◇

Score : love-all. Two of spades turned up.

THE PLAY.

Trick 1. W leads. | Trick 1. Z wins.

Remarks.—W. leads from his strongest suit (*vide* Part I, General Principle 1, pp. 31—36). Having no sequence, he leads the lowest card of the suit (*vide* pp. 34—36, 1 *e, f*).
The fall of the queen and ace in this round, leaves W. with the two best diamonds and another. W's diamond suit may be said to be established (*vide* Explanation of Technical Terms, p. 28).

Trick 2. Z leads. | Trick 2. X wins.

Remark.—W. plays his lowest card second hand (*vide* Part I, General Principle 6, p. 51).

Inference.—Y. allowing the queen to win, may be presumed not to hold the king.

Trick 3. X leads. | Trick 3. W wins.

Remark and Inference.—It is unlucky that W. is obliged to win his partner's queen. The probability is that Y. has the king, as queen is scarcely ever put on when a small card is led, unless the second hand has king also (*vide* Analysis of play of second hand, pp. 53—55).

Trick 4. W leads. | Trick 4. Y wins.

Remark.—This is an instructive trump lead. W. at the first start with but four trumps, was not justified in leading a trump. His better game was to lead his strong suit. W's strong suit is now established, (*vide* last remark, trick 1), and W. has the winning club, and may look to his partner for the winning heart, (*vide* Inference, trick 3). With four trumps W's game now is to lead trumps (*vide* Management of Trumps, 71—76. Consider carefully the paragraph 13 *e*, p. 74, and apply it to the present situation).

Trick 5. Y leads. | Trick 5. X wins.

Remarks.—Y. returns his partner's trump lead. W. finesses the ten (*vide* p. 57, 8 *c*).

Trick 6. X leads. | Trick 6. Y wins.

Figure 3.3 In contrast to Blyth, who shows the cards held in one's hand, Jones shows the cards as played down on the table. This shift in focused attention follows the developing whist theory that the relationships between cards in play matter more than those held by the player. Jones, therefore, recreates the action of the game as it occurs through his illustrations thus helping readers remember good strategy by seeing it in action.

Jones provides metacognitive supports for his readers by explicitly commenting on the types of thinking required at each stage in the game but he also adapts his level of instruction so that students must recall and apply earlier principles for themselves and begin thinking on their own, even while reading his manual. The visualized hands always precede commentary so that the active reader determines when to assimilate Jones's analysis. Hand I, "a very simple elementary hand," includes well-developed instruction (91, see fig. 3.3). By Hand VII, however, only one remark follows trick six. Jones reduces the amount of analysis and leaves the reader to follow the play of the hand on their own with the visual prompts reminiscent of an actual game (see fig. 3.4). Thus, Jones gradually shifts the bearing of cognitive load from teacher to student as the hands become more complex. Without the same system of remarks and inferences, readers must supply their own analysis and reference earlier parts of the treatise from memory. Doing so builds confidence in thinking through what might happen next; that is, judging from the first two tricks, players may now predict how trick three should follow. In a real game, of course, players may not make optimal choices and trick three could look very different from what is pictured here. In that way, however, even without the explicit commentary, Jones still guides the reader in the learning process. The final stage, of course, transfers the reading moment to the game table where players test their memories and observation against variable circumstances.

THE PLAY.
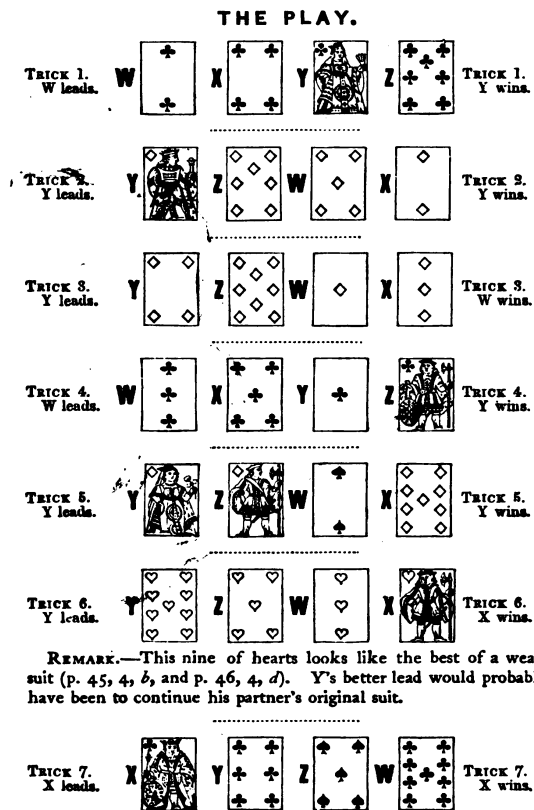
Figure 3.4

In similar ways, Collins also prompts and tests the reader's memory throughout *Armadale*. He reveals the primary secret – that there are two Allan Armadales – and throughout the complicated twists and turns that follow, Collins inserts tests for the reader's memory. At the same time, he includes smaller cognitive tasks that ask the reader to foresee. Collins trains his readers as detectives by playing out, hand by hand, an expert's game. The combination of memory and foresight that Collins engages suggests their partnership and therefore their potential for equal compromise.

Collins prefaces key revelations with syntactic pauses that invite the reader to anticipate the coming information. For example, when Allan Armadale senior tells his history, he expects that the listener will be able to foresee: "You can now guess the truth. Fergus Ingleby was the outlawed son, whose name and whose inheritance I had taken" (*A* 33). The narrator's confidence that, based on the selective narrative details he has offered, the listener "can now guess the truth" offers the listener one final chance to do so and alerts the reader to an agenda they may have missed. The reader now understands that the narrator expects him or her to reach conclusions and verdicts which will then be confirmed. Of course, the fact that the narrator immediately offers the answer or "truth" begets a strange kind of assurance. On the one hand, it's a false proof of the reader's ability to guess the truth since most readers probably read on without pausing to figure it out. An atmosphere of inquiry is established but the reader never actually proves whether or not they could guess the truth. On the other hand, the selectivity of narrative reduces cognitive load to the point that a reader should be able to see what the character could not discern at the time. In this case, the reader does have the advantage over Allan Armadale Sr. because Armadale has told his story from hindsight. From the narrative perspective, then, the reader does have a fair chance at guessing the truth, even before going on to read the confirmation in the next sentence. This moment captures the crucial hinge between memory and foresight so prized by whist strategy in the 1860s.

At the same time, Collins exercises his reader's memory by recurring to the novel's primary secret of double identity. Only the reader, Ozias Midwinter, and Mr. Brock know the truth; until, that is, Midwinter reveals his story to Lydia Gwilt. Collins narrates their encounter through a letter from Lydia to her mentor in crime. As a result,

when Lydia decides to keep the story to herself, she shuts out her mentor but engages the reader: "Shall I trust you with his story?" (*A* 423). The reader already knows his story so Collins engages dramatic irony for mnemonic purposes. Readers may wonder how much of his story has been told and recall the episode with Mr. Brock where Midwinter first gives his autobiography. Her question, however, also implies a further question for the reader to ponder: will Lydia tell her mentor Midwinter's story? Based on Lydia's character and relationships with her mentor and Midwinter, the reader may entertain alternative scenarios. Collins obliges the reader by providing plenty of time for consideration and even repeating the query. Lydia herself rereads her diary, reviews her cognitive artifact, before making up her mind. Collins works mnemonic patterns into the course of the narrative for more effective, dynamic reader engagement in ways that prompt the reader to expect such tasks. The novel mimics a game in the sense that Lydia's first-person narration contributes to the illusion of variable circumstances and the real-time action of the whist table.

Michael Tondre also observes thematic and formal delay tactics as a mental vector in *Armadale* but his analysis follows Miller's emphasis on the cognitive as nervous. Tondre sees "positive potentials for nervous 'hesitation' as an alternative to modern modes of regulatory order, efficiency, and rational self-control" (589). The differentiation between nervous hesitation and order and rational thinking, however, proves somewhat hollow, for games literature suggests that deliberate thought values and even enjoys just this kind of hesitation: "A good player seldom complains that another is slow. He is glad to have the opportunity thus afforded to him of attentively considering the state of the game" (Penn 60). Delay, in the context of strategic gaming, speaks to the

kind of careful thinking encouraged by games literature, the kind of thinking appropriate to games like chess and whist.[156]

The same principle that ties angling to chess, the idea that diverse activities share similar cognitive applications, also works in reverse: as whist strategists developed better ways of teaching their methods, mental faculties appeared more interlinked. Pole, for instance, challenges much whist wisdom when he writes that "a habit of observation is much more important than memory.... You must *pay attention* to the cards as they fall; and if you do this, your memory will repay you for your trouble" (*Philosophy* 88). In effect, Pole links together distinct faculties of mind – attention, memory, and foresight – into one interdependent system. Much as he sees the game of whist as derived from a single purpose so he sees the brain that meets the demands of the game as a working whole. Here, again, we see the principle of deducing the human mind from the demands of its tasks; significantly, as perspective on the task changes, so does the perspective on the mind and how it works. Similarly, Collins exercises his reader's habits of observation – noticing syntactic patterns or repeated phrases – in order to introduce memory-based tasks. Such reading will not be followed or even enjoyed by all; but when readers do seek out the game in play, "memory will repay you for your trouble."

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[156] Tondre's analysis helpfully differentiates between different kinds of puzzles in *Armadale* by focusing on overarching, philosophical conundrums, questions without clear answers (600). As many other scholars have noted, the philosophical questions raised by *Armadale* turn ceaselessly against themselves, constantly flouting resolution.[156] As such, I would argue, the big questions play red herring to the smaller, attainable cognitive tasks Collins poses the reader. In other words, *Armadale* becomes more like the constrained activity of chess when we recognize which puzzles Collins's expects us to solve.

V.   Conclusion

This chapter attempts to uncover the rational tendencies of Wilkie Collins's literary chess by tempering the interpretive extremes of two kinds of statements on rational thinking. The first comes from the prefatory note to *The Law and the Lady*: "Be pleased then to remember (first) that the actions of human beings are not invariably governed by the laws of pure reason" (*LAL*, "Note"). The second comes from an encouragement to students willing to learn the elementary principles of scientific play: "All the blindfold hap-hazard stumbling has disappeared; everything you do has now a clear meaning and object, and you are enabled to appreciate the play of a hand as no longer a mere jumble of chance events, but as a connected series of combinations guided by intelligence and design" (Pole, *Philosophy* 84). In so far as these two statements address different scales of human action, they do not contradict each other. Even so, we should not grant Collins's restriction of "pure reason" precedence just because it pertains to a larger sphere of action. Collins's own novels show that while actions are not *invariably* governed by the *laws* of pure reason, they very often are thought out and consciously managed. As for Pole's commentary on whist, it makes no guarantees that such intelligence and design will always prevail but rather that the student will be able to understand the movements at hand. Any reader of a novel, following the storyline, remembering characters and events through a connected series knows this experience; scientific whist is, after all, a kind of literacy.

One reason reviewers saw Collins as a literary chess player is because he incorporated cognitive strategies, such as metacognitive language and cognitive artifacts,

into the reading experience of his sensation fiction. Collins's manages the reader's

cognitive load by training her in small, cognitively specific tasks of memory and

foresight; and he also uses a variety of sensational tactics to ensure the necessary

"strained attention" to do so. In fact, Collins organizes his novels around alternating

sensational nodes. Much like Staunton's alternating typeface, Collins resorts to different

varieties of sensation in order to keep readers "rapt out of themselves." In *Woman in

White*, Collins delivers a nervous sensational climax when Sir Percival burns to death in

the vestry fire. He concludes the novel, however, with a climax of rational sensation:

Walter's check-mate of Count Fosco. Fosco engineers much of the plotting and counter-

plotting throughout the entire novel but his confession at its close condenses his plots into

four analytical "[moves] in the game" (*WW* 621, 622, 623). Fosco recounts his final

check: "nothing was left but to play the game through to the end. I recalled my

impenetrable calm – and played it" (625). His written confession, of course, testifies to

his ultimate defeat. Walter finally outthinks Fosco, check-mating the reigning champion

in a turn of events that demonstrates even Fosco's fallibility. *The Woman in White*

participates in rational sensation by trading on the risks of taking moves and of being

beaten, even by an inferior player. Penn warns against such an outcome: "Never (if you

can avoid it) lose a game to a person who rarely wins when he plays you. If you do so,

you may afterwards find that this one game has been talked of to all his friends" (Penn

63). Fosco might have done well to take Penn's advice.

Inversely, in *No Name*, the chess-whist game between Wragge, Lecount,

Magdalen and Noel occurs in central scene of the novel, scene four; but the penultimate

scene turns from rational sensation to critically familiar forms of nervous sensation:

impersonating a housemaid, Magdalen creeps through empty, chilled halls in closed wings of a country home in search of the will that disinherited her for a second time. She follows the steps of a sleep walker, discovered, in her turn, by Crazy Old Maezy in a classic scene of spine-tingling suspense. *No Name's* theatrical structure emphasizes the various kinds of sensation that Collins's deploys based on the characters staged in each scene. Various combinations of thinkers focalize each scene: the first follows Miss Garth's reflections, the governess; in the second, Magdalen and Wragge join forces for the first time and test out their partnership; in the third, Magdalen takes on Mrs. Lecount in a brief chess game; in the fourth, chess becomes whist; in the fifth, Mrs. Lecount takes center stage; the sixth and seventh focus on Magdalen; and the eighth closes the play, both in terms of theater and gameplay. As the cast changes, so do the settings: "The liminal space 'Between the Scenes' always implies transit, because each new scene takes place in a different setting" (Bolus-Reichert 24). Collins's management of the load of sensation complicates Hennelly's sense of the stages of sensation: "escape, intellectual exercise, and enlightened entrapment" ("Reading" 89). There are, at least in *No Name*, rotating and alternating stages of intellectual exercise, the very changes in intellectual state demanding the utmost attention from characters and readers.

Tondre's assessment, that Victorian theories of feeling, especially from the developing physiological brain sciences, slowed sensation fiction down, rather than speeding it up, aligns with models of rational sensation borrowed from strategy gaming. "Expectation, interruption, and lag," all new and surprising modalities for early mind sciences, as Tondre points out (585), were the bedrock of good, deliberate game play. If "unconscious and automatic actions of the mind" enabled Collins "to achieve some of his

most 'sensational' effects of shock and surprise" (Ryan 51), then deploying deliberate thought enabled Collins to achieve some of his most satisfying. The experience of watching a mastermind think and being able to follow increases admiration for the character and for ourselves as readers. Even spectators, always placed in the position of a bystander, can understand and appreciate masterly play. Different aspects of mind, the unconscious, the quick impulse, the intuition, the conscious choice, the analytical deduction – each offers different affective vectors and control the pace of sensation. Just as Collins alternates different kinds of sensation, so too does he resort to different vectors of mind to vary the pace between quick darts of shock and surprise to measured, rational reasoning. "Reading in this [patient, pragmatic] style you will soon grow familiar with the country... walking over the ground with your own feet, beating up all the bushes, and looking into all the holes" (Breakey 593): this advice on how to read a chess book could easily apply to Collins's sensation novel as well, walking along, following thinking masterminds.

Reading a chess book, one author claims, means managing cognitive load: "Deluded people begin at the beginning and read right on, making a sort of conscience of it. Whereas you must use *the faculty of taking out just the thing you want and nothing more*" (Breakey 592, my emphasis). Scientists now know the faculty of taking-out-just-the-thing-you-want works by subconscious mechanisms, for the most part; but to the extent that we can direct out attention and memories, metacognitive strategies can be applied to help manage cognitive load.

Without the specific historical context of strategy gaming, Collins's status as a game player shifts towards the concept of "play" rather than games. In a representative

reading, Janice Allan quotes a reviewer's opinion that "life [for Collins] is a sort of chess-board," but infers that such "astute" comments intuit the "play" or "radical re-conception of language" that Collins deploys though lacking "the benefits of a post-structuralist vocabulary" (255). "Those familiar with contemporary critiques of Collins," she writes, "will recognize the analogy of the game" (255); but her analysis implies that reviewers chose the game analogy because they all recognized its fitting place with the play of language. This kind of reading, I propose, follows post-structuralist play sensibilities without taking into account culturally specific sources. As a result, such readings misplace the intended analogy: contemporary reviewers cared more about the minds in play – between characters, author, and readers – than the play of language. The reviewers were not astute in the sense that they somehow all noticed Collins's play with language; but, instead, were astute in that they recognized congruence between two seemingly disparate cultural forms, the novel and the game. As one reviewer put it, referring to *No Name*:

> Mr. Wilkie Collins has once again produced one of his ingenious puzzles.... It is a game which we are invited to watch, because the turns of the game itself have an interest quite apart from the moral character of the players.... He does not treat the novel as a literary vehicle... he offers about as nearly even betting as he can contrive for and against a furious plausible young lady outwitting a wily housekeeper... (Page, *Critical Heritage* 136-137)

Squaring an account like Allan's with the claim that Collins "does not treat the novel as a literary vehicle" exposes the extent to which post-structuralist inflected accounts of *play* misinterpret the reviewers' sense of games and their awareness of the vibrant gaming community growing more publically visible throughout the 1860s.

Downplaying rational or deliberate thought as secondary, less interesting, or somehow less historically scientific invalidates the key context of games literature and

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minimizes the range of cognitive dimensions deployed in sensation fiction, from the neural to the rational. Collins incorporates the sensations of the gaming community alongside and through nervous bodies of his readers and characters, a fact highlighted by reviewers who, like Collins, appreciated cognitive congruence between playing strategy games and reading a novel; or, like Penn, who considered angling and chess as comparable. In this way, Collins follows Edgeworth rather than Dickens, who thinks of games more spatially, coordinating social thinking *between players* and *across the nation*. Dickens, we might say, prioritizes the community while Collins prioritizes gaming. Both Collins and Edgeworth transpose cognitive procedures of rational thinking from games to readers; in Edgeworth's terminology, Collins writes "sensation of address" not "sensation of hazard." Whereas Edgeworth works whist's cognitive procedures of address into her plot, Collins deploys the structures and habits of thinking into his representations of consciousness and metacognitive commands.

The thinking developed and endorsed by the gaming community balances out current scholarly accounts of thinking in the period and presents a more well-rounded understanding of how Victorians thought about thinking. Recent critical interest in thinking in the nineteenth century, particularly in studies such as Vanessa Ryan's, tends to investigate modes of thinking associated with nervous sensation – the irrational, automatic, unconscious actions of the mind – because such were being newly discovered and understood by nineteenth-century science. This trend is perhaps most pronounced concerning George Eliot, known for her close ties to the scientific community most interested in the irrational, unconscious mind, especially in its influence on the individual in society. Unsurprisingly, perhaps, Eliot rejects games as meaningful cognitive

disciplines. She does not try to repurpose harmful gaming, like Edgeworth; nor does she train her readers in game-based thinking, like Collins. To the contrary, Eliot resists game-based social thinking without, crucially, neglecting rational, deliberate thinking. The contemporary discourses of early mind-sciences applied by traditional historicism, therefore, overemphasize the unconscious mind; I propose, however, that for George Eliot's *Romola*, historical context and Victorian science partially obscure a literally physiological, in fact, anatomical, vector of thinking in the novel. I take up recent developments in robotics, artificial intelligence, embodied mind, and proprioception to suggest that Eliot's details of postural consciousness contribute to her overall psychological realism and, furthermore, that rational thinking enters her novels anatomically through "thinking bodies." Finally, though she rejects notions of game-based social thinking and mistrusts the gaming community, her thinking bodies do resonate with forms of embodied cognition imagined by gaming literature.

CHAPTER FOUR: GEORGE ELIOT'S 'GAME OF LIFE': READING FOR 'THINKING BODIES' IN *ROMOLA*

"I am really going to leave you for a season," said Mr. Vesper... "I am bound for more places than I can number in a breath, and my purpose is to play a GAME OF LIFE." — Leitch Ritchie, *The Game of Life*, 1830

Roger Moreland, the murderer: "I have lost and you have won, so life is a chessboard, after all, and we are the puppets of Fate." — Fergus Hume, *The Mystery of a Hansom Cab*, 1886

Van Helsing: "It has given us opportunity to cry 'check' in some way in this chess game, which we play for the stake of human souls."
Quincey: "Great Scott! Is this a game?" [Van Helsing replies] "It is." — Bram Stoker, *Dracula*, 1897

It is something of a surprise to find a common cliché of Victorian popular literature – that "life is a game" – echoed so repeatedly in the novels of George Eliot. Her well-known distaste for gambling in mind, we might rather expect her to compare, with Casaubon, playing back-gammon or shuttlecock to "eating thistles" (*M* 287). In Eliot novels, characters who approach life as a game inevitably fail. And yet, in *Romola's* chapter titled "Check," Eliot writes that "Life was so complicated a game that the devices of skill were liable to be defeated at every turn by air-blown chances, incalculable as the descent of thistle-down" (*R* 385). In *Felix Holt*, Eliot invests chessmen with "passions and intellects" in order to make the point that "this imaginary chess is easy compared with the game a man has to play against his fellow-men" (*FH*

209-210). Finally, in *Daniel Deronda*, Gwendolen fatally faces her marriage as "standing at the game of life with many eyes upon her, daring everything to win much" (*DD* 355). The epigraphs to this paper all evoke games for momentary illustrations but George Eliot carries out a more comprehensive project. From *Scenes in Clerical Life* to *Daniel Deronda*, and most extensively in *Romola*, Eliot exposes social games and game-like forms that structure micro and macro social interactions, insisting throughout that life cannot be played as a game of chess even though life may be a game.[157]

Eliot's gaming community, however, stretches through time, rather than space. Whereas Dickens uses the gaming community as a figure for the nation and Kipling expands that community to the empire, Eliot's gaming community runs through history. In *Romola*, for instance, George Eliot configures the political and social climate of Florence, Italy as a gaming matrix, one that implicates all citizens, whether gamers or not. *Romola* is Eliot's least read and least liked novel. It's a historical novel of dense minutiae and set against political and religious upheaval in late fifteenth-century Florence. Scholars have frequently read the novel as an expression of Eliot's positivism, ambivalent feminism, or dedicated historicism but Eliot's inquiry into the nature and social aspects of thinking occurs through chess. In the Prologue, the spirit of Florence introduces readers to the city and its culture, pausing in the loggia where "games of chess" accompany political and social maneuvering, the "games of skill" (*R* 6-7).

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[157] The first issue of the *Westminster Papers: a Monthly Journal of Chess, Whist, Games of Skill and the Drama* dismissed the idea that "life is a kind of chess" and argues that "the only influence of chess upon the character is to create an enthusiasm for itself that has rendered many players unfit for serious occupation, and that no man ever extracted from a chess-board more of good or evil than he naturally possessed before he saw one" ("Moral" 5). The gaming community, therefore, resisted the use of chess as a generic domain. Their analytic efforts, after all, revealed chess as a particular science not a broad metaphor.

Throughout the novel, Eliot positions chess and social games side by side, particularly in the language of metaphor borrowed from chess to describe real-life games of skill. Power players like the Duke of Milan, the Pope, and the Prince of Naples "anxiously [watch] Florence, lest... it should determine the game by underhand backing... [The Duke of Milan] thought of a move which would checkmate his adversaries" (200). Machiavelli, a marginal fictional presence in the novel, believes the monk Savonarola's actions will not "check his Holiness. The Frate's game is an impossible one" (372). It is Tito, Romola's husband, however, who crystallizes the social chess game for the reader. During his political career in Florence, Tito's "life was taking more and more decidedly for him the aspect of a game" (298). The awkward syntax of this sentence conveys how Tito's own recognition of the social game as such contributes to the power of the game's matrix, its ability to pull in new players and to adapt those players "called on to play" (331).

George Eliot and G.H. Lewes owned (at least) four games books: Bohn's *Handbook of Games*, *Cavendish on Whist*, William Pole's *On the Theory of the Modern Scientific Game of Whist*, and Robert Wormwold's *Chess Openings* (Baker, *Libraries* 46, 61, 98). Bohn's Handbook is likely that published in 1850 but the others were all published in 1864 and 1865, just after *Romola*. Perhaps the writing of Romola inspired an interest in the gaming community and its newest publications, especially since the 1860s was a particularly active time for the publication of gaming literature.[158] We know that Eliot read gaming literature, such as Anthony Proctor's "Gambling Superstitions," in her research for *Daniel Deronda* (Rosenthal 799). In "Why George Eliot Hates

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[158] See pp. 174-175 and pp. 222-228 in this dissertation for a description of the gaming community and its publications in the 1860s.

Gambling," Jesse Rosenthal argues that "though her letters present a rather simple rigidity [rejection of gambling], her actual preparation for the novel showed that she wanted to understand the nature of the gambler's delusion of control" (802).[159] The gambler's fallacy applies the probability of a series to a single event, expecting, perhaps, that if a coin shows heads five times in a row it will be more likely to turn up tails on the sixth throw. What "fascinated" Eliot, according to Rosenthal, is the paradox that statistical "results do tend towards their probabilistic outcomes" over long series without any guarantee for what Eliot called "localized chances" (799). Rosenthal's analysis suggests that gambling as a metaphor or "ontology" supersedes the literal referent (797); but Eliot does not dismiss games such as chess so easily.[160] The literal referent matters in its material and formal expressions. Eliot's links the playing of chess and the checkmate politics of Italy's leadership in the loggia where players "loved his game at chess," and had thereby "learned to distrust men without bitterness; looking on life mainly as a game of skill" (*R* 6-7). Eliot highlights the way chess functions as a normative framework for Florence which suggest that she does not entirely differentiate between actual games and social games; or, perhaps, that she takes seriously the ways a culture and its players may not do so.

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[159] Proctor also published in *The Cornhill Magazine*, such as his article "Automatic Chess and Card Playing" (1875), and several games manuals, including *How to Play Whist* (1885).

[160] Rosenthal, for example, "separate[s] the metaphor of gambling, as it plays throughout the novel, and the literal act of gambling, as we see it in Leubronn.... a metaphor tells us little without some sort of literal referent. So, in order to glean some meaning from the blanket application of this metaphor, we need to understand what the novel has to say about gambling itself.... Gambling here is not just an action; it is an ontology. Lapidoth *is* a gambler" (797).

Though scholars today have not emphasized the way chess frames the novel, it seems that the editors of The Cornhill Magazine did. In May 1863, The Cornhill Magazine published an article titled "Chess" alongside Chapters 52-56 of *Romola*. The author of the article, Leslie Breakey, describes the "chess faculty," or parts of mind necessary for chess. "In chess," he writes, "the memory must not be called in. It has nothing to do with the business, [because the] working faculty is the understanding" (Breakey 593-594). In chess, Breakey implies, the board acts as the memory for the players, keeping track of the position of the pieces. Breakey derives his formulation of the chess faculty from the requirements of the game, deducing that successful players must have the necessary mental equipment for thinking ahead, which he terms understanding. Thus, for Breakey and other advocates of scientific play, chess concerns present and future possibilities, not the past; the chess faculty must successfully manage the present in terms of the future, recognizing that "Every move is the critical move" (593). Breakey concludes with an attack on women chess players. "It is a curious fact," Breakey remarks, "that ladies can never learn chess" (598). Strangely enough, Breakey's gendered analysis responds, in some respects, to Eliot's April installment where Romola disrupts Tito's chess game. In Chapter 47, titled "Check," Romola frustrates Tito's assassination plot; but in Chapter 48, titled "Counter-check," Tito takes his revenge.

In so far as Breakey's article comments on the chess-framed conflict between Tito and Romola, Breakey misreads Romola's rational abilities; however, his sense of how the chessboard extends and supports the thinking necessary to chess illuminates Eliot's own interest in embodied thinking. Analyzing Eliot's fictional representations of mind and body from the vantage point of chess literature, rather than early psychology, helps us see

how Eliot responds to narrow models of mind extracted from strategy games with a positive vision of the "thinking body," a term drawn from modern disciplines of embodied cognition and artificial intelligence. The embodied view argues, along lines familiar from nineteenth-century scientists, that cognition does not happen independently of the body; but modern cognitive studies have extended the importance of the body to thought beyond the brain and central nervous system. New research in robotics and artificial intelligence have only recently begun to explore how passive-dynamic systems – joints, for example – enable intelligence.[161] This body, seen in *Romola's* details of posture, balance, grip strength, and limb orientation, distinguishes thinking from degrees of relative consciousness or unconsciousness and interrogates the incorporation of body and mind current in contemporary physiology. Counter to Victorian mind-body scientists, including William Carpenter, Alexander Bain, Herbert Spencer, and even her partner, G.H. Lewes, Eliot sees the integration of body and mind as mutually beneficial and conducive to the kinds of introspective thinking she prizes.[162] Though well aware that contemporary scientists considered the relationship between mind and body as peculiarly out of conscious control, and, more troublingly, as "threatening the coherence of subjective identity" (Davis 26), Eliot probes the possibility that subconscious mental activity running through the body supports and even enables rational consciousness.

[161] See Clark, *Supersizing* pp. 3-43; Pfeifer pp. 19-22.

[162] For more on Eliot in the context of early psychology and physiology see Peter Garratt, *Victorian Empiricism: Self, Knowledge, and Reality in Ruskin, Bain, Lewes, Spencer, and George Eliot*; Victoria Mills, "The Museum as 'Dream Space': Psychology and Aesthetic Response in George Eliot's Middlemarch" in *19: Interdisciplinary Studies in the Long Nineteenth Century*; Nancy L. Paxton, *George Eliot and Herbert Spencer: Feminism, Evolutionism, and the Reconstruction of Gender*; Sally Shuttleworth, *George Eliot and Nineteenth-Century Science*, especially Chs. 1 and 3.

It is true that Romola does not anticipate the depth of the chess game she encounters, thinking only of the threat to a life in the near future; but Romola's ignorance of the social game, in fact, becomes key to Eliot's case for her heroine's intelligence and even her rationalism. In effect, Eliot claims that Romola's thinking must be seen elsewhere and appreciated according to different standards than those corrupted by the political and gendered power of social games. Drawing on theories of embodied cognition current in cognitive studies today, I argue that Eliot challenges commonplace notions of both games and minds as sources of intellectualism; instead, she demonstrates how cognition seeps far beyond the borders of the brain. To some extent, Eliot resists thinking with games because, though she acknowledges games as powerful cognitive tools, she also recognizes the patterns of exclusion and structures of intellectual power they condone. The thinking body, therefore, provides a possible alternative to thinking with games, one vulnerable still, to physical ailment or weakness, but nevertheless an alternative less standardized or habitually employed by political and social communities. Eliot's concern lies with the individual within the gaming community who may not really be part of it.

This chapter, therefore, extends Deirdre David's call that criticism "address itself to Eliot's own strategies... when she confronts the conflicts between woman's mind and male authority" to consider how Eliot uses fiction to supplement history with modes of thinking made visible by women (176).[163] For David, "woman's mind" primarily concerns the kinds of intellectual or mental efforts made by women; however, thinking, as it is imagined in Romola, exceeds the expectations set by contemporary science,

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[163] See Deirdre David's chapter on George Eliot, pp. 161-176.

culture, and even, in some cases, by games. My intervention, therefore, takes the sense

of embodied thinking from games writing as a starting point but ultimately claims that

Eliot's fictional representation exceeds its cultural bounds and imagines rational thinking

within and through and by the body, its postures, balance and motion, the shape of

thought.

I.   Embodied Chess

Contemporary chess literature shored up the reputation of the game as the "most

ancient and intellectual of pastimes" (Pardon 7), a game of "pure skill" (H—. 324) for

"penetrating and industrious intellects" (Staunton, *Handbook* 5). Its scientific votaries

insisted that "[recreation] though it be, chess must have a course of study" (Breakey 591).

Such courses of study, however intellectual, also required real-world practice: setting up

boards, making moves. Games literature took this embodied role seriously: H—.

classified chess under "Mental and Bodily Games" along with cricket, billiards, tennis,

draughts, and golf.

Breakey's reflections on the cognitive dimensions of chess also gesture towards

the kind of embodied cognition I read into Eliot's novels. Learning chess, Breakey

writes, requires "a book that teaches" and the proper mode of reading it (592). Reading a

chess book from cover to cover will never result in improvement. Instead, Breakey

recommends trying out moves, experimenting with their configurations, strengths and

weaknesses:

In chess the memory must not be called in. It has nothing to do with the business, absolutely nothing. The working faculty is the understanding.... Unless you have seized this idea you have done nothing. Once you have grasped it the working of it out becomes pleasant, even fascinating.... You try it out by yourself, experimenting on it in every possible way.... The running down of your game, through all its doublings and twistings, soon becomes as exciting almost as a fox-hunt... Reading in this style you will soon grow familiar with the country... with map in hand, walking over the ground with your own feet... [Then, chess moves will be] grappled to the memory with hooks of steel, and knit to it with cables.... [Let book study] be minced up, and stewed down, and eaten and digested... (Breakey 593-594)

Breakey's metaphors – seize, grasp, the fox hunt, walking, knit by cables, digestion – construct the thinking of chess as embodied praxis. Using embodied or material metaphors for the mind was a typical Victorian rhetoric found in contemporary science as well as games writing and one deployed frequently by Eliot in her novels; but Breakey intends that those chess players interested in improving their play will, in fact, enact these metaphors, not only in their minds but in play and on boards. Similarly, Eliot too moves beyond figuring the mind with embodied metaphors and explores how the body distributes, supports and enables rational thinking.

For nineteenth-century chess enthusiasts, blind or blindfold epitomized the mental effort required by the game but also highlighted the role played by the eyes and body in everyday chess matches. In 1860, *The Bradford Observer* described Mr. Lumbley, a blind chess player who became a sensation for playing four simultaneous matches. The writer finds "such intense and protracted mental exertion" almost "impossible to conceive" but Mr. Lumbley explains how he manages this feat of memory: "Mr. Lumbley explains his process by the simile of a pamphlet; each game has a page to itself, and on it constructs a mental diagram. Each page is distinct, and when one is open he has no remembrance whatever of the rest. The process certainly supplies a wonderful

instance of the immense exertion of which the memory is capable, when subjected to discipline and method" ("Chess Tournament," *Bradford* 5). The anecdote exalts Mr. Lumbley's powers of reason but it also implies the key role of the eyes in everyday matches. We might assume, for instance, that two identical games of chess would require the same amount of mental effort; but Mr. Lumbley's blindness increases his "mental exertion" to unimaginable levels. Therefore, we might extrapolate just how much mental effort the eyes or power of sight off-set. In other words, Mr. Lumbley's absence of sight points up how the cognition of chess normally subsists of mental calculation and visual memory. In fact, his simile reinforces this point as his "mental diagram" reproduces, in visual imagination, the mind's eye, the prompt normally afforded by the chess board.

Lumbley's blind chess playing was repeated in exhibition settings by great chess masters, most notably Herr Zukertort, the world champion in the late 1860s and 1870s. Zukertort toured Ireland and England, drawing large crowds of spectators to his blindfold chess matches where he normally played twelve simultaneous games. The sensational write-ups of these matches, such as the one in Dublin's *Freeman's Journal and Daily Commercial Advertiser*, described Zukertort's almost supernatural abilities but also noted key details of setting and atmosphere, including the layout of the tournament: twelve players sat at tables lining the great hall while Zukertort sat facing the corner. Each player made his move in succession and recorded it on a piece of paper. A teller then called out the move to Zukertort who responded with his counter-move. The setup of the room emphasizes the cognitive networks in action as players transfer their decisions from head, to paper, to teller, to Zukertort. Zukertort, meanwhile, maintained a mental catalogue of each game; occasionally he "enumerated every move that had been made by

himself and this particular adversary from the beginning of the game. More than once he corrected or supplemented the announcement of the teller" ("Great Chess," *Freeman's* 3). The writer of the articles tries to imagine what this means for Zukertort's brain: "His mind follows each change made by each of his twelve opponents... From the rapidity with which he gives his directions, it would seem, incredible as it may be, that his mind is engaged simultaneously in the twelve different contests – that the twelve distinct games are running together in parallel lines of thought through his brain" (3). Like Breakey, this writer uses embodied metaphors – follows, parallel lines of thought – as the best means to capture Zukertort's thinking. In this case, the spatial configuration of so many games "running" side by side imagines thinking as discrete processing. Rather than a unified or organized whole, this brain thinks by managing a complex routine of storage, recall, and analysis. In this case, Zukertort inverts Breakey's formula: his understanding of expert play being so advanced, the working faculty must return to memory as a true test of his thinking powers.

George Eliot pushes this kind of awareness to imaginative extremes in *Felix Holt* (1866) when she shifts the site of distributed cognition from the players to the pieces:

> Fancy what a game at chess would be if all the chessmen had passions and intellects, more or less small and cunning: if you were not only uncertain about your adversary's men, but a little uncertain also about your own; if your knight could shuffle himself on to a new square by the sly; if your bishop, in disgust at your castling, could wheedle your pawns out of their places; and if your pawns, hating you because they are pawns, could make away from their appointed posts that you might get checkmate on a sudden. You might be the longest-headed of deductive reasoners, and yet you might be beaten by your own pawns. You would be especially likely to be beaten, if you depended arrogantly on your mathematical imagination, and regarded your passionate pieces with contempt. Yet this imaginary chess is easy compared with the game a man has to play against his fellow-men with other fellow-men for his instruments. He thinks himself sagacious, perhaps, because he trusts no bond except that of self-interest;

but the only self-interest he can safely rely on is what seems to be such to the mind he would use or govern. Can he ever be sure of knowing this? (209-210)

Imagine if Zukertort were to play Eliot's chess game: his memory would fail to account for pawns "wheeled out of their places" or knights "shuffling to new squares on the sly." In her scenario, the player of mathematical imagination overlooks his or her own pieces, not the possible moves of the opponent. The deductive reasoner overlooks the surface possibility of passion or intellects in pawns and, consequently, also misses their mysterious depth. In this game of imaginary chess, the pieces possess individual agency and the ability to violate foundational principles of the game that were never in question, such as the movement of the knight. The rules of the game have been completely rewritten by the conglomeration of passions, intellects, and self-interests present on the board. Eliot exposes the highly arbitrary and limited nature of chess, despite its complexity and "literally endless" variations (Breakey 589).

At first glance Eliot appears to oppose intellect and passion, especially in the contempt of the mathematical reasoner for the passionate pieces. She seems to suggest that the passion of the pawns may prove an equal match for the intellect of the power-player. Further review, however, reveals an alternative. Notice the frequent partnership between intellect and passions running through the passage: immediately, passions *and* intellects; the bishop's rebellious persuasion follows on his disgust; similarly, the pawns abandon their stations out of hate; "mathematical" modifies imagination at the expense of the passions; the "mind he would use or govern," therefore, integrates both passion and intellect. Furthermore, Eliot's chess mimics life more closely, she suggests, because of its constant movement. It is, in fact, the ability of the pieces to *move their bodies* that ultimately interrupts and disturbs the chess game. This game cannot be carried out in the

mental arena; instead, the thinking and motives of the pieces spill over into their actions. After all, it doesn't matter why the knight shuffles to a new square only that he unexpectedly does so. The key, therefore, lies not only in the different kinds of intellectual powers represented, crossed, and combined in this passage but that each variation must account for its status as a thinking body: a piece on a board among other pieces.

Eliot often foregrounds aspects of movement and the materiality of chess in her use of the game as a metaphorical vehicle. Consider this extended example from *Daniel Deronda* (1876):

> Most of us remember Retzsch's drawing of destiny in the shape of Mephistopheles playing at chess with a man for his soul, a game in which we may imagine the clever adversary making a feint of unintended moves so as to set the beguiled mortal on carrying his defensive pieces away from the true point of attack. The fiend makes preparation his favourite object of mockery, that he may fatally persuade us against our best safeguard: he even meddles so far as to suggest our taking out waterproofs when he is well aware the sky is going to clear, foreseeing that the imbecile will turn this delusion into a prejudice against waterproofs instead of giving a closer study to the weather-signs. It is a peculiar test of a man's metal when, after he finds he has painfully adjusted himself to what seems a wise provision, he finds all his mental precaution a little beside the mark, and his excellent intentions no better than miscalculated dovetails, accurately cut from a wrong starting-point. His magnanimity has got itself ready to meet misbehavior, and finds quite a different call upon it. Something of this kind happened to Deronda. (455-456)

This many-layered passage follows on the brief warning that Deronda, on his return to town and reunion with Hans, which he expected, "found other things not altogether according to his expectations" (*DD* 455). Hans has developed feelings for Mirah, an unlooked-for result, on Deronda's part, of her intimacy with the Meyrick family. Eliot touches on a generic "chess as life" illustration; the painting represents the idea expressed

by the second epigraph to this chapter, that "life is a chessboard, after all, and we are the puppets of Fate." Eliot, however, uses the development of her narration to inject the remembered painting with motion. In her account, she instructs readers to "imagine the clever adversary making a feint of unintended moves" and the reaction of the "beguiled mortal" who subsequently carries away his defensive pieces.

The passage resonates with the idea above from *Felix Holt* that our calculation may easily go awry, and not only in high-stakes circumstances but in the minutiae of everyday. Here, Eliot twists the original object of the painting, playing for a soul, so that disaster turns out to be mere inconvenience, the wearing of unnecessary waterproofs. This stray phrase, unanticipated in its own right, reminds readers that, like chess, novels – more particularly, omniscient narration – may take surprising turns. The exaggerated understatement, that the fiend *even meddles so far as to suggest* wrong apparel, upends the typical sermonizing of the first half of the paragraph and the normative sympathy of the second half. What particularly enhances the grievance is not so much that the mortal has been out-thought by the fiend but that the mortal has moved in accordance with those miscalculations. There has been wasted motion: defensive pieces carried away, waterproofs taken out, intentions cut from the wrong starting point. The irony of the passage makes it difficult to know how earnestly Eliot means "painful adjustment" but, in any case, Deronda's experience is not only mental but one of physical movement and return. If we recall, however, that Deronda's own insignificant actions lead to this serious miscalculation – he places Mirah in Hans's way – then we uncover a further irony: Deronda, all along, has been the fiend. He made the unintended feint and

miscalculated accordingly. Perhaps this adjusted reading of the painting proves the most

painful.

For chess players, too, the low-stakes movements of the game may prove more

troublesome than the well-planned campaign. Without a course of study, Breakey warns,

chess players often fail to see their downfall: "He may think he is getting on prosperously

almost to the very end.... He keeps killing men, and discerns not that he is driving the

nails into his own coffin. That he finally loses he knows. What he does not know is, that

he never had a chance" (Breakey 591). Even an experienced player, Breakey warns,

intent on calculating out "some ten or twenty moves.... overlooks something lying at the

surface" thus losing to "inferior players in the most unexpected and ludicrous manner"

(594-595). At first, Breakey seems to correlate ignorance of the game with limited vision

– the amateur doesn't know enough to foresee his own defeat – but chess involves so

many possible variations that even experienced players may overlook basic points of

weakness in their defense. The physical chess board doubles the meaning of "something

lying at the surface." Breakey, of course, means something elementary that should be

noticed and addressed by the experienced player and yet also means literally sitting on

the surface of the board. Ironically, an expert's advanced knowledge may prove a

cognitive distraction so powerful that players may miscalculate even with the board as an

artificial memory, even while staring directly at the pieces. Eliot returns to this idea

frequently in *Romola* questioning where exactly the surface lies and the variations in its

form.

The border Eliot probes most specifically lies between chess as a game and its

forms in the social games of real life. In effect, she uses scenes of games in her novels to

foreground semblances between how players play games and how they act in life. In her

first published novella, *Amos Barton* (1857), Eliot begins the theme that will later

develop into a full novelistic framework for *Romola*: "The Rev. Amos was very fond of

chess, as most people are who can continue through many years to create interesting

vicissitudes in the game, by taking long-meditated moves with their knights, and

subsequently discovering that they have thereby exposed their queen" (*SCL* 73-74).

Eliot's tongue-in-cheek tone exposes the distance between the narrator and Amos, that

the narrator knows what Amos does not: he plays a poor game of chess in spite of taking

long-meditated moves. Amos's lack of insight, however, becomes more serious when

applied to real life: "If there was any one point on which he [Amos] showed an

inclination to be excessive, it was confidence in his own shrewdness and ability in

practical matters, so that he was very full of plans which were something like his moves

in chess – admirably well calculated, supposing the state of the case were otherwise"

(85). Amos's life becomes like a game when he transfers patterns and habits of thinking

from his chess to his plans.

Here, Eliot echoes Dickens's sense of the social game as generated by its players,

particularly as a result of their game-playing. The first issue of the *Westminster Papers:*

a Monthly Journal of Chess, Whist, Games of Skill and the Drama dismissed the idea that

"life is a kind of chess" and argues that "the only influence of chess upon the character is

to create an enthusiasm for itself that has rendered many players unfit for serious

occupation, and that no man ever extracted from a chess-board more of good or evil than

he naturally possessed before he saw one" ("Moral" 5). Eliot, however, like Dickens,

isn't so sure. Though she certainly resists reducing life to any one game, her characters

often do so. In *The Mill on the Floss* (1860), Lucy and Phillip appear to arrange events auspiciously:

> Phillip turned over in his mind with restless agitation all that Lucy had told him... till he had thoroughly resolved on a course of action. He thought he saw before him now a possibility of altering his position with respect to Maggie.... He laid his plan and calculated all his moves with the fervid deliberation of a chess-player in the days of his first ardour, and was amazed himself at his sudden genius as a tactician. (422)

Miraculously, Phillip's father agrees to his plan, according to calculation; but Phillip, still a young amateur in the days of his first ardor, does not apprehend the depth of the game. For all of Phillip's foresight, Maggie, a pawn full of passion and intellect, does not play according to plan. Phillip's tactical genius lacks the experience of a scientific chess player, trained by studious literature. If he was an expert player, he'd know that he still ran the risk of miscalculation. In Breakey's estimation, Science "looks on calmly" as Genius "struggles fiercely to escape": "Science rather enjoys a wild-beast struggle like this, and sometimes lets the animal loose on purpose to torture him again, and see him plunge and tear. All this time science may be... the less noble beast of the two" (Breakey 591). The distance that Eliot sets up between Phillip's "fervid deliberation" and his ultimate failure aligns Phillip with Amos Barton and Breakey's inexperienced amateur.

I conclude this section with a further reading of *The Mill on the Floss* because in that novel Eliot extends her consideration of chess as characterization, epitomized by Amos Barton, into a dynamic frame for the social world of the novel. *The Mill on the Floss* frequently stages the battle between genius and science, often undermining both, as, for example, when Philip fails, but not at the hands of any more scientific player. Instead, Eliot unpacks the many ways that social games masquerade as chess – claiming close to perfect information, stable rules, and predictable causation – despite being

engineered by unscientific players. The childhood games of Maggie and Tom structure their adult perspectives in ways that interrogate what qualifies as mental skill, the seeming hallmark of chess. Ultimately, Eliot turns to the body for a more expansive intellectualism, one capacious enough to account for the intense mental activity inspired by chess that also justifies its inclusion in H—'s Mental and Bodily Games.

Tom Tulliver exercises power early in life because, "being good at all active games – fighting especially," he has "precedence among them [the boys at school]" (*MF* 133). Apparently, Tom has not practiced or learned to be good at all active games; his precedence is conditional on his "being good" at them. The respect of others for Tom's talent for sport supports his social dominance and reveals its unequal distribution; that is, although stereotypically a male trait, being good at sport is far from a universal or even common quality. The other boys cannot be as naturally endowed as Tom, if they have given him precedence based on his skill in physical contest. Tom only fears Phillip, "who, not being able to fight you, had cunning ways of doing you a mischief by the sly" (161). In *The Mill on the Floss,* the games that structure Tom's childhood interactions become foundational matrixes for his adult life. Unsurprisingly, faced with the relationship of his sister and his childhood antagonist, Philip, Tom falls back on a familiar rhetoric, accusing Philip of cheating to "win what's too good for you" (345).

The primitive hierarchy of the school yard lends Tom an unconscious sense of authority and begins shaping his perception of his right to judge; he is, in this sense, a "natural" judge. He makes it clear that while he belongs to the world of sport and games, Maggie does not. She has internalized his decision, for "Tom always said it was 'no good' playing with *her* at those games – she played so badly" (*MF* 33). Though Tom

does exhibit stereotypical characteristics for a young man, those abilities are more individual than gendered, as shown above; but Tom does not hesitate to apply his judgment to all girls, even his cousin, Lucy: "She's only a girl – *she* can't play at bandy" (hockey) (45). When faced with contrary evidence of Lucy's unexpected cleverness building houses with cards, his earliest conclusions remain unshaken: "Tom could build perfect pyramids of houses; but Maggie's would never bear the laying on of the roof… Tom had deduced the conclusion that no girls could ever make anything. But it happened that Lucy proved wonderfully clever at building" (86). Despite a short condescension of admiration for Lucy's efforts, Maggie's behavior soon has Tom thinking in terms of all "girls" once again (86). Tom is no chess player; far from it – he has neither science nor genius, despite plenty of animal spirits. As he judges life from the template of games, Tom selectively chooses games of his own making as guides.

Tom derives power, in part, from his role as game's creator and referee but also from his deviation from a game's rules. For instance, Tom and Maggie have three jam puffs to share and must decide how to distribute the third, which has been unevenly cut. Tom proposes a game: he holds the two pieces behind his back and demands that Maggie choose. Ironically, each hope that she chooses the smaller piece; Tom, because he wants the larger and Maggie because she wants Tom to receive what he wants. Inevitably, Maggie chooses the larger piece. After trying to exchange with Tom, who sullenly eats his piece, Maggie eats hers only to be accused of greediness for not sharing some. Although Tom does play fair – unlike Spouncer, who cheats when he plays this game in the schoolyard and only abides by the justice of Tom's fist – this game of choices is rigged against Maggie. If she refuses to play, she misses out on the jam puff and Tom

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won't allow this option. If she gets the small piece, she retains his acceptance and love. If she gets the large piece, but perceives that she can – only in this instance – bend the rules and share some, she retains his acceptance and love. If, as happens, she gets the large piece and eats it all, as the official rules dictate, she receives punishment.

Like the imaginary chess in *Felix Holt*, Tom presents games that exceed or alter their forms and intentions: Maggie's knight has shuffled off on the sly. Tom sets the rules but secretly hopes Maggie will bend them, thereby bringing hidden, unspoken rules into play. When she plays exactly as required, he punishes her with his disfavor rather than abiding by the results of his own set contest. Tom superficially wins the match; he runs away to repeat this episode in a game of "heads-and-tails" with his friend, Bob (*MF* 50). As in *Amos Barton*, Eliot interweaves games and social games, suggesting that the habits of behavior in each inform the other. Tom's victories, however, contain no elements of science or intellectual merit. Ironically, if "any practical violation" of principle results in "injury to the intellectual character of the game," then Tom, the winner, destroys the mental integrity of the game (Staunton, "Tournament" xiv). Sadly, neither Tom nor Maggie perceives that Tom creates non-standard games that do not fit into recognizable forms. Maggie cannot recognize Tom's game for what it is because its template does not exist outside of his momentary desires. Even Tom remains unconscious of the ways he changes the rules of the game in the middle of play.

A disturbing lack of science or satisfying intellectualism characterizes *The Mill on the Floss*, with Mrs. Tulliver as an exceptionally embarrassing example (*MF* Ch. 8, "How a hen takes to stratagem," 242). Tom finds himself the victim of unspoken rules in the educational setting of Mr. Stelling's school. There, Maggie not only more intuitively

learns his lessons when she comes for brief visits, but Tom fails to understand Mr. Stelling's scholarly pun game at the dinner table, only feeling the "painful sense that he was all wrong somehow," a refrain usually sung by Maggie (136). Her natural inclination for book knowledge, "wishing [Luke] to think well of her understanding, as her father did" (29), and expecting that others "would have more respect for her" as a result (17), never provides the solace she seeks. Modern readers may blame her social circumstances but we should also hear Eliot's warning against a restrictive intellectual life, the kind completely bound up in cerebral book knowledge.[164] Eliot urges her readers to see what Maggie cannot: that her passions supplement her intellect rather than detracting from it, especially in terms of mental activity. More pertinently, however, is the role played by Maggie's body. Maggie's intellectual suffering begins, in part, because she either mistrusts or discounts her body.

Maggie's experience in the jam puff scenes lays the groundwork for my argument concerning the thinking body in George Eliot's novels. As she eats her puff, "Maggie didn't know Tom was looking at her; she was seesawing on the elder bough, lost to almost everything but a vague sense of jam and idleness" (*MF* 46). It sounds as if Maggie loses conscious awareness, dreaming, but the fact that she remains balanced on the tree branch, seesawing back and forth, without conscious thought, actually cues a high level of mental activity. As we will see, Eliot highlights the nonconscious work of the mind by drawing attention to its action in the body. As an adult, Maggie finds herself

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[164] Nicholas Dames attributes the strange failure of *Romola's* scholars to their impersonal forms of knowledge. The novel, he argues, "converts the question of historical memory and scholarship to a matter of personal memory, then assesses the types of personal memory created by that conversion through the familiar Victorian values of nostalgic remembrance" (*Amnesiac* 212-213).

once again "absorbed in the direct, immediate experience, without any energy left for taking direct account of it and reasoning about it," as she floats down the river with her cousin's fiancé (403). This time, however, the stakes involve her reputation and society will not allow for bent rules even though it might forgive broken ones. As it turns out, St. Ogg's plays games like Tom Tulliver: "If Miss Tulliver... had returned as Mrs. Stephen Guest... public opinion, which at St. Ogg's, as elsewhere, always knew what to think, would have judged in strict consistency with those results" (490). Though it seems Maggie's lack of physical energy inhibits her ability to reason it would be more accurate to say that enervation inhibits her ability *to reason like St. Ogg's* or her brother.

When Eliot says "St. Ogg's," however, she does so with its multiplicity and distributed thinking in mind. Like Dickens, Eliot confronts many minds populating social systems. David Higdon describes the world of *The Mill on the Floss* as one "in which things happen without apparent design, but a world in which [Tom and Maggie] bear full responsibility for their responses to the unexpected" (188). Higdon's analysis, however, emphasizes circumstance or fate – the chess fiend – rather than investigating how Eliot embodies those circumstances through social networks of thinking players. This world is also the world of *Felix Holt*, where chess pieces may unaccountably leave their squares; and the world of *Daniel Deronda*, where feints of unintended moves may rebound on their makers. For Eliot, the tragedy of such a world, where consequences follow the unexpected, is that these worlds, systems, are populated by many minds capable of powerful cognitive effects. How can thinking so often fail? In such a world, what good is rational thinking? Why even try to play the game when its rules may be so overturned by other players – or even accidentally or unconsciously by one's own self?

Eliot pursues these questions in *Romola* as she considers the jumbled network of thinking individuals crowding the social chessboard in pre-Raphaelite Italy.[165]

II.   Telling History: The Limits of Strategic Thinking

Romola investigates the struggles of the titular heroine to define her own space and kind of work. Romola seems suited to a life of the mind but finds herself involved in physically demanding service: nursing the sick. In spite of a brief exodus from home – where Romola finds the same nursing to be done – she returns to a domestic circle. By contrast, Romola's husband, Tito Melema, takes his place in Florentine political circles with relative ease, working his way into the city's elite by dexterously balancing circumstances and trading loyalties. Eliot sets the fictional story of Tito and Romola at a key moment in late fifteenth-century Florence: tension between city states, religious factions, and international intrigue all converge as the Franciscan monk, Savonarola, leads a populist revival in Florence that ultimately ends with his martyrdom. Other historical figures appear, notably Niccolo Machiavelli, but Savonarola emerges as a central interest, both as the primary actor in his own tragedy but also as a surrogate father

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[165] I have intentionally used the descriptor "pre-Raphaelite" to allude to the artistic movement of the same name during the Victorian period. *Romola* is a "pre-Raphaelite" novel with its interest in bodies in tableaux and atmospheric details of pre-Raphaelite paintings, such as Fra Filippo Lippi's *Apparition of the Virgin to St. Bernard*. David calls Romola a "pre-Raphaelite icon" (189). However, I have not pursued that context here because the pre-Raphaelite emphasis on the body, though a priority, does not concern thinking of cognitive activity. Victorian pre-Raphaelite paintings privilege sensuous materiality but not the kinds of cognitive structures that enable movement, posture, and balance. For more on *Romola* and the visual arts, see Julia Straub, "Deconstruction of an Ideal: George Eliot's *Romola*" (Ch. 5).

and mentor for Romola. Tito, having betrayed his closest relationships for self-advancement, dies at the hands of his adopted father while Romola cares for his abandoned mistress and bastard children at the novel's end.

Romola's excessive historical details have always impressed, even overwhelmed, its readers, including its earliest critics. Eliot's exhaustive research for her only historical novel set outside England often frames *Romola's* critical readings, and early reviewers presciently noted that it "will never be George Eliot's most popular book" because of its prodigious attention to historicity (Hutton, qtd. in Carroll 205).[166] Kelly Battles describes Eliot's efforts to rehabilitate the genre of the historical novel by modelling *Romola* on competing "epistemological stances" taken by historians so that "the instability of historical knowledge forms the primary thematic subject matter of the novel" (219). Furthermore, Battles argues that *Romola* "explores the extent to which women could intervene as historical agents and, subsequently, as shapers of the historical narrative" (215). Battles concludes that the novel's ambiguous ending, matriarchal yet maternal, leaves "nothing to tell regarding Romola's place in history" and "ultimately does not question the gendering of history as a patriarchal realm that excludes women... As a surrogate mother, Romola ceases to be one of those unique women" noticed by history (233). Like Battles, I see Eliot sifting the "character-space" of history, to adapt Alex Woloch's literary term for the limited resources of novels;[167] but Battle's emphasis on

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[166] June Szirotny calls *Romola* Eliot's "watershed" novel (109). Nicholas Dames calls Eliot's exhaustive research process the "most 'memorable' fact" about the novel (*Amnesiac* 206). See also Shuttleworth, pp. 97, 99.

[167] Woloch's seminal monograph, *The One vs. the Many* (2010), considers the "character-space" of the novel as a limited resource divided among protagonists and minor characters that functions as a primary vector of roundness and flatness (see pp. 12-21). Woloch's sense of the "distributional pressures" of the novel's character-space, or,

Romola's maternal role overlooks less traditional rubrics for judging the relative patriarchy of history condoned by the novel. More than an investigation of epistemological modes, *Romola* argues for a change in point of departure: First, Eliot imagines her own forebear: what kind of woman existed somewhere in the past in order for Eliot to succeed as an intellectual in the nineteenth century? Second, what kind of thinking does history prioritize that has made it more difficult to recover an awareness of such women?

In *Romola*, George Eliot links games of skill, particularly chess, to game-inspired thinking demonstrated by Savonarola and, most extensively, Tito, the same strategic thinking prioritized by culture and history. Romola, by contrast, does not conceptualize her life as a game even as she finds herself playing along with Tito, as does Eliot, who uses the language of chess for two significant chapter titles: "Check" and "Counter-check." Ironically, Tito's misjudgment of the social game arises in part from his ignorance of chess; like Tom Tulliver, Tito does not specialize in chess but he consciously manipulates the social game with a cleverness Tom lacks. Tito's strategic thinking leads him to commit the chess player's fallacy: he plays life as a game because his cultural milieu reinforces the conceptual leap between a game of chess and political power. In this section, I explore Tito's strategic thinking as a limiting paradigm for intellectual history.

On her travels through Italy in 1860, George Eliot saw Count Cavour, the Italian statesman then diplomatically engaged in Italian unification. She wrote to her friend,

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elsewhere, the "distribution of attention within narrative," resonates with modern neuroscientific accounts of cognitive load (13, 15). Though Woloch doesn't say so explicitly, his thesis conceptualizes the novel as a kind of working mind.

Mrs. Congreve, that Cavour was "A really pleasant sight—not the prince, who is a large, stout 'mustache,' squeezed in at the waist with a gold belt, looking like one of those dressed-up personages who are among the chessmen that the Cavours of the world play their game with. The pleasant sight was Count Cavour, in plainest dress, with a head full of power, mingled with bonhomie" ("Letter to Mrs. Congreve" 142-143). Eliot accords Cavour his common due as an internationally recognized political mastermind. She describes him from a typical paradigm that emphasizes one individual's strategic thinking as the active motor generating history. *Blackwood's Edinburgh Magazine* describes Cavour as "great and gifted" ("A Glance" 665), "crafty" (654), "calculating" (656, 660, 664), a man of "deep intrigue" (661, 662, 665) and "careful study" (660, 665).[168] We might call this paradigm the "none but one" paradigm, as Blackwood's insists that "none but one, and that man... Cavour," imagined Italian unification (654). Eliot's observation, then, proves a telling discrepancy: she reflects on the "chessmen" manipulated by *Cavours*. As *Romola* makes clear, political ministers like Cavour play disproportionately large parts in the game as recorded by history; and, furthermore, any history that prioritizes "none but one" strategic thinking oversimplifies the historical narrative and the thinking it records.

Chess literature recorded the many revisions and alterations in the gaming community over time, thereby suggesting a framework for history more aligned with that in Eliot's novel. Breakey's rhetoric of discovery – "walking over the ground" with the

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[168] *Blackwood's Edinburgh Magazine* published "A Glance at the Italy of Cavour" in June 1863, as *Romola* was coming to a close. The article traces Cavour's influence in the events leading up to Italian unification in 1860. When the Emperor of France, seeing that "Cavour was about to win the game," responded by "upset[ting] the chessboard" with the treaty of Villafranca, Cavour never flinched (662). His "game was played with consummate craft and skill" (661).

"map" in hand – figures every new generation of chess players as following in the steps of their forebears (593). In *Chess Openings*, one of the games books owned by Eliot and Lewes, Wormwold attributes the Scotch gambit to early Italian writers but notes that it "received little attention until its occurrence in the celebrated match by correspondence between Edinburgh and London" (40).[169] Further analysis of the Scotch gambit uncovered its roots to another line of play that had been discredited, and, as a result, it became less popular (41). One chess opening "quickly became the 'fashionable' opening of the day" only to be replaced by another (4). Disputes over strategy reminded players that even the most established forms could be overturned. Wormwold's text reminds its readers of the many contributors to the current state of the game, altered "by each successive generation of players, as new openings were invented, or old forms of attack strengthened or remodeled" (1). Many players adapt the game through successive generations thus diminishing the influence of any one major figure. Eliot's densely populated novel suggests that the social games it records also depend on many actions derived from "successive generations of players."

Eliot populates *Romola* with layers of Cavours, from powerful political leaders to the monk, Savonarola. By "rapidly surveying, as he had done before, the courses of action that were open to him, and their probable results," Savonarola feels confident he makes the right choices (*R* 463). As he justifies his decision-making to Romola, "*You* see one ground of action in this matter. I see many. I have to choose that which will further the work entrusted to me" (464). Savonarola's sense that he has taken all the variables

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[169] *Chess Openings* was published in book form in 1864, after Romola's serialization and publication but Wormwold had published much of its material earlier in the form of periodical and journal articles. His commentary also relies on research from other, earlier sources that were common knowledge in the gaming community.

into account and, furthermore, that his motives are not self-centered, contribute to his overconfidence. Savonarola eventually finds himself encumbered by many trivial incidents, a trial by fire, and unlikely adversaries. Like Breakey's experienced player who "overlooks something lying at the surface," Savonarola loses his life to "inferior players in the most unexpected and ludicrous manner" (Breakey 594-595). By contrast, Breakey urges chess players to study the literature of the game as the best means for discovering best practices. Because "initial moves have consequences so remote, and involve variations so complicated and countless, that we must use the work of other people – more or less. Certain avenues have been cleared, certain great lines of route which long experience has proved to be safe; and on these we must set out" (595). Savonarola attends too much to the future, like a chess player who counts memory as having "nothing to do with the business." By contrast, even Breakey admits that the study of chess prioritizes its history, the learning that has gone on before, its "certain routes" confirmed by "long experience." Furthermore, for all his wisdom, Savonarola cannot predict the countless variations set in motion by the many individuals involved. In his concern for the overall system he reduces the many to one and, as a result, does not see either the individual or the system with clarity.

In contrast to prominent historical agents, like the Pope, Machiavelli, or even Savonarola, Eliot focuses her attention on small Cavours that support more historically visible, powerful decision-makers. Tito Melema, not Savonarola, crystallizes Eliot's primary investigation into the game of life metaphor in so far as it structures political action and contests the singularity of historical figures often inscribed into historical accounts. Tito shares the same tenure at Florence as Savonarola and, like Cavour, Tito's

mind prepares him to play some kind of game, whether chess or politics. With his "quick" (*R* 122), "nimble" (184), "acute" mind (379), Tito finds it "easy... to keep up this triple game," manipulating three factions in Florence (445). Partisan only to his own interest and comfort, Tito, "discerning the equal hollowness of all parties, took the only rational course in making them subservient to his own interest" (379). Choice by choice, move by move, Tito secures his own position by balancing political forces. Tito's priorities may differ from the other Cavours – Savonarola, the Duke of Milan, the Pope – but his methods are the same. He displays the same kinds of strategic thinking and makes the same moves as a Cavour despite his more limited social visibility. Reversing history's formula and focusing on small Cavours disrupts the causal link between playing chess and success in entering the historical record. After all, Tito is not good at actual games of skill, like chess. His popularity depends, in part, on the fact that he "had no pretensions to excel" at the "Florentine games" played at dinner parties (181). Even though Tito intends to be a Cavour and even convinces others to see him as such, Eliot emphasizes the paradoxical points of irrationalism in Tito's success.

Tito's selfishness leads him to believe his choices are the "only rational course" but the timeline of Tito's conscious thought undermines that idea. Tito prefers "[sweeping] away [memories] at a dash" (*R* 91) and "following the impulses of the moment" (95) to conscious reflection. It takes almost one hundred pages before he has his "first real colloquy with himself" (95). His belated reflection, however, has significant consequences because his subsequent actions mark his entrance into the game: "When, the next morning, Tito put this determination into act [the result of his colloquy] he had chosen his colour in the game, and had given an inevitable bent to his wishes"

(97). Though Eliot links this turning point to conscious thinking, its long delay turns our attention to other kinds of mental action. Tito's mind, though not engaged with conscious reflection, has nevertheless been extremely busy, raising the potential for surprising, unusual, or displaced modes of thinking. Eliot poses her readers this question: what kind of cognitive activity has Tito engaged in for the first hundred pages of the novel?

Eliot's narration is slightly misleading here because it actually gives Tito more consciousness than he deserves. His eventual articulation, that "life was... a game" – for him – comes two hundred pages later, when Eliot tells us "Tito's implicit desires were working themselves out *now* in very explicit thoughts" (*R* 298, my emphasis). Later on, he becomes, again, "*newly* conscious of his own adroitness in the presence of the game that he was called upon to play" (331, my emphasis). This arc of Tito's conscious perspective makes clear that when he first chose his color, he had little idea that he was doing so; that is, he had not thought of his actions in terms of a game he was playing. Only later, now more firmly established in the pattern of decision-making he chose, does he consciously find "game" to be a fitting metaphor. The game begins without Tito, even as he is technically playing it. Only the omniscient narrator knows that Tito's first actions, choosing white or black, will be the way that Tito himself will eventually describe his own actions.

Ironically, the more clearly Tito perceives his own actions as a game, the less clearly he understands what it means to play life as a game. In his first recognition, "life was taking more and more decidedly for him the aspect of a game in which there was an agreeable mingling of skill and chance" (*R* 298). The more he appreciates his own

"adroitness in the presence of a game he was called on to play," the less he appreciates the role of chance or the actions of others involved (331). By the time he betrays his wife's godfather, Bernardo del Nero, Tito only feels the "mild self-gratulation of a man who has won a game that has employed hypothetic skill, not a game that has stirred the muscles and heated the blood" (502). Eliot distinguishes three main types of games: chance, skill, sport. Tito's increasing myopia parallels his increasing exclusion of games of chance and sport from his understanding of the game of life. As Eliot will demonstrate, all three are key components to understanding life as a game, should one adopt such a model. The more specifically Tito categorizes his life as a game of skill, the less clearly he sees the ways in which life exceeds the specific domain of chess.

Eliot repeatedly underscores the "trivial incidents" that "unpleasantly frustrate[e]" Tito's "clever arrangements" and "calculations," a key point of gaming strategy (*R* 385). In Eliot's view, "perfect scheming demands omniscience;" and Tito overlooks an unlikely adversary, so intent on "his final game in Florence" that "it remained to be seen who would win at the game of outwitting" (490-491). Significantly, his attention to the game is part of the problem; Tito is too narrowly focused on his own moves. He sees himself playing against a few key players and as a result, he overlooks the real threat – a less successful, less intelligent player who, nevertheless, betrays Tito in an "unexpected and ludicrous manner" to the least politically astute character in the novel, Dolfo Spini. Tito thinks himself sagacious because he trusts no bond except that of self-interest; perhaps, it would be more accurate to say that he knows or perceives no bond except that of self-interest. More telling, this self-interest constrains Tito's intellectualism to a very narrow kind of rationalism that ultimately inhibits good thinking.

As Tito becomes more game-oriented, Eliot focalizes "game of life" statements *for him*; but the narrator also offers corrective alternatives: "Life was so complicated a game that the devices of skill were liable to be defeated at every turn by air-blown chances, incalculable as the descent of a thistle-down" (*R* 385). Significantly, this statement has no "for him" clause; it comes more neutrally from the narrator. It appears, at first glance, to make an oppositional statement to Tito's typical perspective: whereas Tito sees life as a game of skill to be cleverly arranged, the narrator knows life is really up to air-blown chances. This surface interpretation, however, is misleading. In context, Romola's actions, not chance, frustrate Tito's plot to assassinate Savonarola. She is another agent within the game matrix and Tito underestimates and overlooks her ability to play, treating her as incidental, equivalent to an "air-blown chance." For Eliot, then, we often mistake air-blown chances for impersonal circumstances when such chances may be opportunities for other agents to affect the game. Secondly, the narrator accepts the "life as game" metaphor, with certain qualifications, such as violating the rules of a specific game, as in the example above from *Felix Holt*, to adapt to life's extreme complexity. Even so, Eliot only admits that the devices of skill are "liable" to fail, not inevitably doomed to do so. Surprisingly, it seems Eliot thinks life *is* a game, just one that is very different from any of the literal games we play.

Eliot's game of life exposes modern play theory's reliance on the liberated individual. For modern play theorists, games cease to be such as soon as they impinge on events outside the very limited bounds of the game or when players are forced to play. Philosopher James Carse, for instance, defines games by their absolute "voluntaryism": "There is no finite game unless the players freely choose to play it. No one can play who

is forced to play.... whoever plays, plays freely. Whoever *must* play, cannot *play*" (Carse

4).[170] Bernard DeKoven, author of *The Well-Played Game*, considers "a game to be

something that provides us with a common goal, the achievement of which has no

bearing on anything that is outside the game" (DeKoven 3). DeKoven finds it "heart-

warming" that "games are not life" and are "throwaway items. We only play them

because we feel like playing them. They don't mean anything for real, and neither does

quitting them" (79).

Modern play theory insightfully pinpoints the role of perception to games: play

only happens *if the individual sees it* as such. Social games, too, result from their

perception as such by their players; but Eliot points out the ways one individual's

perspective impinges on and determines another's. Tito's "move" to betray Bernardo del

Nero has far-reaching consequences but because Tito sees politics in Florence as a game,

he only reacts with "mild self-gratulation" (*R* 198). Tragically, he takes such actions –

even considers them "properly managed" (198) – precisely because he has forgotten, or

ignored, their non-game nature. Eliot, therefore, though she would not call his choices a

game, recognizes that there is a game in play because the players see it as such.

Eliot enacts this principle formally in her chapters titled "Check" and "Counter

Check" (Chs. 47, 48). These titles more specifically frame Tito's actions as chess-based

as he works to counteract Romola's interference; but strangely, the first "check" comes

from Romola. In fact, her actions shift Tito's more generic game of skill to the

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[170] Carse takes the idea of choosing to play to extremes. Even slaves choose to play the game of slavery because death is always an option: "Certainly the price for refusing it [the commanded role] is high, but that there is a price at all points to the fact that oppressors themselves acknowledge that even the weakest of their subjects must agree to be oppressed" (Carse 14).

chessboard, limiting their conflict, as she thinks, to themselves. Romola expects that chess involves two players but she does not realize, like Maggie, that the rules change when chess becomes a social game. For Carse or DeKoven, Romola's action would not count as a check because she acts to prevent deception and assassination, not out of a voluntary desire to join the larger Florentine game. Like an unexpected new piece on the board, Romola enters the game not as a pawn but as a neutral third party seeking justice, not political advantage. Unfortunately, she overlooks the extent to which her action is taken as a serious play in the game, a real check, one leading to future moves. If Eliot aligned with the play theorist perspective, her chapter titles might have been something like "Protection" and "Countercheck," each articulating the perspective of the character. Instead, Eliot makes a powerful statement about the way the methods of others can color and impact our own choices.

Tito's limited strategic thinking can only interpret Romola's actions according to his own template of Florentine games. Thus, to interact with her husband, Romola must enter his game. As it turns out, their game of chess exceeds their marriage and stretches over Florence's political networks, a broad array of players all narrowly focused on strategic thinking. The game in Florence, a more advanced, cosmopolitan version of that in St. Ogg's, recasts Maggie and Tom as Romola and Tito. Neither Tom nor Tito really understands chess, with its arbitrary constraints and highly specialized rational applications. As it turns out, Tito, like Philip, falsely believes in his young genius and deductive rationalism. Tito's "none but one" mentality falsely exalts his strategic thinking and political abilities, but such is the expected historical narrative Eliot contests. Eliot exposes the privilege of strategic, deliberate thinking in historical accounts by

undermining its narrow conception of the mind and thinking. Her novel, by contrast, extends the boundaries of the mind to include the passions and the body and actually incorporates the body into her model of rational thinking, one with the potential to surpass the limited rationalism of social games and open character-space in history for intellectual women. With the help of her body, Romola learns to look forward, like a chess player, without losing sight of the past.

III.   The Thinking Body and Artificial Intelligence

Chess literature and common perspectives on chess describe the best players as gifted, crafty, calculating, deep – that is to say, as Cavour-like minds. Like Cavour, the best chess players concentrate their mental energy on understanding and foresight; the memory must not be called in – it has "nothing to do with the business, absolutely nothing" (Breakey 593). Though Eliot distinguishes between a "game that has employed hypothetic skill" and a "game that has stirred the muscles and heated the blood" (*R* 502), she also incorporates the body as a key element of thinking.

Cognitive literary studies welcome an array of methods and approaches and have proven especially amenable to developing ideas in the cognitive sciences of the embodied mind, a view of cognition that stretches thinking across the entire body, from brain to elbows to toes, highlighting nonconscious processes that support rational thinking. What has surprised researchers in artificial intelligence, for instance – that thinking occurs across brain, body, and environment – may seem almost commonplace to literary

scholars who often assume highly-mediated consciousness in texts and read body descriptions as clues to inner states. Cognitive literary studies, therefore, take advantage of the overlap between literary studies – which emphasize the culturally specific, networked qualities of literary history and style – and parallel efforts in the cognitive sciences to understand the mind and brain as peculiarly enmeshed in culture and environment. In "Reading Minds – and Bodies – in *Emma*," for example, Alan Richardson applies modern Theory of Mind approaches to the ways that "Austen's characters must pay special kinds of attention to one another's bodies – the eyes, facial expressions, gestures, vocal tones, and the movements of blood under the skin" to "negotiate the claustrophobic and treacherous social environment of Highgate" (*Neural* 81). His analysis builds on Lisa Zunshine's book *Why We Read Fiction: Theory of Mind and the Novel* (2006) and Alan Palmer's *Social Minds in the Novel* (2010). Palmer in particular makes the case that "the traditional narratological approach... stresses those aspects that are inner, passive, introspective, and individual.... As a result, the *social* nature of fictional thought has been neglected" (39-40). Reading for proprioception, the body's nonconscious system for monitoring itself in space, begins, then, from the idea that literary minds also depend, in part, on thinking bodies.

When it comes to George Eliot, however, even Palmer stays respectfully cerebral. His chapter on "the Middlemarch mind" exposes the highly-networked, social patterns of cognitive activity, or group-based "intermental functioning," that enter the novel as a kind of character in its own right (Palmer 65, 69). His lists of "verbs of thought," "thought report," and the "double cognitive narratives" shared between Lydgate and Rosamond all present *Middlemarch* as social and hyper-cognitive, but characteristically

disembodied (76, 96, 101). Palmer's effort goes a long way towards expanding the

conventional view of consciousness in George Eliot's novels beyond the internal, deep,

and reflective; and, to be fair, even critics detailing the centrality of the body to

psychology in Eliot's novels still describe the mind's "fundamental separateness" (Davis

26). Michael Davis, for example, situates Eliot within her contemporary contexts of early

physiology and psychology but primarily reads her embodied references to the mind as

"physical images.... [with] strongly metaphorical significance, rather than [indicating] a

literally physiological or anatomical dimension of a mental process" (26). I propose,

however, that in this case, historical context and contemporary science partially obscure a

literally physiological, in fact, anatomical, vector of thinking in George Eliot's novels,

especially *Romola* (1863). In contrast to the "disruption" between body and mind

perceived by contemporary scientists, *Romola* exposes the positive integration between

automatic, embodied proprioception and conscious thinking. More specifically, Eliot

focuses her experiment with the thinking body in the character of Romola, thereby

developing a profile for her intellectual heroine as a different kind of thinker – and one

dynamically equipped against her cunning husband, Tito. The current perspective of

embodied cognition underscores the proprioceptive details that structure thinking bodies

in *Romola*, suggesting that we take its bodies seriously as positive contributors to the

mental action of its characters, especially Romola.

I am not suggesting that George Eliot somehow anticipated proprioception – first

named in 1906 (R. Gibbs, *Embodiment* 29). Nor am I suggesting that modern cognitive

scientists should read *Romola* instead of creating experiments (though they should read

Romola). Instead, I want to use modern understandings of proprioception and how it

relates to thinking in order to highlight anatomical details in Eliot's text that normally get taken for granted. Claiming priority for proprioceptive detail in *Romola*, then, surely seems to misdirect resources of a reader's attention already stretched to its limits by the scope of Eliot's historicism. Doubly misdirected: *Romola* features explicit engagements with contemporary social sciences, especially physiology and Comte's social philosophy, that provide relevant scientific contexts (Shuttleworth 96; Uglow 171-174). In short, I might seem to be paying attention to the wrong kinds of details in *Romola* and with the wrong contexts. Modern theories of embodied cognition, however, supply the immediate advantages of helping us wade through Romola's historical details to its embodiment and point out what historical contexts have obscured: the positive correlation between proprioception and thinking that revises how we understand Romola as a thinker in her own right. Furthermore, proprioceptive patterns train the reader across *Romola* in new ways of reading for the body – and thinking – in literature. By focusing on contemporary contexts as the appropriate scientific route into Eliot's writing, critics have overlooked how postural consciousness underpins Eliot's psychological realism in *Romola*, the ways Eliot constructs thinking outside of the mind in physical vectors, and the thinking body upon which such writing depends. Without removing or discounting her specific Victorian contexts, then, I want to explore how a modern framework exposes the surface thinking that George Eliot builds into her characters' bodies at the level of language. By "thinking body," therefore, I mean one formed stylistically in details of posture, balance, grip strength, and passive-dynamic systems, such as joints – details of frame, rather than affect or individual appearance – the kind of body now being studied in the fields of

artificial intelligence, robotics, and embodied cognition as "prerequisite" to intelligence (Pfeifer 19).[171]

The pivotal meeting between Savonarola and Romola provides a good litmus test for reading proprioception. Midway through the novel, Romola leaves Florence to pursue a life of the mind. Her father dead and betrayed by her husband, Romola decides to seek out Cassandra Fedele, a woman renowned for her scholarship living in Venice. Just outside the city gates, however, Romola meets the evangelical Frate Girolamo Savonarola, "with a command from God to stop you.... My daughter, you must return to your place" (*R* 338). Eliot skillfully manages the bodies in this scene: Savonarola addresses Romola from behind; she refuses to turn around, angry at his interference. Finally, she "started up with anger in her eyes," only to meet Savonarola's "calm glance," their "faces were almost on a level" (339). Subdued by the "simple human fellowship" in his glance, her "anger melted" (339); "blood had rushed to Romola's face, and she shrank as if she had been stricken.... shaken by the suggestion in the Frate's words of a possible affinity between her own conduct and Tito's" (340). Finally, Romola submits and Eliot closes the scene with a memorable tableau: Savonarola "spoke with growing intensity, his arms tightly folded before him still, as they had been from the first.... Almost unconsciously she [Romola] sank on her kness [sic]. Savonarola stretched out his hand over her; but feeling would no longer pass through the channel of speech, and he was silent" (345).

I've called this scene a "litmus test" because it encourages three ways of reading its bodies. First, the charged body language stresses the emotional contest of willpower

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[171] See Clark, *Supersizing pp*. 3-43; Pfeifer pp. 19-22; and Raymond Gibbs, "How the Body Shapes the Way We Think: A New View of Intelligence."

between Savonarola and Romola. Savonarola's static posture, his "tightly folded arms,"

confronts Romola's variability, the starts, shudders, flushes, and, finally, "almost

unconscious" sinking to her knees. Deirdre David argues that with this scene, "Eliot

replaces female desire for autonomy with a coercive discourse of fidelity to community"

(192). She continues: "It seems as if Romola becomes increasingly diminished by her

experiences... and is finally so chastened by Savonarola's sternly imperative discourse,

that she falls to her knees before him" (193). David might have said, it seems as if

Romola becomes increasingly diminished *by her own body*. Certainly, along the lines of

feminist criticism that David proposes, Romola kneels before patriarchal authority,

betrayed by her own unconscious responses.[172] What kind of intellectual submits so

quickly – kneeling, no less? Such a reading aligns with contemporary Victorian

discourses of the unconscious, the second way to read the bodies in this scene, one that

stresses the lack of unity between conscious will and unconscious activity.[173] These two

readings underscore the gendered power dynamics faced by Romola and intellectual

women like her but also leave Romola without recourse, trapped socially and biologically

as her own body appears complicit in Savonarola's rebuke.[174] Reading for

proprioception, however, provides an alternative perspective on the scene, one that alters

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[172] Jennifer Uglow writes that "Romola submits to the familiar voice of male authority" (168).

[173] Michael Davis aligns Eliot with "contemporary scientists of mind," such as William Carpenter, Alexander Bain, Herbert Spencer, and Eliot's partner, G.H. Lewes who all "[emphasize] the close link between a decision and both the outward circumstances and the inner workings of the body which influence it" in pre-Freudian conceptions of automatic cognitive function (126).

[174] Julian Corner reads a positive view of the unconscious but only as realized by the novel's end. In the meantime, for Corner, Romola "seems permanently divorced from any source of strength" (71).

the dynamics between Romola and her own body. As a figure of embodied cognition, Romola's body supports her intellectual efforts even when her body language does not.

Embodied cognition shifts the interpretive terms of body language from implications of metaphor and signs to focus instead on body systems and even basic morphology: Romola's kneeling contains anatomical as well as social meaning. Scientists have only recently realized the degree to which cognitive activity depends on this kind of thinking body. The philosopher of mind Andy Clark begins his case for extending thinking, *Supersizing the Mind* (2008), by reviewing recent advances in artificial intelligence that have shifted their focus from writing highly detailed software – the equivalent of rational thought for robots – to imitating energy efficient, "passive-dynamic systems," like ball-bearing joints (4). Clark notes that when scientists stop micro-managing a robot's thinking and design it to engage with its environment in energy-efficient ways, the robot achieves more intelligent behaviors.[175] Artificial intelligence researcher Rolf Pfeiffer explores the same phenomenon in the human body in his book *How the Body Shapes the Way We Think* (2007). "Intelligence always requires a body," Pfeiffer claims; not just because minds need a physical frame but because bodies help manage our cognitive load (18). In other words, because our bodies perform some of the brain's work, our brains can perform higher-order thinking, such as the kind of deliberate thought necessary to competitive chess or abstract mathematics.[176] Even everyday tasks would require more conscious thought with a different morphology. Pfeiffer asks his readers to imagine "grasping a glass wearing thimbles on all your

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[175] See Clark, *Supersizing* pp. 3-29.

[176] See George Lakoff and R. Núñez, *Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being* (2000).

fingers! The reason the task becomes easier [with our soft fingertips] is that part of the

neural control that would otherwise be required for grasping is in fact taken over by the

morphological and material properties of the hand" (19). The body does not think,

therefore, in the conscious ways we normally associate with thinking – but that is exactly

the point. While "classical artificial intelligence" has succeeded in understanding "tasks

that humans normally consider difficult" such as "playing chess" it has struggled to

account for everyday actions, the kind of "effortless" thinking that contributes to picking

up a pen (34). Embodied cognition acknowledges the dependence of conscious thought

on other body systems, and expands the kinds of thinking significant to intelligent

action.[177]

Late nineteenth- and early twentieth-century models of the "postural" body

suggested that while the conscious mind tracked changes in posture, the body constantly

monitored itself subconsciously in order to set a "standard against which subsequent

motor changes are measured" (Gallagher 19). Proprioception calculates body movement

and has been called the body's "sixth sense."[178] Subconscious, rather than unconscious,

the proprioceptive system constantly monitors sensory data and keeps track of the body

in space by maintaining the muscle tension necessary for balance, posture, and initiating

movement. Our sense of proprioception allows us to "know how our body and limbs are

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[177] Valero-Cuevas et.al (2007) found that our hand "control is not enabled solely by the
nervous system but involves complex and essential contributions from the network of
linked tendons" in our fingers (Clark, *Supersizing* 212). Local nerve functions rely on the
materials of bone and tendon to find the best possible approach for picking up or
handling an object. We not only talk with our hands but we actually think with them too.

[178] Sir Charles Sherrington (1906) (R. Gibbs, *Embodiment* 29).

positioned" (Gallagher 43).[179] Like our other senses, proprioception collects and

interprets particular types of sensory data; but, unlike our other senses, it is not localized.

Proprioception operates across the entire body at all times, a collaborative, holistic

integration that adjusts the entire body in response to the tiniest of alterations.[180]

Returning to the confrontation between Savonarola and Romola from the

perspective of proprioception highlights the cognitive activity that undergirds the scene

without their conscious awareness. Across their interaction, Romola's proprioception

monitors her body, calculating each movement through her changes in posture, from

sitting to standing to kneeling. Without consciously thinking about her movements,

Romola "[raises] her head again," "[clasps] her hands, pressing them tight" (*R* 341-342).

Her movements, of course, reflect the emotional content of her thoughts; but, in a

cognitive register, they also indicate an active mind, one moving dynamically through the

interaction with Savonarola. Romola's invisible mental action also reflects on her

conscious thinking throughout the scene. In a crucial moment, Romola recognizes "the

strength there might be in submission, *if* this man... had some valid law to show her"

(339, my emphasis). Far from being overwhelmed, either by patriarchy or biology,

Romola evaluates Savonarola's arguments with caution and sound judgment. She seeks

strength and remains open-minded enough to realize that such might be found in an

unlikely place. Her body language underlines the turmoil of Romola's thoughts,

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[179] And to know our world: Manoel et. al (2016) determined that humans develop
reliance on proprioception to understand our immediate environments (whereas children
rely on vision until proprioception matures): "In a more radical view of embodiment, the
object's reality is framed using the actor's body as a reference" (472).

[180] For example, Tsay et. al (2016) found that limb signals do not come from muscle
spindles, as previously thought, but from other sensory inputs like skin and joint
materials. Depending on the position of the arm, the elbow plays a greater role in our
sense of position than our muscle system.

described explicitly by Eliot as well; but her body provides a source of postural support that is perhaps best appreciated by comparison with Savonarola's immobility. In effect, Romola's decision to try Savonarola's law for its validity demonstrates strength of character and mind that exceeds his. From the outside, Romola appears submissive indeed; but comparing her posture with Savonarola's indicates hidden measures of inner-strength. In spite of Savonarola's gender advantage, Romola's body presents a cognitively balanced, intellectual unit. She kneels as much to her own mind, as to his.

Though cognitive studies now see cognition as "what occurs when the body engages the physical and cultural world" and "no longer assumed to be purely internal... and disembodied," cognitive scientist Raymond W. Gibbs notes that many scientists still work on the mind as if it were "composed of isolated faculties or 'modules'" ("How" 610). In their study of "independent faculties," modern researchers continue the Victorian view on the mind by emphasizing one "faculty of mind" at the expense of another (613). Gibbs warns that conceiving of intelligence as one kind of thinking will assume that "too much cognition 'in the head' is needed to cause intelligent behavior to occur in the real-world" (613). Embodied cognition, therefore, strongly dissociates intelligence from the narrow conception of thought as abstract faculties and considers basic body morphology and material as elemental to thinking.[181] I propose that George

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[181] Embodied perspectives are also marked by changing methodologies. For example, Fournier-Belley et. al (2016) found that "proprioceptive tests formed at rest do not correlate well with performance during dynamic tasks such as walking. Proprioception therefore needs to be assessed during movement execution" (213). We need to account for movement to better understand proprioception – an agenda far from traditional, computational approaches. Furthermore, this perspective leads to changes in treatment. Recent studies have suggested that depression, long associated with emotional and psychological distress, could be treated with Botox. By artificially engaging the facial

Eliot writes this kind of thinking – the thinking body – into her fiction, in *Romola* to balance models of deliberate consciousness with active, proprioceptive structure normally taken for granted.

Scholars' rigorous interest in situating Eliot within contemporary contexts of early psychology risks skewing our understanding of how Eliot represents subconscious activity.[182] According to Davis, Eliot sides most closely with her partner, G.H. Lewes, in conceiving of the relationship between mind and body as peculiarly out of conscious control.[183] Eliot, he argues, "lays more emphasis than Lewes" on the "often powerfully disruptive effect on the individual of a collision between consciousness and the unconscious" but retains an "abiding sense of the power and tenacity of the conscious mind in the face of this disruption" (121-122). As I've begun outlining here, however, elements of subconscious proprioception repeatedly support the kinds of introspective thinking Eliot prizes as the foundation for a conscious sense of self. To invert Davis's claim, Eliot demonstrates the *powerfully cooperative* relationship between consciousness and nonconscious activity while *allowing for the power of rational thought supported by such a thinking body*. Her well-known and explicit debts to contemporary science obscure the ways that postural consciousness unites body and mind as a mutually reflexive organism in her fiction. Eliot's commitment to consciousness, then, appears

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muscles associated with happy emotions, the brain forgets its depression (Finzi and Rosenthal 2016).

[182] For more on Eliot in the context of early psychology and physiology see Garratt, Mills, Paxton, and Shuttleworth (especially Chs. 1 and 3).

[183] For more on Eliot's embedded and embodied view of the mind, especially in relation to personal will, see Davis pp. 129-159.

also in proprioceptive details that express the body's ability to manage its own cognitive vectors, such as balance and motor control.

In this way, the most drastic example of mental collapse in the novel can be better understood as a failure of the proprioceptive body. Serving as a slave after their shipwreck, Baldassarre waits for his adopted son, Tito, to provide bail and rescue; but Tito never comes. Finally, Baldassarre escapes and comes face to face with Tito, who disowns him and calls him a madman. In the course of his sufferings, Baldassarre has lost much of his cognitive function. His memory is weak, all of his great scholarly learning has disappeared, he has forgotten how to read: "It had all slipped away from him... Was it utterly and forever gone... Or, was it still within him...? It might be so; he tried to keep his grasp on that hope" (*R* 254). For a time, his memory returns; but soon goes again. Baldassarre only knows his constant desire for revenge.

Eliot figures his tragic mental loss as psychological – a loss of self – but Baldassarre's body plays a key role in the process; and, in fact, from a modern perspective, his memory and proprioception fail together. Baldassarre's "power of imagining facts needed to be reinforced continually by the senses" (*R* 409). Tellingly, as Baldassarre murders Tito, he focuses on his grip, thinking consciously about the strength and position of his "knuckles" and knees, vowing that he "would never loose his hold" (516). Baldassarre thinks first about his body's posture and balance, then, once established in place, turns his mind to other thoughts. Baldassarre's condition may not be memory failure alone but also understood as a failure of proprioception. Thus, Baldassarre must consciously think for his body; that is, foreground the kinds of thinking normally carried out at the subconscious level. As a result, his capacity for higher order

cognition, like memory, recedes. The more he consciously processes the proprioceptive

thinking normally carried out by his body, the more incapacitated his mind becomes.

Unsurprisingly, his moment of clearest "lucidity" comes in a moment when his body is so

exhausted that it doesn't have the physical capacity to move; in a state of "after-tremor,"

Baldassarre's cognitive resources are freed from their duties supplying a defunct

proprioceptive system and can attend to their normal functions of memory and

imagination (317).

Baldassarre certainly exemplifies the interests of Victorian scientists in the

"unpredictable, possible destructive turns which [unconscious, automatic thought] may

take" (Davis 158); but we should hesitate to endorse this viewpoint as Eliot's.[184] Doing

so overemphasizes the "direct opposition" between memory and the body (Dames,

Amnesiac 216). Working from this framework, Nicholas Dames extrapolates the

"presentness of the body" across the entire novel so that the body's "sensations and its

perceptions, are continually overtaking the power of memory in the novel, as if a

weakened retrospect must yield to the force of the still-active" (*Amnesiac* 216). Dames

connects the contrast between scholarly and personal memory to the novel's status as

historical fiction and its interrogation of the past and present. He comes to the unusual

and interesting conclusion that "Eliot's historical fiction lifts the past into the present,

[184] Within the rubric of early psychology, Davis aligns Eliot closely with Lewes, in
conceiving of the relationship between mind and body as peculiarly out of conscious
control, and, more troublingly, as "threatening the coherence of subjective identity" (26).
Davis situates the power of the body in opposition to the self: "More than just a factor
external to the mind, the body, an inextricable part of selfhood, threatens to resist
understanding or anticipation of its actions and their results.... Eliot's representations of
the power of the body are one way in which she articulates her wider anxieties about the
mysteriousness of the mind" (44-45). In contrast, by tracing proprioceptive details we
find that the body supports long periods of introspective consciousness and personal
memory.

making memory itself unnecessary" (217); however, his argument dispenses with memory and the past for the sake of the present: every move is the critical move. Dames's reading aligns *Romola* with the chess faculty, a narrow and strongly pragmatic conception of mind that subsumes the past within the present. If we examine the testimony of Romola's body more closely, however, we find a vision that completely inverts the model typically drawn from Baldassarre or even Tito. For Romola, her postural, subconscious body enables rational thinking and, more particularly, memory. Her thinking body, in fact, allows us to better appreciate the way Baldassarre's breaks down.

In *Intellectual Woman and Victorian Patriarchy*, Deirdre David writes that "the fulsome recognition of one woman intellectual may be read as a sign of absence: the thousands of women who were editing periodicals, writing essays and novels... are not recognised by the idealization and elevation to iconic status of George Eliot.... it seems to me that Eliot as 'feminine sage'... this is a 'George Eliot' pointing the way to those [other] lives" (175). Even though this "de-sexed and de-gendered" George Eliot "points the way to many female lives of unrecognised intellectual merit," David concludes that doing so only "[pretends] that intellectual women enjoy equal opportunities with men to create culture" (175). Her concluding remark, that by "boldly locating herself in the privileged realm occupied by Victorian men of letters," Eliot "gains for herself the admiration of Victorian patriarchy" (176) seems to suggest that Eliot adopted male patterns of thinking and scholarship and contributed to the obscurity women intellectuals in history. I would like to suggest that Eliot thought through just such an accusation in *Romola* – that she acutely felt the potential danger of too much book learning, precisely

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for its gendered consequences, even as she dearly delighted in it. Eliot weighs the relative value of modes of thought privileged by, what David might call, "male culture" (163). Her attention to the thinking body should not be understood as a simplistic inversion of the mind-body or male-female binaries; instead, Eliot highlights Romola's thinking body because, as a woman, she has not been introduced to the social game as Tito has been. Romola, therefore, privileges other faculties of mind and even makes radical forms of thinking, like proprioception, more visible. Ultimately, however, Eliot does not seek to replace strategic thinking with nonconscious proprioception; rather, Eliot targets compartmentalized views of the mind and, in so doing, suggests a revaluation of – a retelling of – history through all kinds of thinking.

IV.   Romola's Thinking Body

Eliot's reassessment of the kinds of thinking best suited to the game of life begins by seeking out alternative models of thinking and exploring the ways that conscious thinking depends on the body for its status *as* thinking. In this way, Eliot resists exclusively mental models of thought and highlights ways that the body participates in thinking. By reading for proprioceptive details of posture and balance, we uncover the constant presence of the body during periods of mental activity, especially, for Romola, during times of memory and imagination. Reading for this body follows less semantic,

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less attention-grabbing details, such as the posture and balance.[185] George Eliot often emphasizes postural moments and distinctly characterizes Romola by her posture: "it was impossible to mistake her figure and her walk" for Romola walks "without the slightest conscious adjustment of herself" (*R* 129, 47). Romola's posture provides a form of being for her character – it signifies her body – but even as it makes her physically visible, recognizable, her posture also provides a supplementary counterpoint to conscious, analytical thinking. Ultimately, Romola's body consolidates her understanding and memory so that her mind can access the kinds of thinking necessary to develop a future from the past.

Romola's posture supports periods of introspective consciousness, passages of interiority that hang on the proprioceptive frame. Eliot frequently opens and closes Romola's interior monologues with details of posture. Preparing to leave Tito, Romola consciously reviews her reasons for doing so, feels deep emotions, and processes memory by first "Feeling her way to the nearest chair," then "[sitting] down to wait for the morning" (*R* 307). Feeling her way to her seat emphasizes the way Romola's hands and arms precede her. Romola sustains several hours of introspection sitting in the dark, which removes visual reinforcement for posture and body position. The scene foregrounds Romola's deep thinking, downplaying description of Romola's body. The resulting sense of stillness reinforces how, formally, posture frames and facilitates Romola's interior monologue. After two pages of intense mental content – several hours in narrative time – Eliot closes the passage this way: "[These thoughts formed] the

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[185] Late nineteenth- and early twentieth-century models the "postural" body suggested that while the conscious mind tracked changes in posture, the body constantly monitored itself subconsciously in order to set a "standard against which subsequent motor changes are measured" (Gallagher 19).

tangled web that Romola had in her mind as she sat weary in the darkness" (309). Eliot physically structures the narration of consciousness within proprioceptive support and, as a result, achieves a kind of implied simultaneity. The representation implies that during the seated interval, Romola's posture remains static and therefore does not obtrude on her conscious attention, which processes complex emotion and memory. Eliot repeats this pattern of rest and reflection when Romola "[sinks] down on the step of the altar... in hope that the inward tumult which agitated her would by and by subside" (419). Eliot narrates Romola's "agitated" consciousness, but during this narration, Romola's body shifts position, "kneeling with buried face on the altar step" (419). This change does not distract Romola from her thinking because her body manages the movement, supporting her conscious reflection as a result.

Romola's thinking body, in fact, intervenes when her conscious mind becomes overwhelmed by emotion and memory. As she prepares to leave Tito and Florence, "a sudden wave of memory" threatens to delay her departure until the "coarse roughness" of her clothes "recalled her fully to the present" (*R* 303). This new sensation, a change in motion and posture that leads to a physical contact, becomes a strategy that Romola consciously pursues over her night of preparation: she "courted those rude sensations" and, later, as the "emotions of the past weeks seemed to rush in again with cruel hurry, and take possession even of her limbs.... [she] began to feel the need of some hard contact. She drew her hands tight along the harsh knotted cord.... She started to her feet... pressing her hand upon the rough carving" (304, 306). Even when her body appears to contest her will with an agenda of its own, surely the quintessential form of the unconscious as understood by Lewes, proprioceptive details finally converge as

Romola's closest ally bolstering her own "wavering consciousness" (305). Romola listens to her body's instincts and recognizes the ways her body aids conscious meditation and even nurtures willed desire.

Eliot retrains her readers with Romola's proprioceptive patterns. Over and over again, Eliot prompts us with Romola's posture, many times drawing our attention to the fact that Romola remains unconscious of her body. Conversely, when Romola does notice her body, she notices its proprioception: "As she rose from her knees... the return to a standing posture, with nothing to do but gaze, made her more conscious of her fatigue than while she had been walking and occupied" (356). Romola's shift to consciousness reminds us that her fatigue already existed without being processed by her awareness. In this instance, Eliot wants us to read Romola's body as she does, awakening to the kinds of effort it makes in her behalf. The change in postural state clues Romola, and readers, to prior periods of nonconscious mental activity.

By linking Romola's proprioception to her psychology, Eliot establishes her heroine's intellectual character, one not easily articulated by critics. Romola's father, Bardo, speaks disparagingly of his daughter's capacity for "the sustained zeal and unconquerable patience demanded from those who would tread the unbeaten paths of knowledge," explicitly tying his expectations of the "wandering, vagrant propensity of the female mind" with "the feeble powers of the feminine body" (*R* 49). Critics, of course, recognize his overt sexism as rather implying his own lack of insight rather than as any valid statement on Romola.[186] Countering Bardo's negative assessment proves

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[186] Susan M. Bernardo describes Romola's role as her father's assistant as in the "realm of language and patriarchy" in order to convey how Bardo's words construct gender expectations (89). Deirdre David notes Romola "is a daughter kept firmly in her

easier, however, than formulating a positive statement on Romola's intellectual abilities. Susan David Bernstein approves Romola's "wide-glancing intelligence" (131), but these words, also from Bardo, suggest critical election of preferred traits. Nicholas Dames wonders if "Bardo's criticism of Romola's memory [can] be recovered as a positive value?" (*Amnesiac* 212). His valuable analysis of Victorian nostalgia, however, characterizes Romola as cultivating a "dependable capacity for inattention and forgetfulness" comparable in ways with the novel's amnesiac, Baldassarre (213). Deirdre David's analysis of Romola as Eliot's "traditional intellectual" exposes the unsettling ways that such a role depends on "emphatic recognition of her essential womanhood," a bid for patriarchy "transcended" by "inherency" (195-196, 188). Even Eliot plays coy. Willing to describe Tito's thinking as "a masculine effectiveness of intellect and purpose which, like sharpness of edge, is itself an energy," Eliot refuses an explicit parallel for Romola, noting only that "Romola had an energy of her own which thwarted his" (*R* 391). What is this unnamed, other "energy of her own"? Eliot matches its strength with Tito's but leaves the reader to figure out for himself how Romola's mysterious intellectual energy works.

Examining proprioceptive patterns structuring conflict between Romola and Tito helps unpack Romola's equivalent to Tito's "effectiveness of intellect." Tito juxtaposes Romola in many ways; he micromanages the future for the sake of any present pleasure and betrays his closest relationships for personal gain. Davis discusses the ways "Tito constantly tries to control his physical being" as a measure of Eliot's exploration of the

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subjugated place by peevish reminders of her intellectual inferiority" (190). Susan Bernstein argues Bardo's "masculine, colonising approach to learning carries its own limitations" (131).

unconscious power of the body (123); but the fact that Tito serves as the novel's counter-example, a cautionary figure of moral decline, suggests that his attempts to control his body also reflect an extension of his social micromanagement. Tito considers all variables as potentially manipulable, including his own body. Rather than a statement on the nature of the unconscious, Eliot probes the relationship between unconscious activity and Tito's self in order to expose the ways that Tito prohibits his body from thinking. Faced by the adopted father he betrayed, Tito "governed his head and glance... with apparent ease" – but his physical maneuvers delay other responses (*R* 332). Tito cannot, of course, control every moment of postural consciousness any more than he can manipulate social circumstances entirely to his favor and Eliot suggests that Romola benefits from the relative autonomy allowed to her thinking body.

The context of Victorian body-mind sciences prioritizes Tito's experience of his body as paradigmatic of Eliot's psychological realism when, in fact, such an account fails to fully interpolate Romola's body-mind experience.[187] When Tito announces the sale of her father's library, the narrator tracks their thoughts and feelings relatively evenly throughout the scene, but gives noticeably more detail to Romola's physical position. She begins "[resting] her arm on his knee, as she used to do on her father's, and looked up at him" (*R* 267). Despite strong and terrible feelings, Romola "had only drawn away her arm from his knee and sat with her hands clasped before her" (271). After Tito's announcement of the sale of her father's library, Romola's body acts with less and less consciousness. She "turned her eyes on him" (272, 273); "started from her seat and stood looking down at him, with tightened hands falling before her" (272); "her whole frame

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[187] For readings of Tito's psychology as paradigmatic of Victorian science, see Dames, *Amnesiac* pp. 222-224; Davis pp. 119-159; Shuttleworth pp. 107-109.

seemed to be possessed by impetuous force that wanted to leap out in some deed.... the strongest part of her consciousness... was annihilated by the vehemence of her indignation.... she did not sit down; she was too unconscious of her body voluntarily to change her attitude" (273); she took no notice of his kiss "and seemed really unconscious of the act" (275).

Whereas Romola acts through the scene without consciousness of her body's posture, Tito acts with full awareness. His mental acuity does not work in concert with his body, for, in contrast to Romola, Tito consciously focuses on his posture, "holding his head back," "[leaning] forward" for a conciliatory kiss (*R* 267, 269). His apparently unstudied calm results from "great pains to be like himself" (267). Tito remains remarkably inert, unmoving until Romola submits. His relative ease belies his concentration on his physical posture as Tito divides his attention between the "utmost activity [of] his intellect" and his body (275). The fact that Tito, brilliant though he may be, rarely moves during this scene emphasizes the priority given to his rational efforts with little attention for body management. Eliot undercuts the only proprioceptive attitude that Tito takes in the scene: he "lean[s] in the easiest attitude possible against a pedestal.... Not that he was inwardly easy" (272). Tito's posture foreshadows Savonarola's, when he arrests Romola's escape from Florence. The proprioceptive differences between Tito and Savonarola, however, also highlight their contrast in moral authority and explain why Romola heeds one and not the other. Tito leans against a pedestal for support, hoping to convey confidence and ease with his body language; but readers attuned to proprioceptive detail also interpret his posture as a sign of cognitive impoverishment.

Eliot links his immobility to the effort of his mind to win the chess match he constructs between them: "every word was spoken for the sake of a calculated effect, for his intellect was urged into the utmost activity by the danger of the crisis" (*R* 275). The crisis reminds the reader of Tito's motivation for selling the library in the first place. Shocked by Baldassarre's recovered health, Tito prepares for leaving Florence with ready money from the library. Ironically, he will never do so; Baldassarre recovers strength of body but not of mind and fails to injure Tito as he feared. Nevertheless, in the present moment Tito responds "like a timid animal urged to a desperate leap by the terror of the tooth and the claw that are close behind it" (263). Recent events brought "at once the pressure of a new motive and a new opportunity" (263). Tito reacts like an amateur chess player, taking advantage of the present opportunity to secure future stability, as if every move is the critical move. Looking at the available pieces on the board, he makes the right choice for his future security. He transfers that chess-like antagonism to his standoff with Romola. "Shut up in the narrowness that hedges in all merely clever, unimpassioned men," Tito sees Romola as an opponent (269): "I partly foresaw your opposition," he tells her, and "avoided that obstacle... without consulting you" (272). The memory has no place in Tito's calculations; his working faculty, if it can be called as such, is the understanding. When Tito assures Romola that "Any rational person looking at the case from a true distance will see that I have taken the wisest course," readers know that his statement only applies from the standpoint of the social game (274).

That "true distance" – hindsight – reveals the opposite, that Tito had no cause for ready money and never actually leaves Florence undermines his rational decision-making process. Like Daniel Deronda, Tito finds "all his mental precaution a little beside the

mark, and his excellent intentions no better than miscalculated dovetails, accurately cut from a wrong starting-point" (*DD* 456). Truly, this proves to be a peculiar test of Tito's mettle: for, unlike Deronda, Tito feels no distress at his miscalculation, only relief. Tito lacks Deronda's "painful adjustment"; Tito never regrets the sale of the library, pointless though it had been, and never understands its contribution to his failed relationship with Romola. The narrowness of Tito's self-awareness parallels his absorption in his social games that arises both from his perception of social games as chess and from the ways he thinks for his body rather than distributing his mental skill.

Proprioceptive awareness highlights Romola's cognitive activity without linking her intellectualism to her work, another common critical strategy. Shona Elizabeth Simpson, for instance, reads *Romola* as representing "the struggle of an intellectual woman to mark out her own space" (53). Simpson contrasts the confinement of Bardo's library, a masculine space contaminated by duty to Bardo, with the openness of Florence's streets conducive to Romola's wandering; "But even outside," nursing the poor, Simpson insists, "Romola still does not do her own work" (62). According to Simpson, Romola finally "finds what she needs" once she leaves Florence (63); but is nursing an island village back to health really so different from her care for the poor in Florence? Bernstein, on the other hand, accepts Romola's library work where she sees Romola as an "active and commanding reader" (127) who "acts as the superintendent of this reading room" with "eyes, voice and body as the active agents of the texts" (131). Though a positive angle for the beginning of the novel, carrying it through Tito's sale of her father's library and Savonarola's discouragement of academic pursuits in Venice with Cassandra Fedele leaves Romola trapped by absence. As Eliot withholds Romola's

"energy of her own" from explicit narration, so too does she resist defining Romola's intelligence as expressed by some kind of productivity. Instead, Eliot asks her readers to forego conventional means of intellectual evaluation and to accept Romola as cognitively capable of deep thinking supported by postural consciousness, as when Romola reflects in the dark, or kneels on the stone steps by the altar (*R* 307, 419). Romola, in fact, need not be intellectually superior; her normal cognitive function satisfies Eliot and releases Romola from the kinds of intellectual strain associated with socially recognizable achievement. Eliot preserves some measure of rest for her heroine that she could not attain for herself.

In any case, reading for proprioception recasts the kinds of intellectual work performed by other characters, such as Bardo and Tito. Eliot didn't have the vocabulary developed by embodied cognition, but she is especially attentive to how the body relates to work that seems exclusively mental. Eliot allegorizes the intellectual work carried out by Bardo, Romola's father, as a thinking body. Bardo, blind and immobile, is the mind; Tito, writing and reading, performs as the conscious body while Romola carries out actions typically assigned to the subconscious body. Here is the way Eliot describes the central role Romola plays as Bardo's work goes forward: "[Romola] placed herself at a table just in front of [Tito], where she was ready to give into her father's hands anything he might happen to want, or relieve him of a volume that he had done with. They had always been in that position since the work began" (*R* 117). Romola carries volumes to and from the shelves, reaching, stacking and preparing the materials that Bardo needs to think and Tito needs to act. Bardo and Tito take her role in this position for granted; from their perspective, her work matters least. Without Romola, however, their

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intellectual work could not move forward. Without linking proprioception to cognitive action, Romola's part in her father's intellectual endeavor passes unnoticed; and, in fact, we could say the same about how literary scholars read for the body and mind in Eliot's novels. The approaches taken by Davis and Dames, for example, examine elements that correlate to Bardo and Tito but overlook the kinds of details Eliot allegorizes here: "pointing," "[lifting]" books, retrieving objects (116-117). Eliot draws attention to the neglected resources of the body and women by first assigning Romola the proprioceptive role and then underlining how crucial that role is to more prioritized forms of cognition. She undercuts standards for intellectual excellence as being tied to documentable output. Romola's role in her father's intellectual work foregrounds the body's relevance to thought and challenges the prominence of internalized, rational models of social thinking.

Romola trains its readers in proprioceptive awareness through comparing posture in scenes of conflict, highlighting the ways proprioception complements and forwards inward reflection, and by undercutting the notion that cognitive activity occurs without postural assistance. The novel's epilogue, however, contains one final application for the reader's attention to proprioceptive detail. The epilogue briefly summarizes Romola's current life: back in Florence after a short hiatus, Romola lives in the same house with Tito's mistress and children. While she was gone, both Tito and Savonarola die violent deaths, though an altar to Savonarola's memory and Tito's offspring still make their presence felt. Romola tells a portion of her history to Tito's son, Lillo, as a moral warning and ends with a last memorial to Savonarola. Romola's epilogue puzzles modern readers, in part because it feels formally inconsequential. David Kurnick, for instance, finds the Epilogue "notional at best," a formal expression of Romola's

"characteristic sense of not being all there" (494).[188] In a convincing argument, Dames

argues that the epilogue fulfills Victorian ideals for nostalgia and amnesia, the triumph of

personal memory, a resolution that continues Romola's "fading" from narrative and

history (*Amnesiac* 228). Kelly Battles more bluntly believes "Romola's final retreat"

leaves "nothing left to tell" (232-233). I propose, however, that the Epilogue showcases,

for a final time, the kind of proprioceptive detail that literally shapes the bodies of Eliot's

characters, especially Romola: "Romola sat nearly opposite Lillo, but she was not

observing him. Her hands were crossed on her lap and her eyes were fixed absently on

the distant mountains: she was evidently unconscious of anything around her" (*R* 546).

Rather than fading, or drifting into detachment, Romola sits, solidly and intently,

thinking. Readers following the patterns of proprioception through the novel should

recognize the presence of postural consciousness that ends with a scene of anatomical

embodiment, the shape of thought. Romola's strange dreaminess registers the success of

her body in contributing its mental awareness to her mind, allowing for the kind of

absorption necessary to long meditation, a form of postural consciousness that Eliot uses

again in *Middlemarch* when Dorothea rests her cheek on her palm in Rome and observes

Featherstone's funeral back in England.

Romola's posture suggests ongoing reflection and it harkens back to earlier

episodes where her body supports periods of introspection. This time, however, Eliot

does not narrate Romola's thinking; Eliot elides narration of consciousness, but maintains

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[188] Critics disagree whether *Romola's* ending constitutes some kind of failure – a "final
retreat" from history (Battles 232) marked by "infinite resignation" (Corner 85) and
"ethical languor" (Reilly 639) – or a triumph of the "maternal mission" (Uglow 174), the
fulfillment of Romola's vocation as educational Madonna in "control" of her situation
(Bernardo 101). See also Paxton p. 140, Simpson pp. 63-65, Szirotny p. 105.

similar postural details. Romola remains seated, "absorbed," until her young charge intrudes with a "preserving [look]" (*R* 546). Romola's obscured thoughts may contain memories, or dreams for the future, an open-endedness that lends itself to a key ambiguity: the realization that Romola, still in her early twenties, has plenty of time for intellectual pursuits, whether we witness it or not. For all readers know, beyond the epilogue, Romola *will* pursue a scholarly career and her books were lost to history – or wait to be discovered. Reading for body language or Victorian science tends to entrap Romola, crushed under the dual pressures of sex and patriarchy, but reading for proprioception suggests the potential for a hopeful alternative, one predicated on the supportive relationship between nonconscious and conscious mental activity. Romola's embodied stillness, then, rewrites previous models from Savonarola, Tito, and even Bardo, confined by blindness to his chair. Romola waits and dreams without the overbearing confidence, deception, or arrogance of the other thinkers in the novel. For Savonarola, Tito, and Bardo, posture cues their desire for control and power over their bodies, a sign of their moral character. For Romola, posture can be read as posture; a final release from the over-signification of interpretation and the burden of meaning.

Romola focalizes Eliot's engagement with proprioception but Eliot bolsters her psychological realism throughout *Romola* by extending postural consciousness even through minor characters. For example, as Tournabuoni discourses to Tito Melema about political strategy, he crosses his legs: "'In truth, Melema,' Tournabuoni was saying... laying one hose-clad leg across the knee of the other, and caressing his ancle [sic], 'I know of no man in Florence who can serve our party better than you'" (*R* 328). Nancy Henry "decode[s]" this detail as homoerotic but the way Eliot includes it emphasizes

proprioception in action (329).[189] Descriptive clauses interrupt the sentence but their movements do not interrupt the flow of Tournabuoni's speech. Eliot exaggerates this fact by stretching the clauses of the speech tag, piling up three gerunds (saying, laying, caressing) in the real-time length of a breath. Tournabuoni's basic morphology – the bend in his hips, the proportion of his legs to his torso – enables his seated balance and maintains a dignified posture during strategic conversation. Tournabuoni's conscious mind focuses on his political persuasion – or Tito's curls, Henry might suggest. From the perspective of embodied cognition, the simple details of posture reveal an entire body system at work. In fact, in cases where subjects lose proprioception, movement only becomes possible with conscious attention and visual reinforcement (Gallagher 43).[190] These moments capture why many cognitive scientists now consider proprioception as vitally involved with conscious thinking, in deeper ways than we currently understand.

Of course, proprioceptive details contribute to Eliot's overall realism; but stylistically, such details draw our attention to the centrality of knuckles, thumbs, ankles, knees, fingers – the nuts and bolts of the body – for higher-order modes of cognitive processing. Such structural, systems-based details rarely enter into traditional readings for the body in literature; frameworks of sensibility, sensation, and affect, even while claiming priority or agency for the body, still read the body semantically, or as a unit distinct from mind and self. Eliot certainly incorporates aspects of the body as its own entity but she also highlights the integration of body and mind as another way of configuring intelligence. Eliot does not suggest that Romola's body somehow does more

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[189] Recent studies have found that gesture functions "as part of the actual thinking process" (Clark, *Supersizing* 123-125).

[190] See Gallagher's discussion of "The Case of the Missing Schema," pp. 40-64.

than her mind; she takes nothing away from more recognizable modes of Romola's consciousness. Reading *Romola* alongside modern research paradigms for artificial intelligence helps underscore the ways that Eliot seeks to understand intelligence holistically, not compartmentalized in either mind or body. She narrates her sense of consciousness in proprioceptive details that draw our attention to a neglected vector of the body in literature, one that is also a neglected vector of thinking. The ways that Eliot deploys proprioceptive patterns – movement then awareness, shifting levels of conscious attention – eventually compile a significant amount of relevant integration between conscious thought and subconscious proprioception. Eliot makes the case that cognitive activity may take important but unrecognized forms, and, furthermore, that reflective thought depends on these overlooked thinking bodies.

V.   Women and Chess: then and now

Now, if there is any foundation for this charge [that women can't compete with men in chess], it is evident that the women's game must be affected by some extraneous cause that does not influence the men, and there has been much puzzled inquiry as to what that cause can be. It has remained for the *Troy Times* to solve the great mystery: wire hairpins! — "A Scientific Hint for Women Players," 1897

Romola's thinking body presents an implicit feminist intervention in the debates over women's minds and particularly their relationship to chess in the nineteenth century. Chess provided new social opportunities for women to achieve public visibility but also fomented resistance to just that. The mind-body debate appeared settled in the chess world, until applied to women. From the "male culture" perspective, the role of the body

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never required comment; but discussions over women in chess quickly became embroiled in physiological explanation. The epigraph above proves a case in point: the anonymous scientist attributed a woman's lack of concentration to her wire hairpins, conductors of atmospheric electricity, thus inhibiting her own natural brain waves from proper concentrative function. Here, though in a ridiculous manner, we find precisely the kind of interdependent intelligence that Eliot incorporates into Romola's thinking body.

In 1906, the *Saturday Review* published a short article titled "Women and Chess" that reflects on the rising presence of women in chess. Considering that more women were playing chess than ever before, the article finds it "remarkable that in the whole of its [chess's] enormous literature there does not appear the name of any woman among the stars of the first, second or third magnitude" ("Women and Chess" 689). The explanation can no longer be one of generic "intellectual superiority of one sex over the other" – could it be more specific, that "faculties and qualities of concentration, comprehensiveness, impartiality, and above all a spark of originality" are "[absent] in woman"? The Saturday Review's up-to-date science, its compartmental mind, provides a rhetorical maze for ignoring female intelligence. As for the body, "Whether, or to what extent, [the fact that women have been unable to hold their own in open competition] is a matter of physical constitution, we are unable to say" (690). The article concludes by encouraging women who wish to improve to eschew the "exclusiveness" of ladies' clubs and enter general competition (690).

Records of ladies' matches commented on intellectual qualities of the antagonists, such as their "capacity for taking pains," but often presented a narrow view of the mind (Gunsberg 668). "Chess and the Fair Sex" admits that ladies, crushed by the boredom of

domestic living, "must often feel the need of something intellectually attractive" (Sampson 121). The author expects women to excel at chess because they are "nice at calculating, as well as quick in devising a means of attack or defence" (122). These feminine intellectual qualities recall Mary Wollstonecraft's fear that intelligent women will only develop the lowest forms of intellect, such as cunning. The author here seems to acknowledge the same as an advantage. Romola's return to Florence undermines the assumption that home-life means nothing to do and lack of intellectual activity.

Modern debates over the participation of women in competitive strategy games, such as chess and bridge, rehearse many of the same keynotes from the nineteenth century. In 1985, Joyce Nicholson wondered why so few women participated at top levels. As a competitive player herself, she knew women were at least capable. Her survey of other top bridge players returned qualitative answers: women were, generally, not aggressive enough, too social, too emotional or illogical to succeed at the same rate as men. Nicholson speculates that "sex-role conditioning" may explain the gender gap in competitive bridge (21) but also believes that there "does appear to be a type of brain that excels at games like bridge and chess" (58). "Trying to assess my own brain," she writes, "I can see now I was born with a.... lack of noticing and assessing the situation quickly [which] has been a great disadvantage to me in learning bridge.... I certainly do not have a bridge brain" (59). Nicholson's assessment reduces the gendered assumptions influential in the nineteenth century but admits that some people seem born to play Bridge. As recently as 2015, British grandmaster Nigel Short revived the discourse of gendered brains by stating that men are "hardwired" to play better chess than women (Ellis-Petersen).

Such opinions continue in part because the question asked by the *Saturday Review* remains unanswered: there are only two women in the top one hundred chess players worldwide; only two percent of grandmasters have been women (Schank). A 2009 study explored a new avenue of inquiry: statistics. Researcher Merim Bilalić (2009) asked "Why are (the best) women so good at chess?" If, indeed, women were just generically bad at the game, they should not be competitive with men – ever; but there are significant exceptions to this rule, like the Polgar sisters.[191] Bilalić's reframing of the typical question foreshadows the way his study reinterprets the typical data. Only one of the top one hundred chess players in the world are women. Normally, that statistic is offered as proof that women are not as good at men; otherwise, the argument goes, they would be more equally represented at the top. If women were just as good as men at chess, the top hundred women players should be as good as the top hundred men players, or so that argument goes. Because that is not what we find, the conclusion drawn is that women are not as good as men at chess. Bilalić's analysis, however, suggests this common-sense reasoning is flawed precisely at the point it claims to consider: the numbers. The fact that there are so many more men players mean that their samples are likely to have more extreme outliers; therefore, you can't compare the top 100 men and women because the women will miss out on their inactive outliers because their sample size is so small. In other words, there is no way to know whether men or women are better at chess until their participation rates are the same. "Even if two groups have the same average (mean)

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[191] Judith Polgar "was a phenomenon, by far the strongest female player the world has ever known. She is currently ranked 27th of all the players in the world but she is the only female player in the top 100. The fact that the best female player is an outlier in her population...means that conclusions drawn on the basis of the performance of the top player along may not be applicable to top players in general" (Bilalić 1162).

and variability (s.d.)," Bilalić insists, "the highest performing individuals are more likely to come from the larger group. The greater the difference in size between the two groups, the greater is the difference to be expected between top performers in the two groups" (1161). Bilalić speculates that the same rule of numbers may apply to typically male-dominated fields like math, science, and engineering. There are simply not enough women participating in those fields to be able to compare their performance. Rather than biology or culture, Bilalić argues that basic statistics must be considered first.

Critics have struggled to accommodate George Eliot's concern for women within modern feminist paradigms. As early as 1883, Mathilde Blind pointed out that George Eliot's fiction conveyed a conservatism at odds with her life, a paradox that has challenged critics to account for her apparent inconsistencies.[192] In *George Eliot's Feminism: "The Right to Rebellion"*, June Szirotny reopens the somewhat stale debate over the status of Eliot's feminism by reframing Eliot as a legitimate feminist, but one of "ideals" rather than "practical matters" (32). Eliot's fiction, Szirotny contends, "[supports] the radicalism that she lived" by addressing the "cause of inequities" rather than "particular campaigns" (200). One "particular campaign" passed over by literary history, however, is the turmoil of women playing competitive chess. Reading contemporary essays and newspaper articles, such as Breakey's "Chess," alongside Eliot's fiction highlights a node of her feminism that is both conceptual and practical.

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[192] See Szirotny pp. 29-32.

Women had competitive presence in chess in the nineteenth century, both by

organizing their own clubs and challenging male players.[193] Reactions were mixed: some

felt that women were disgracing their natural femininity in aggressive, intellectual

combat; others worried that their hairpins would impair their brain function or that their

weak bodies would not withstand the stamina required for competitive play; others were

amazed that women could be competitive and found themselves applauding their

efforts.[194] Breakey admits that chess "possesses all qualities that are good, and none that

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[193] Eventually, the first Ladies' Chess Club was established in London in 1897, the year
of Victoria's Diamond Jubliee. Earlier women's clubs were founded in Philadelphia and
Boston.

[194] A toast, printed in Howard Staunton's *The Chess Player's Chronicle*, proposed "The
Ladies," especially "those who were chess players" because there are "amongst the fair
sex many formidable opponents in the chess field, and although some gentlemen
professed to make it a point of gallantry to indulge them with a conquest occasionally, he
believed they now frequently made a virtue of necessity, and veiled a want of skill under
an appearance of respectful deference" ("Northumberland" 372). *The Chess Player's
Magazine* of 1864 printed a notice of the first women's chess club established in the
United States, at Germantown, Pennsylvania. The article, without irony, "compliment[s]
the fair denizens of Germantown on their spirit in starting this novel enterprise, and wish
them a great deal of pleasure and success in it" ("Ladies'" 113-114). Isidor Gunsberg,
one of the last Victorian masters of chess, describes the match between Mrs. Worrall and
Mrs. Showalter as a "serious" match (667), a "careful, deliberate, and hard-fought battle"
worthy of any "minor master" (668). Mrs. Worrall, though the more exciting player,
"rather hurriedly gave up the exchange" whereas Mrs. Showalter "possesses greater
capacity for taking pains" (668); but then, of course, "youth will tell – especially in
procuring mates" (668). Gunsberg's pun on "mate" invokes a frequent commentary on
women's chess. The sight of a young, intelligent woman playing chess with her fiancé
serves as a "flying hint to the ladies. Cupid has no one arrow in his quiver more sharp at
the point than chess. Let the unmarried, who wish to cross the pale, look to it" (Walker,
Chess and Chess-Players 168). J. Sampson followed up an earlier article on "Chess and
the Fair Sex" with a reprint from the *Glasgow Weekly Herald* that recommended that
"mothers and guardians who are blessed with the care of marriageable young ladies, and
who are at a loss to know how to introduce them to eligible young partners" to take note
of the now "extinct" Ladies College Club ("Chess and the Fair Sex (Continued)" 553).
The Club "died a natural death" as all the ladies got "*mated* and the gentlemen carried off
the prizes."

are bad. It even combines fascinations of opposite kinds... for it is peaceful, and at the same time warlike; it is light, and yet profound; it is manly, and yet womanly" (589). Nevertheless, his commitment to serious chess play leads him to misogynistic conclusions. "It is a curious fact," Breakey remarks, "that ladies can never learn chess" (598). Not that curious, apparently: "But the reason is plain enough. It [chess] is an art of war, and nature intended them to shine in arts of peace. For this particular recreation, therefore, they are incapacitated by natural constitution" (598). Breakey's attack on women chess players echoes Tito's own words: "You are so constituted as to have certain strong impressions inaccessible to reason," Tito tells Romola (*R* 391). Men allow ladies to believe they "*can* learn chess, and if they don't the reason is conventionally assumed to be because they happen not to choose" (Breakey 598). Men allow ladies to win, giving women a false sense of success; however, it would be "social suicide" to admit to what "men in their secret conscience know" (598). Breakey discourages playing with women, especially in courtship, and advises young lovers to take a lesson from Penelope's suitors.[195] Though often playing chess amongst themselves, the suitors know better than to ask "*her* to play" (599).[196]

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[195] Breakey's prohibition on chess in courtship differs dramatically from its purposes in history, often the scene of love in medieval and renaissance romance. The gender stereotypes attached to games and sports did not always attend chess. In her book, *Birth of the Chess Queen* (2004), Marilyn Yalom traces the game from its origins in India by the sixth century through the development of the game's most powerful piece, the queen. Originally, the piece now known as the queen was the vizier, or adviser, to the king. It was the least powerful piece on the board, being able to move only one square diagonally. Around the year 1000, the queen began to replace the vizier on European chessboards, in part, Yalom speculates, due to powerful queens who ruled at the same time and the rising cult of the Virgin Mary. The queen was still highly restricted in its moves, occasionally allowed to travel with the king under special circumstances (71). A Spanish poem circa 1470 provides the first record of the revolution in play that catapulted the queen from a position of weakness to being the strongest piece on the board, a change

Women's rising presence in competitive chess in the nineteenth century, therefore, poses a conundrum for George Eliot. On the one hand, chess opened possibilities for women to publish and compete intellectually with men. The chess column in *The Home Circle* (1849-1854) encouraged correspondence chess by publishing games between readers, including that of the first known female correspondent, "Sybil," in 1853 (Harding 375). Mary Rudge joined the Bristol Chess Club in 1872 as its first female member. In 1888, a Miss Thorold competed in the International Chess Tournament held in Bradford, England and her results were reported in the *Morning Post* ("International" 3). The numerous publications on chess, especially in the newspapers, also opened opportunities for women.[197] Miriam Clarke and Rhoda Bowles edited chess columns for women's journals in the 1890s (Harding 377). Edith Baird, the most prolific women chess writer, published over 2,000 chess problems in her own books and as a regular contributor to chess magazines and newspapers. Her book, *Seven Hundred Chess*

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codified further by books of chess problems and strategy published in 1495 and 1497 (193-195). Historically, chess was played by both men and women of the ruling classes and considered a standard part of their education as it fostered adult skills of military strategic thinking and planning ahead at a young age (94). Over the seventeenth century, however, chess became less fashionable for women and they stopped playing. Yalom suspects this may be due, ironically, to the new powers accorded to the queen which produced a much faster, more competitive game. Additionally, the rise of the "professional chess player" increasingly moved chess from the private, domestic sphere into the public domain where "full-time champions," like Ruy Lopez of Spain, supported themselves with sponsorships from their sovereigns and competitive winnings (229). For more on the role of the chess queen in the literature of the late middle ages, see Jenny Adams, *Power Play: The Literature and Politics of Chess in the Late Middle Ages*.

[196] The *Dundee Courier & Argus* reprinted this portion of Breakey's article followed by this parenthetical: "(We call our readers' attention to the consultation game below, as a practical unequivocal refutation of these very ungallant observations)" ("Chess Play and the Fair Sex" 2). The *Courier* then printed a chess match played between a woman and man on one side against another man.

[197] For more on periodicals and chess, see Harding.

Problems (1902), "the labour and recreation of some fourteen years," also gives details

on her chess playing career, such as competitions entered and won ("Preface"). She notes

which of her chess problems proved the most "successful" (returning the fewest solves in

a sixth-month period) and highlights the variety of newspapers and magazines that

published her work (17). For Baird, the "fascination of composing has always been far

greater to me than that of solving" (17). On the other hand, women's interest in chess

might only contribute to social games constructed along strategic lines and habits of play.

Their efforts might only reinforce, rather than dismantle, social games. For Eliot, the

questions raised by women and chess remains like that of "the correct defence to the

King's Knight's Game": "as unsettled at the present time as it was three centuries ago"

(Wormwold 5).

VI.   Conclusion

In 1877, George Eliot reported to her friend, Miss Sara Hennell, that "During the

last two months of our stay there I was conscious of more health and strength than I have

known for several years. Imagine me playing at lawn-tennis by the hour together!"

("Letter to Miss Sara Hennell" 231). Eliot's health famously broke down in her writing

of *Romola*. Dames attributes her pain to the historical task, the painstaking research and

collation of detail (*Amnesiac* 207). He follows Anthony Trollope's own impression from

a letter he sent to Eliot: "When Trollope wonders, in a letter to Eliot, at 'the toil you must

have endured in getting up your work,' it is the toil of detailed recollection to which he

alludes" (211-212). Szirotny attributes Eliot's ill-health to the strain of processing the woman question (109). The thinking body in *Romola* suggests the two cannot be separated. Processing how women might take their place in history, imagining their forebears and yet trying to preserve those forebears from the kinds of social interaction that characterize the Cavours of the world and much of written history presented Eliot with a daunting task.

Rather than seeking an unconscious alternative to rational thinking, Eliot turns to the body for its support of conscious deliberation. She desires a more complex view of thinking than that typically distilled from strategic gaming literature and fiction supplies the platform where Eliot can literally push the boundaries of thought, even beyond those imagined by contemporary Victorian scientists. Suggesting that Eliot somehow anticipated modern robotics studies would be misleading, however robotic Romola may seem at times to readers. Instead, the correlation between the two suggests a parallel inquiry, the search after how thinking works and what systems contribute to its processes. Like Edgeworth, Dickens, and Collins, Eliot seeks to understand thinking in games; but, unlike the others, she does not repurpose or adapt that model. Instead, she returns to the body of the thinker in an effort to better understand how rational thinking performs without the training or experience recommended by the gaming community. In effect, thinking with games for Eliot leads to thinking in bodies.

The gaming community continued to grow and gain public visibility during Eliot's career. By the time Eliot died in 1880, chess tournaments had flourished and expanded, in numbers of competitors, frequency, and publicity. Following the first international tournament in 1851 in London, Paris, Baden, and Vienna had each hosted

international tournaments of their own with increasing press coverage and international interest. Visitors clogged the competition venues and newspapers reported match updates daily. Now, tournaments stretched over two months instead of a few days. When the international tournament returned to London in 1883, it did so with a new coterie of chess "celebrities," professionals who had become household names. The 1883 tournament, therefore, marked a new evolution for chess competition: the celebrities entered the "Great" Tournament while a simultaneous tournament was held for amateurs ("London Chess" 3, 4). Significantly, London's amateur tournament debuted an international sponsor: the Maharaja of Vizianagram, the ruler of the princely state of Vizianagram, now in Andhra Pradesh, India. To *The Pall Mall Gazette*, this sponsorship, a tournament "feature," represented "the cordiality with which England's dependencies and colonies have contributed to it.... showing the sympathy which any pastime of the mother country meets with in the rest of the empire" (4). The tournament was "great" because it was "open to the whole world" and showcased the chess world at its best (3).

The *Gazette* fails to mention that chess originated in India. A more accurate statement might be that the tournament expresses the dependency of the mother country on the empire for her latest gaming obsession. This is precisely the tact Rudyard Kipling pursues in his exposition of the Great Game in *Kim* (1901). Kipling's novel contests the imperial narrative tied to chess in periodical literature: instead of depicting the Indian people as amazed by their introduction to English play, Kipling makes the case that gamers in India already populated the Great Game, a game that existed long before British empire. The Great Game capitalizes on rational sensation but extends the model from Collins's domestic sensation fiction to imperial dimensions, elevating the

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absorption and strained attention of rational sensation into an "intellectual sublime" and the converting the national gaming community into a "thinking empire." Kipling's celebration of imperial gamers, whether Indian or English, comes at a price: it maintains the imperial structures that promote the Great Game without examining the power imbalances those structures also support. Kipling seems to hope that a thinking empire might – eventually – dismantle the power imbalances he rejects, such as racially divided intellectualism; but he forgets, as George Eliot cannot, that this ideal privileges those gamers best suited to the Game and that even the intellectual sublime imposes new hierarchies of power.

CHAPTER FIVE: RUDYARD KIPLING'S "INTELLECTUAL SUBLIME": THE GREAT GAME AND THE "THINKING EMPIRE"

As has been said, when [Captain] Disko thought of cod he thought as a cod; and by some long-tested mixture of instinct and experience, moved the *We're Here* from berth to berth, always with the fish, as a blindfold chess-player moves on the unseen board. But Disko's board was the Grand Bank – a triangle two hundred and fifty miles on each side – a waste of wallowing sea, cloaked with dank fog, vexed with gales, harried with drifting ice, scored by the tracks of the reckless liners, and dotted with the sails of the fishing-fleet. — Rudyard Kipling, *Captains Courageous*, 1897

If a man has studied Whist, he knows that.... the same study and thought will enable him to succeed in the game of life.... As a young subaltern I was asked to join a game of Whist, the other players being distinguished old officers; and... one of these officers remarked, that considering what a good rubber I played, there must be something in me above the average. It may have been from this circumstance, that as quite a young officer I obtained a lucrative appointment... in India... — A.W. Drayson, *Intellectual Whist*, 1899

In Rudyard Kipling's *Captains Courageous* (1897), fifteen-year old Harvey, wealthy, spoiled, obnoxious and bored, learns the satisfaction of the working life when he falls off a steamer and is picked up by a fishing boat, the *We're Here*. Captain Disko levels Harvey's privilege, knocking him down in their initial encounter, the first lesson in Harvey's reeducation. Harvey soon respects Disko – not for his heavy fists, but for his expert skill in the work at hand. Repeatedly, Kipling validates Disko's abilities and special talents – other boats fare ill when they ignore his advice, some follow the *We're Here*, hoping to capitalize for themselves on Disko's uncanny "mixture of instinct and experience." Harvey's reeducation depends, in part, on his recognition that Disko's

vocational superiority overrides economic status. Surprisingly, Hervey discovers the intellectual satisfaction of a working life predicated on *thinking of* and *thinking as*. The epigraph above figures Disko's abilities as peculiarly mental and captures the concept I call the "intellectual sublime." By comparing Disko to a "blindfold chess-player with an unseen board," Kipling invokes a recognizable standard of high mental ability; magnifying the "board" to the huge Grand Bank inspires awe. This kind of intellectual feat, tangibly confirmed by large hauls of cod, leverages the thinking individual against "a waste of wallowing sea," "dank fog," "gales," "drifting ice," and, perhaps most threatening of all, the ignorance of less-expert captains, "reckless" and drifting. For Kipling, thinking not only inspires hero worship, it also supports and furthers the worthy projects of empire.

Kipling's intellectual sublime differs from models more familiar in aesthetic philosophy, such as those by Edmund Burke or Immanuel Kant. Burke and Kant both identify the sublime with observing something much larger than ourselves, vast, perhaps terrifyingly so. For Burke, observation of the sublime leads to emotional and even somatic recognition of our own insecurity that both horrifies and, somehow, delights. Kant, unlike Burke, links the sublime to human control over the observed object or phenomenon. Though the sublime overwhelms imagination, reason may conquer the sublime, either by calculation or by realization of our own safety.[198] In both cases, Kant

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[198] Kant calls the first type of sublime "mathematical." In this case, the size of the observed cannot be imagined but can be known by calculation. A good example would be when games manuals calculate the number of possible combinations for cards: "Seven cards may be played 5040 different ways" (*QR*, "Chess" 93). The fact that one cannot really imagine 5040 combinations plays with any accuracy but can still know that number exists makes it mathematically sublime. Kant calls the second type of sublime "dynamic." The dynamic sublime occurs when we witness nature's power but know our

extols the power of the human mind to overcome the emotional response inspired by the sublime; however, Kipling's intellectual sublime differs in key ways. Though he maintains the element of vastness, Kipling alters the experience of the sublime by shifting the role of the individual observer to an active participant, or player, potentially one of many. The moves of the game constitute the sublime object, and therefore the players create the intellectual sublime as they interact and maneuver. The intellectual sublime, therefore, moves from the mental theater into a complex game networked through social and imperial systems. In the epigraph above, Kipling juxtaposes the usual source of the sublime – powerful nature – with Disko's skill as a captain. The catches of cod, laboriously counted by the crew, provide a direct measurement of Disko's intellectual ability, even though it defies imagination.[199] In this case, Harvey and the reader experience the intellectual sublime by observing Disko's prowess; *Captains Courageous* remains heavily focused on the individual. Kipling adapts the intellectual sublime in *Stalky and Co.* (1899) and *Kim* (1901), the two novels I discuss further below, to involve networks of players that cannot be fully comprehended, either by calculation or by reason, even though intellectual engagement in the large game binds its players together.

Games literature promoted the intellectual sublime by defining skilled gameplay as both attainable through study and the gift of genius. In *Intellectual Whist*, A.W. Drayson writes that scientific play "has become a means of cultivating the perception and reasoning faculties, and yields delight to those who have studied the game.... [supplying]

own safety. Seeing the damage caused severe weather on the nightly news inspires awe even though we know by reason that the storm has passed and that we may be quite far away. See Alan Richardson's *The Neural Sublime: Cognitive Theories and Romantic Texts* for his discussion of Kant, Burke, and the sublime in his chapter, "The Neural Sublime," especially pp. 24-29.

[199] This would be an example of Kant's mathematical sublime.

a far higher source of pleasure [than gambling by] the exercise of intellect" (5-6).

Drayson, who attributes his own imperial appointment to his reasoned play at whist in the

epigraph above, also suggests that whist might prove more accurate than "competitive

examinations" as an assessment of the "intellectual capacity" of a candidate, perhaps in

part because he believes that "reasoners, like poets, are born, not made" (52, 18). In

English Whist and English Whist Players (1894), William Prideaux Courtney describes

the "Ideal Whist Player" as a person who, first and foremost, represents natural talent:

"The whist-player, like the poet, cannot be created by artificial means. Nature must have

framed his being" (298). Courtney advises all interested whist players to develop their

skills by intelligent study but promises excellence only to those few who exhibit the

following "gifts" of character: coolness ("He must be cool. If he becomes flurried and

nervous, his faculties will slip from him"), equanimity of temper, courage, and memory

("This is a priceless possession at whist") (305-315). Finally, a "good whist-player must

be consumed with perennial enthusiasm for the game" (316). "Who can be surprised,"

Courtney asks, "that in an age of such portentous dulness [sic] men with these gifts are of

exceptional rarity?" (303-304). The male-dominated world of strategic gaming correlates

easily with Kipling's fictional worlds of masculine adventure and heroism; each setting

standards for masculinity predicated on high mental character.[200]

Kipling repurposes this kind of character emanating from intellectual endeavor for

his heroes of the intellectual sublime; he takes issue, however, with Courtney's primary

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[200] For more on Kipling's "codes" of manliness, see Carole Scott, "Kipling's Combat
Zones." See also Bradley Deane's chapter on manliness in Kipling's verse, "Gunga Din
and other better men: the burden of imperial manhood in Kipling's verse," pp. 19-50.
When imperial themes become "too grandly abstract" for his readers, Deane argues,
Kipling "often translates them into the more personal and immediately compelling terms
of manliness" (22).

denominations: English and whist. For Kipling, a mere evening at cards in an English drawing room cannot and should not inspire the kind of "perennial enthusiasm" Courtney insists upon. How can any card table or game board compare with Disko's chessboard? Kipling makes this point explicitly in a short story, "At the End of the Passage." The story begins as four friends, all civil officers stationed at "lonely [posts]" on India's frontier, play whist (Kipling, "End" 79). The men gather weekly, if possible, and "squabbled whenever they met; but they earnestly desired to meet, as men without water desire to drink" (79). Whist provides the men an intellectual outlet, a brief "escape" from the mind-numbing, "miserable intrigues" each confronts during the week (79). The men squabble, in part, over "leads and returns," finer strategic points (79). "It was not the best kind of whist," Kipling admits, "but they had taken some trouble to arrive at it" (79). Their effort, Kipling implies, speaks to their need to exercise their intellectual faculty in a meaningful way, yet one without real-world stakes; in other words, they attempt to be English whist-players playing English whist. For the moment, these four men set aside the social maneuverings of his work and take solace in the small problems posed by whist. Real English whist and English whist-players operate with the luxury of low-stakes confined to the game. Kipling's gamers, by contrast, translate the cognitive faculties developed by strategy games into real life dimensions, always with the risk that real life may still win the game. The men play to protect their sanity but the pressures of their work and environment eventually wear down the host until he dies of supernatural mental collapse. The dark horror of this short story provides a useful counterpoint to the pleasurable intellectual sublime of *Stalky* and *Kim* and helps to underscore Kipling's

well-known ambivalence towards empire. As I will argue, Kipling's intellectual sublime both enables and qualifies his endorsement of the British empire in India.

In Kipling's novel *Kim* (1901), the intellectual sublime characterizes the British empire in India as a "thinking empire." *Kim* follows the adventures of the thirteen-year old street urchin, Kimball O'Hara, the orphaned son of Irish parents stationed in British India but raised by a half-caste woman in the local bazaar. Set in 1878, the narrative begins with two catalysts: Kim joins a holy Buddhist Lama on a spiritual quest for the River of the Arrow and accepts a commission from the Pathan horse trader, Mahbub Ali. Kim quickly realizes that Mahbub Ali plays the Great Game, an imperial contest supported by intelligence networks running throughout India and beyond. The Great Game, like Disko's chessboard, consists of epic proportions, "so large that one sees but a little at a time" (*K* 168). Mahbub entrusts Kim with a coded message, the pedigree of a white stallion, which informs British officers of an organized attack by Russia and confederated northern allies. Kim slowly unravels the meaning of the so-called pedigree and becomes enamored of and entangled in its intrigue. Kim maintains contact with the Buddhist Lama but increasingly turns to the Great Game, receiving training and assignments from Colonel Creighton and Lurgan Sahib. Finally, after four years of development as a field agent, Kim partners with another agent, the Bengali Hurree Babu, and returns to his original task: the pedigree of the white stallion. When Kim expresses surprise at the white stallion's return, Hurree Babu reminds Kim that "'When everyone is dead the Great Game is finished. Not before'" (220). The novel, therefore, cannot contain the entire Great Game but, instead, tells the tale of two related incidents and the intervening development of a shared protagonist, Kim. At the same time, it follows the

Lama as his quest intersects with Kim's, comparing and contrasting the points of contact between the gentle Buddhist guru and players of the Great Game. Ultimately, both quests come to quasi-resolutions: the Lama finds the River of the Arrow in a nearby stream of water, meriting salvation for himself and for Kim; and Kim retrieves more information about the white stallion's pedigree – Russian intelligence – for British officials.

As this summary of the novel already suggests, *Kim* seems a balancing act of opposites – British, Indian; Great Game, Buddhism; Creighton, the lama – opposites that fuel critical debates over how to interpret the novel's Great Game. The term marks out new geographical borders as literary ones: "Great Game country" inspires "Great Game writing" (Hopkirk 9, 8). Some critics, such as Chris Ann Matteo, interpret the Great Game "as a specific, metaphoric code word for the relationship between England and her annexed colonies" (163). Jed Esty, for example, reads the Great Game's "endlessness" as a time-conscious figure that "uses the logic of arrested development to shape the representation of India as a nation perpetually coming of political age, of the Great Game as an infinite mode of British rule, and of Kim as an open-ended human project" (13). Other critics reject the historical and cultural specificity of the Great Game, like Malcolm Yapp, for whom the Great Game serves as a symbolic abstraction equivalent to others in the novel, such as the Wheel, the River, or the Way. Edward Said implicates the aesthetic with the political as a symbolic structure when he determines that the "ultimate analogy is between the Great Game and the novel itself.... It is as if by holding Kim at the center of the novel (just as Creighton the spy master holds the boy in the Great Game) Kipling can *have* and enjoy India in a way that even imperialism never dreamed of" (155). Judith Plotz argues that the "rules of the Great Game force on Kim a role that

progressively impedes fully human communion between him and the Indian world"

(118); but J. Jeffrey Franklin believes Kim and the novel "finally dissolve the dualism of

the Great Game and the Buddhist Way" (*Lotus* 175). As my argument takes up the

cognitive dimensions of the Great Game, it demonstrates the ways that representations of

thinking crystallize some of these seeming divergences by providing grounds for

comparison somewhat apart from the typically charged sides of critical debates.

Examining the Great Game as a cognitive structure adapts Said's formulation so

that by holding *thinking* at the center of the novel, Kipling enjoys empire *and* India, a

seeming node of contradiction. Where critics have sometimes struggled to reconcile the

structural racism of Kipling's imperial values with his respect for local culture and people

groups, Bradley Deane points out, instead, a "deep ideological consistency" in the

interaction between manliness and racism in Kipling's work that "[obscures] the

structural racism of empire behind the pageantry of masculine competition" (23). My

analysis adds an intellectual dimension to Deane's analysis and also redraws some of its

basic outlines. For Kipling, empire in India produces strategic thinking that generates an

intellectual sublime; as such, it belongs to the players, regardless of race, not to the

British. The gaming community helped promote this idea by publishing matches played

in India. The respected English player John Cochrane travelled to India for the purpose

of playing chess. His games with local Brahmins, especially those contested between

1851 and 1853, were published in the *London Illustrated News* and the *Westminster*

Chess Club Papers.[201]

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[201] See *The Westminster Chess Club Papers*, 1 Mar. 1870 for a match between Cochrane
and the "celebrated Brahmin Moheschunder" ("Games" 173).

Along these lines, Kipling disrupts conventional hierarchies associated with both Old and New Imperialisms. As *Kim* demonstrates, the most powerful players may be extremely minor characters, or never seen at all, or in unexpected guises. From the perspective of thinking, empire offers flexible models of partnership tuned to the most skilled players, all of whom hone their skills but work from natural gifts, the genius for their trade in the Great Game. From the perspective of games and the intellectual sublime, Kipling reimagines the British empire as a "thinking empire," one organized and sustained by shared modes of strategic thinking common to gamers everywhere. This ideal moves away from the values of New Imperialism as described by Deane and presents Kipling as the manufacturer of his own brand of imperial fantasy, one that promises an egalitarian meeting of the minds but exists only within the pages of *Kim*.[202] Kipling's thinking empire rewrites the traditional political power structures of the British empire along intellectual, game-based lines without ever denying the British right to play. To preserve his own place in the game, Kipling endorses British presence in India even as he makes the case for going native.

Undoubtedly, Kipling deploys the Great Game symbolically as a metaphor for his novel, but I am interested in what happens if we understand the Great Game as, first and foremost, an actual game. What kind of play cycles on, without end? What kinds of strategy would this game require, what kind of players? Said writes that Kipling thinks of imperial service, the Great Game, as "more enjoyable when thought of less like a story – linear, continuous, temporal – and more like a playing field – many-dimensional,

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[202] This idea sounds appealing, especially wrapped up in adventure fiction; but valuable studies on the violence of empire, particularly Nathan Hensley's *Forms of Empire: the Poetics of Victorian Sovereignty* (2016), cast significant doubt on the extent to which this vision actually had any link to reality or could even be realized.

discontinuous, spatial" (138). I want to refine Said's point about the playing field from

the historically specific context of strategic gaming literature, a perspective that augments

Said's thesis. Understanding the Great Game as a game begins with examining the small

games in *Kim*. Before receiving any official training for the Great Game, Kipling shows

us that Kim already thinks in terms of games. Significantly, Kim's instinct for intrigue is

not enough; he will need to learn the Play of the Jewels, and other actual games, before

he is fit to join the Great Game. This isn't just fiction: snipers in the military (USA and

UK) train their observational skills with a simple game: have a buddy place ten items

under a tea towel. Take the tea towel away, and you have ten seconds to observe the

items. How many can you remember? Play again until you can remember all the items,

and details about the items. This game is called KIM, an acronym for Keep in Memory,

but, as any reader of Kipling's novel has already guessed, the Play of the Jewels is the

real inspiration behind this apparently simple game.[203] Much like Hoyle's Artificial

Memory, soldiers deploy KIM games to improve cognitive function, "an intellectual

training likely to bring out, and to exercise, the intelligence," as Drayson describes

scientific whist (21). Considering Drayson's own perspective, that whist prepared him

for an imperial appointment, as he recounts in the epigraph above, it is perhaps

unsurprising that he subtitled his book "Conversations, Discussions, and Anecdotes on

the Great Game."

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[203] In writing about Zukertort's blindfold chess tournament, *The Freeman's Journal and Daily Commercial Advertiser* suggested its readers try their own experiment similar to the Play of the Jewels: "To realise in a small way the difficulties of the task undertaken by Herr Zukertort, let a moderately skillful player look at a board covered with pieces... and then turn away his head and endeavor to remember the position of every piece on the board" ("Great" 3).

While the novel suggests that games do develop habits of mind, it also warns that the ease with which thinking maps from small games to great ones depends in part on the ability of the thinker to see cognitive analogies between disparate forms; in other words, to perceive the intellectual foundation of the intellectual sublime. Understanding the Great Game as a game requires a methodological shift from reading the link between games and empire as representational to understanding the relationship as cognitively functional.

By trading on cognitive vectors shared by games, novels, and political intrigue, Kipling rebrands the British Empire as a thinking empire. His intellectual sublime imagines a cognitive network of thinkers and players, dynamically structured by skill, not arbitrary notions of race or class. At the same time, it ignores the conflict, violence, and power relations that make his intellectual sublime impossible in reality. *Kim* insists that mental superiority can and should structure relations between people but it does so best, most fully, under an imperial framework. At times, Kipling alludes to the cost of the Great Game he loves, as in the dark framing poem he wrote for *An Almanac of Twelve Sports*:

> Here is a horse to tame
> Here is a gun to handle –
> God knows you can enter the game
> If you'll only pay for the same,
> And the price of the game is a candle –
> A single flickering candle!
> > Now we must come away.
> > What are you out of pocket?
> > 'Sorry to spoil your play
> > But somebody says we must pay
> > And the candle's down to the socket –
> > Its horrible tallow socket.

The candle ultimately serves as the arbitrary time-keeper, determining an ending, much

like Kim, based on neither the game nor play.[204] In addition to time, the candle consumes

a hidden cost, one that seems insignificant, until, of course, one is unable to pay. The

Great Game exposes how large games outpace the individual player, and, while they

cannot be mastered, must still be played but *Kim*, much like the candle, sometimes

obscures its costs – and previous debts. *Kim* acts as a novel of empire by including the

reader in the kinds of intellectual play promoted by the Great Game and extending the

gaming community into the community of readers bound together by *Kim*.

I.   The Great Game's Intellectual Sublime

Over the nineteenth century, writers referred to paternalistic and political missions

in central Asia as the "great game" but Kipling repurposes the phrase along distinctly

intellectual lines, eschewing the phrase's historical connotations that resonate with his

own poem, "The White Man's Burden," for a game of strategic thinking, positioning, and

skill reminiscent of chess and whist.[205] *Kim* popularized the phrase as never before but

since that time critical discussions of the "great game" have focused on its other

meanings: political, as play between countries or empires; ideological, as propping up

imperial, especially Western, rule; historical, as nineteenth-century engagements between

[204] Kipling may be thinking of a common phrase, "The game is not worth the candle." Originally of French origin, *Le jeu ne vaut pas la chandelle*, Cotgrave first translated the phrase in an English dictionary as "It will not quit the cost" in 1611. According to the OED, the phrase soon returned more literally to its French roots, translating *jeu* as play or game.

[205] For a review of the history of the phrase, see Becker; Yapp.

Britain and Russia over Afghanistan and other Eurasian borderlands north and west of India.[206] By recovering a sense of the Great Game as a popular strategy game, we can reflect on the kinds of cognitive activity necessary to such political, imperial, and historical relations: what kinds of thinking does the Great Game, in its many forms, encourage or require? "'Well is the Game called great!'" reflects Kim (*K* 224). *Kim's* Great Game inspires the enthusiasm of the sublime. Four factors contribute to this particular Game that make it truly great: first, it is its own reward; second, the stakes are serious; third, its mystery; and fourth, its size. All of these great, sublime features, however, share a common intellectual domain because all are addressed through skilled, intelligent play. Kipling's Great Game is not just great because of its dimensions but because of how players interact with and manage those dimensions in cognitive terms.

First, the Game rewards its players with the pleasure of its play. From the beginning, even before undergoing his education in the Game, Kim understands why its players love to play. For three years, he carried out small tasks for Mahbub Ali, the horse-trader: "It was intrigue, of course... but what he loved was the game for its own sake – the stealthy prowl through the dark gullies and lanes, the crawl up a water-pipe, the sights and sounds of the women's world on the flat roofs, and the headlong flight from housetop to housetop under cover of the hot dark" (*K* 3). The tempos and rhythms of the game accommodate both the slow, stealthy prowl and the adrenaline of a headlong flight. Kipling's description captures the movement and the atmosphere of the movement, conveying the affect of the game as its highest reward. Kim plays the game

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[206] The term "Great Game" gained academic traction during the 1960s when journalists and historians drew links between past and present invasions of Afghanistan (Becker 73, 71).

in order to feel these sensations and, as a result, hones the instincts best suited to the game: "Swiftly Kim took up the money; but, for all his training, he was Irish enough by birth to reckon silver the least part of any game. What he desired was the visible effect of action; so, instead of slinking away, he lay close in the grass and wormed nearer to the house" (36).

Despite its moments of joy and pleasure, the Game exacts a high price. Kipling frequently follows the game's euphoria with a reminder of its stakes. For example, "Kim stole out and away, as unremarkable a figure as ever carried his own and a few score thousand other folk's fate slung round his neck" (*K* 35). Here we have the same sense of movement as Kim steals away into the darkness; but this time, unbeknownst to him, a few score thousand people will be impacted by his actions. Kipling's metaphor juxtaposes the casual way Kim carries a dangerous message around his neck with the fates of those the message represents. Kim seems unaware of the stakes because his movements, slinking away, imitate his previous intrigues carrying illicit love notes. Kim eventually absorbs Kipling's consciousness about the seriousness of the Game as he becomes more immersed in the game and its stakes. Working to save the life of a fellow agent, Kim feels "this was the Great Game with a vengeance" (199). The agent confirms Kim's intuition, exclaiming, "Live a year at the Great Game and tell me that again!" (200).[207]

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[207] The Great Game sponsors its fair share of violence: only the best players survive. In effect, Kipling displaces the violence of empire onto the Game, as a result of its play, not of the power structure of empire. He seems to see empire as the more neutral structure and the Great Game as the true determining force in the region. In some ways, he inverts the formula Nathan Hensley proposes in *Forms of Empire: the Poetics of Victorian Sovereignty* (2016). Whereas Hensley might read the Great Game as a form of empire, Kipling might suggest empire is a form of the Great Game. If the Game truly preexists

For skilled players, the mysteries and puzzles of the Game adequately balance its dangers. Lurgan Sahib, the master of disguise who completes Kim's training, tests Kim's fitness for the game in strange and unnarratable ways. Lurgan Sahib disturbs Kim's sleep by playing a record on a phonograph, a machine new to Kim. Bothered by this strange contraption, Kim "grew furious, thinking, as usual in Hindi," then English, then again in Hindi, before destroying the machine "when the vile thing drew breath" (*K* 150). The darkness and Kim's unfamiliarity with the machine lend themselves to defamiliarization that resists complete narration. Kipling follows this episode with one even more bizarre: Lurgan Sahib tests Kim's psychological control by trying to make him see a broken jar as a whole. Lurgan "laid one hand on the nape of his [Kim's] neck" and Kim begins to see the pieces of the jar reforming themselves (152); he fights against the impression, yet – "how slowly the thoughts came!" – and finally "took refuge in – the multiplication table in English!" (153). These forms of psychological testing indicate the extent to which the Great Game consists of psychological warfare; its strangest, most unaccountable moments require the highest presence of mind. Kim passes this examination of mental fitness because his cognitive recourse to rote memory grounds his sense of reality and enables him to confront Lurgan's mirage.

Attending to its great dimensions, in terms of size and variety, however, truly marks the Great Game as an intellectual sublime:

> Kim slept little, and his thoughts ran in Hindustanee: 'Well is the Game called great! I was four days a scullion at Quetta, waiting on the wife of the man whose book I stole. And that was part of the Great Game! From the South – God knows how far – came up the Mahratta, playing the Great Game in fear of his life. Now

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empire, then Kipling's endorsement may be read as a response to inevitability; learning how to play better becomes the key to its ultimate defeat.

I shall go far and far into the North playing the Great Game. Truly it runs like a shuttle throughout all Hind [India].[208] And my share and my joy' – he smiled to the darkness – 'I owe to the lama here. Also to Mahbub Ali – also to Creighton Sahib, but chiefly to the Holy One. He is right – a great and wonderful world – and I am Kim – Kim – Kim – alone – one person – in the middle of it all.' (*K* 224)

That all these seemingly unconnected people, places and affairs actually coincide, and do so through Kim, one person in the middle of it all, impresses Kim and contributes to his joy. Chess and whist enthusiasts acknowledged a similar response to the "extensive combinations" strategy games made possible.[209] The intellectual expanse of these games amazes their players but, even more so, impresses upon players the intellectual powers of the human mind in localized circumstances. These games cannot be conquered as wholes but can still be played in parts.

Admiration for the game translates into admiration for its most skilled players. Kim watches agent E.23 in bemusement only to realize that what looked like foolishness actually represented highly skilled play: "'I am only a beginner at the Game, that is sure,'" Kim reflects; "'I could not have leaped into safety as did [E.23]. He knew it was darkest under the lamp. I could not have thought to tell news under pretence [sic] of cursing... and how clever was the Sahib!'" (*K* 208). Later, Kim compares himself to

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[208] The OED cites Kipling's poem, "The Coastwise Lights," as an example of the weaver's shuttle: "Swift shuttles of an Empire's loom that weave us, main to main." An obsolete meaning of the word shuttle as arrow could also be relevant for Kim in the context of the Lama's search for the River of the Arrow.

[209] See Ch. 2 pp. 157 and footnote 198 in this dissertation. This quality of the Game resonates the most strongly with Kant's mathematical sublime except in key respects: Kant's mathematical sublime depends on complete calculation of the unimaginable subject. Kipling's Game presents just the opposite kind of subject: it defies calculation. One can only intellectualize the Game by: 1) imagining its vast proportions; 2) playing locally. In this way, Kipling's intellectual sublime inverts Kant's mathematical sublime. As Henry Bohn says of whist, "The possible combinations [of cards] are almost beyond arithmetic, and absolutely out of the reach of words" (2).

Hurree Babu: "'He makes them a mock at the risk of his life – I never would have gone down to them after the pistol-shots" (281). Kim admires the key components of the intellectual sublime played out in real life by E.23 and Hurree Babu: its stakes of life and death; the presence of mind and counter-intuitive improvisation displayed by its agents; and the radically different play styles that prove the impressive flexibility and capacious dimensions of the game itself.

Kim's wonder at the skill showcased by E.23 and Hurree Babu shows that although he may be a beginner, he belongs to the class of players "who have an idea of what the game means" (Breakey 590). The sublime of strategic gaming depends on playing the game well and on a right approximation of the play between players. Players at chess who do not rightly perceive the skill of their opponents also fail to experience the intellectual sublime of highly skilled play: "*They* know nothing of the 'stern joy' which the true chess-player feels as the tide of victory sways to and fro over the well-fought field" (591).

By aligning the Great Game with strategic gaming culture, Kipling rebrands the term along lines of intelligence, information gathering, and thinking prioritized by strategy games. *The Westminster Chess Club Papers* remarked that although "We are told that 'life is a kind of Chess'" and some claim chess "more aptly described as a representation of war," "We believe on the contrary that the only influence of chess upon the character is to create an enthusiasm for itself.... 'Dans l'Empire des echecs il y a beaucoup de Rois, mais deux fois plus de *Fous*'" ("Moral" 5).[210] The article claims for chess a peculiar and unique form, one capable of inspiring enthusiasm in its adherents.

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[210] "In the empire of chess, there are many kings but twice as many fools (bishops)" (my translation).

The affect of chess, the article implies, concerns absorbed interest closely tied to admiration for intellectual ability and skilled strategy. The "moral" that closes the article appears to be a simple pun on Fou or bishop; but it actually cues the result of enthusiasm for chess – that its votaries study it to the point of being able to discern the kings from the fools and to value the relative scarcity of truly skilled players. The pun on *fous* hints at the intellectual application: these are not political kings but intellectual ones, the best and most skilled players.

Kipling harnesses the intellectual sublime claimed by gaming culture for his own fictional representation of the Great Game. In so doing, he ties the intellectual sublime to projects of empire. The Game "[reminds Kim] of experiences in the letter-carrying line, when, for the sake of a few pice, he pretended to know more than he knew. But now he was playing for larger things – the sheer excitement and the sense of power" (*K* 47). This next-level experience, the "stern joy" of the well-played chess game replicated in life for imperial stakes, amplifies the satisfaction in mental skill to an intellectual sublime deeply tied to the projects and power of empire. Kipling ignores what many modern readers cannot: how to appreciate an intellectual sublime imperially tainted? This question becomes increasingly difficult to ask as the novel develops its cognitive parameters for readers: for as "Kim warmed to the game," so do readers find themselves compelled into the novel's play (47).

II.   Reading for Imperial Games

MR. STAUNTON, the Mighty Shah of Chess, has been retained as Standing General by the Peace Society. He is, in future, to fight all England's battles with foreign powers. This mode of warfare will be much cheaper.... Who shall say how soon CHESS-GENERAL STAUNTON may be called into play? — "Chess, the Cheap Defense of Nations," *Punch*, 1849

In *The Compleat Gamester* (1674), the first games manual in English, Charles

Cotton calls chess "The Warlike Game," for obvious reasons (125). Howard Staunton,

Victorian Britain's most famous chess player, explains that as the original Indian game

"was an imitation of war, so the men were endowed with such military qualities as

Hindoo warfare would naturally suggest. The Piece stationed next to the King was the

elephant – an important auxiliary in Indian warfare – the Horse, which occupied the

adjoining square, represented the cavalry, while the Piece in the corner was the Ship –

typifying the vessels which fought on the Ganges and other great rivers of the country –

and the four Pawns were the infantry" (Staunton, *Chess: Theory and Praxis* 3-4). As a

metaphor for warfare, chess relies heavily on representational correlations: the horse for

the cavalry, the rook for the navy, the board for the battleground. As Staunton tells its

originating myth, "Chess was invented in the second age of the world by the wife of

Ravan, King of Lanka (the capital of Ceylon), in order to amuse him with *a kind of image

of war* while his chief city was closely besieged by an enemy" (2, my emphasis). As a

"kind of image of war," chess formally replicates the spatial maneuvers and relations of

the battlefield. The organizing mechanisms of empire, however, may not always be so

visibly arranged. In addition to a representational metaphor, therefore, chess provides a

functional approach to the kinds of thinking empire requires. Kipling's Great Game takes

the historical conflict between Britain and Russia as an occasion for exploring its

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underlying intellectual structures. By positioning the British and Indians as allies against

the Russian and French, Kipling amplifies, as others have noted, his claim for "Pax

Britannica [as] the guarantor, not the enemy, of Asian multiculturalism" (Esty 8); a

multiculturalism that includes, I propose, gaming. Kipling's Great Game provides a

common bond, a shared enthusiasm and sublime that unites British and Indian forces

against the less-skilled.

Kipling shifts his gaming metaphors towards the thinking empire and away from

the war of empire in part because, as war, chess could be used as a "kind of image" of the

tension between British and Indian forces. In October 1859, *Punch* published this short

announcement: "THE INDIAN CHESS-BOARD. – This long match is over. BLACK loses –

WHITE wins. It will be a long time before BLACK, after the magnificent check it has just

received from WHITE, will feel inclined to renew the game" (166). The "long match"

refers to the conflict begun by the Sepoy Rebellion of 1857, formally declared ended by

the British in July 1859. This short notice, in the style of a chess-column account,

invokes obvious racist tropes of black and white in the reductive terms of final scores.

An implied irony, Indians, the people who invented the game, defeated on their own

chess-board, offers a not-so-subtle insult. This kind of statement runs completely counter

to everything Kipling promotes in *Kim*. He wants India to be "inclined to renew the

game" – just not this one. Kipling replaces chess as an image of war with the Great

Game as an intellectual and necessary partnership between British and Indian forces. In

effect, *Kim* re-writes this version of the Indian chess-board by shifting the terms of

conflict from body to mind and exchanging the two-player form of chess for the multi-

player partnership of whist. For Kipling, this solution reduces antagonisms between

British and Indian – even as it obscures the motives for such conflict – and elevates the

game being played to its rightful status as Great. This shift remakes the British empire

into a thinking empire that proves amenable to and appreciative of Indian play.

Kipling's reorientation of the Great Game follows a trend in chess sets produced

in India over the nineteenth century. The English-made Staunton chess-set, first released

in 1849 as a simple, abstract set that could be mass-produced, is still the most familiar

today; but collectible sets, then as now, were far more ornate and thematic. For instance,

the East India Company sets, also called the "Delhi John" or "John Company" sets (see

fig. 5.1), mimetically reproduced "Hindoo warfare." The Delhi John sets were produced

in India throughout the nineteenth century and even beyond the dissolution of the East

India Company in 1874, although twentieth-century sets declined sharply in quality.[211]

Although few could have owned such intricate works of craftsmanship, the public could

have seen the work from the ivory carvers of Berhampore (Bengal) in Great Exhibition of

1851 and in the *Illustrated London News* from April of that same year (see fig. 5.2).

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[211] Today, Jonathan Crumiller owns six of these sets, the largest single collection in the world. To see more of his collection, visit https://worldchess.com/2016/01/31/the-collector-the-sets-of-the-east-india-company/

*Figure 5.1 Two examples of East India Company Chess Sets, circa 1805 and 1830, respectively.*

IVORY-CUTTERS AT BERHAMPOOR (BENGAL), FOR THE GREAT EXHIBITION.

Figure 5.2 Illustrated London News*, 1851. This illustration of an Indian workshop carving ivory chess sets accompanied an article on their workmanship being celebrated at the Crystal Palace Exhibition. Note the European-style glasses worn by some of the workers, reminiscent of the Lama's glasses received from the British caretaker of the museum in Lahore.*

The sets show surprisingly little variation, except when it comes to the pawns (see fig. 5.3). For the most part, only the bases (neutral for the East India Company, colored for India) distinguish the ruling pieces, who ride the same mounts and even wear similar dress, although some differences in weaponry and stylistic details are visible. The pawns, by contrast, show such variation that Jonathan Crumiller, the collection's owner, shows an example of pairs of pawns belonging to his six sets; the pairs of pawns, left to right, span the century. The top row of pawns represents the East India Company; the bottom row, local foot-soldiers. Interestingly, cultural characteristics move back and forth, confusing the identities between British and Indian. In the set from the 1830s, pictured

second, the British soldier looks British and the Indian soldier stereotypically oriental; but in the next set, those identities appear to switch places. Some of the sets depict Indian Sepoys as the pawns for the East Indian Company, but even so, the chess sets unconsciously reach for the assimilation of the final set in which the pawns appear nearly identical. Quality in manufacture declined over the nineteenth century, which could explain the lack of differentiating detail but another set, known as the "Sahib Bust" set, follows the same trend (see fig. 5.4). The sixth pair of pawns (fig. 5.3), identical except for their bases, comes from a set that exchanges the usual theme of war for that of a tiger hunt. United by common prey, this late nineteenth-century set figures the dissolved East India Company and local rulers at peace as hunting partners. These identical pawns – British? Indian? – trade cultural identity for visual assimilation, a thinking empire no longer at war with itself.
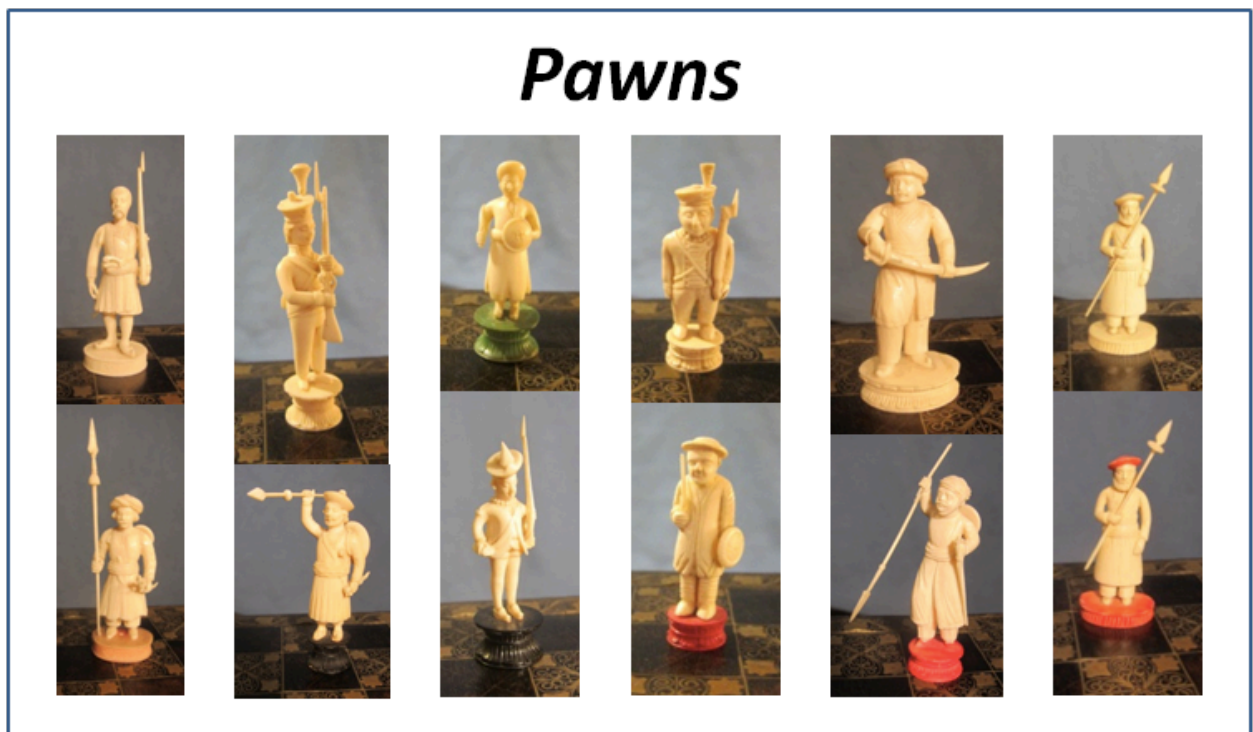
Figure 5.3 Comparison between pawns for Company John sets over the nineteenth century.

Kim, I argue, participates in this same rhetoric by replacing the prey of the tiger hunt with mutual political foes, France and Russia. Kipling rebrands the term "Great Game" from its earlier connotations of moral paternalism along lines of intellectual combat in order to demonstrate why Britain and India need each other. This argument supports his seemingly paradoxical view of empire and explains how he can love and admire India while still supporting colonial rule. With other European threats at hand, Kipling supports the British right to rule because they most consistently match the Indian-style of strategic thinking. From Kipling's view, the Great Game belongs to England and India together.

Figure 5.4 Sahib Bust Sets

Kim assimilates its players to its Great Game as the phrase occurs repeatedly in the novel across various characters, including the narrator: "The Game is so large that one sees but a little at a time" (*K* 168); "When everyone is dead the Great Game is finished. Not before" (220). Each of its players respect what Jed Esty defines as the Game's "defining quality," its "endlessness" (13). *Kim* serves as a kind of bildungsroman where the titular character learns about himself but also as one where he learns about the Great Game, as does the reader. At the beginning of the novel, Kim knows little about the Great Game, especially in its official and explicit dimensions:

> He knew he had rendered a service to Mahbub Ali, and not for one little minute did he believe the tale of the stallion's pedigree. But Kim did not suspect that Mahbub Ali, known as one of the best horse-dealers in the Punjab, a wealthy and enterprising trader, whose caravans penetrated far and far into the Back of Beyond, was registered in one of the locked books of the Indian Survey Department as C.25.1B. Twice or thrice yearly C.25 would send in a little story, badly told but most interesting, and generally – it was checked by the statements of R.17 and M.4 – quite true. It concerned all manner of out-of-the-way mountain principalities, explorers of nationalities other than English, and the gun-trade – was, in brief, a small portion of that vast mass of 'information received' on which the Indian Government acts. (*K* 21)

The abrupt shift in focalization, "But Kim did not suspect," jerks the reader, even one savvy enough to suspect, as Kim does, the "tale of the stallion's pedigree," into the world of the Great Game, where "locked books," departments, registration, and code names all indicate the seriousness of the intrigues connected with the pedigree's code. The "vast mass" of gathered information feeds a game "so large" that it virtually never ends; Kim does not even suspect its dimensions but he will soon begin to learn how his particular skill sets enter into the Great Game of imperial intelligence. The final sentence gives the impression that the Indian Government thinks like an individual, processing "information received" and drawing inferences that lead to action. It would be a mistake, however, to

read this synecdoche too literally; that is, as if Kipling figured the thinking Indian

Government as an individual in order to imply that somebody at the top chose rational

courses of action. Instead, as this passage shows, and indeed as the entire novel explores,

the action and information of the Indian Government subsists among multiple agents –

C.25, R.17, M.4 – and their handlers. The novel only taps the complexity of the entire

machine; nevertheless, Kipling finds it appropriate to represent that organism as capable

of thought. As a result, Kipling underscores the way the Indian Government works like a

mind without considering its agency as a unified force.

In fact, modern understandings of the Great Game make just this point: as

historian Matthew Edwards points out, "The original Great Game was, in the main, a

struggle behind the scenes, a war of operatives working alone or in small groups,

sometimes on their own initiative, at the very edges of control and supervision by their

superiors" (89).[212] *Kim's* colorful cast of extremely minor characters emphasizes the

ways that the edges of novelistic representation actually point to the untapped excess of

the Game. One such operative working "at the very edges of control and supervision" of

superiors and the novel appears for just a few pages: the unnamed Ao-chung coolie. Also

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[212] Today, Edwards goes on to say, "The concept, however, of secret agents operating
alone per se is laughable, with the New Great Game being conducted as much in business
negotiations in New York, London and Moscow as it is in Central Asia and the
Transcausus" (89). For more on distinguishing the modern Great Game from the one
Kipling referenced, see Edwards pp. 91-97. For more on the new Great Game, see
Alexander Cooley, *Great Games, Local Rules* (2012); Sajid Kamal, "The New Great
Game" (2013); Khalil-Ur-Rehman, "The New Great Game" (2014); Henry Meyer, et. al,
"Ukraine and the New Great Game" (2014). Geoffrey Hamm likewise finds modern
comparisons to the Great Game overly romanticized – but he also finds the entire history
suspect as Kipling's purely fictional secret service "never existed" (396). Historian
Malcolm Yapp argues that the "Anglo-Russian rivalry did not exist to the extent which
has been suggested and which the use of the term has fostered, and that the
consequence... has been to distort our understanding of the problems of the defence of
British India... and even of the nature of British rule in India" (187).

called the "man from Ao-chung," this non-descript character plays what we might assume to be the stereotypical coolie: cowardly, disloyal, stupid. Readers might assume he provides a foil for Kim: while Kim works to recover state secrets, the Ao-chung coolie steals a rifle and flees the scene. Without warning, however, the narrator connects the Ao-chung man to the Great Game and, apparently, one of its power players, Yankling Sahib: "Two hundred miles north of Chini, on the blue shale of Ladakh, lies Yankling Sahib, the merry-minded man, spy-glassing wrathfully across the ridges for some sign of his pet tracker – a man from Ao-chung. But that renegade, with a new Mannlicher rifle and two hundred cartridges, is elsewhere, shooting musk-deer for the market, and Yankling Sahib will learn next season how very ill he has been" (*K* 266). The full story of the Ao-chung man happens literally, in Edwards's words, "behind the scenes." The reader knows nothing about Yankling Sahib or his influence, either; but Kim knows even less – the narrator reveals this connection long after the Ao-chung man exits the scene. Yankling Sahib's remove – two hundred miles north – and his impotent apparatus, the spy-glass, suggests the extent of his dependence on his tracker. Kipling's neologism, "spyglassing," suggests the extent to which Yankling Sahib performs this activity, the idea that he can do little else but watch and wait for the return of the Ao-chung man. Meanwhile, the Ao-chung man, following his own initiative, seizes weapons and pursues his own designs, knowing Yankling Sahib will have to content himself with the basest excuses next season. Kipling's verb tenses align the story of the Ao-chung man with Kim's but also underscores the extent to which the story remains untold: Yankling Sahib *will learn next season*. Behind the scenes, of politics and narrative, the Great Game involves countless actors in their own time-sensitive plots, sometimes coming into

contact with the titular character, but often only as a reminder of the limits posed by the novel form for such a subject as the Great Game.[213]

Critics have often accused Kipling of being Empire's poet but exploring the history of the Great Game terminology suggests otherwise. Seymour Becker's etymology for the Great Game traces the phrase back to Captain Arthur Conolly, who used the phrase occasionally in letters and publications to describe the "noble" action of the British Empire in civilizing India (63): "For Conolly, the game metaphor signified a contest in which the Russians were Britain's *potential* opponents, but the Central Asians were her *immediate* ones. The contest was a mostly altruistic undertaking which would confirm Britain's superiority, not over Russians but over uncivilised infidels" (65).[214] Until the 1870s in fact, the term "Great Game" explicitly included *Russia's* partnership with England in bringing European values to Central Asia (69).[215] Certainly many of Kipling's readers would classify him as sharing imperial sympathies with Conolly; but *Kim's* representation of a Russian character undermines the parallel. As a French and Russian agent discuss British intelligence, little suspecting that the wily Bengali agent, Hurree Babu, understands French, both Europeans reveal their lack of insight into the game: "To fight a fellow-Continental in our game is something. There is risk attached,

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[213] Similarly, Kim imagines the network of Russian spies opposite his own: "...this collapse of their Great Game (Kim wondered to whom they would report it)..." (*K* 248).

[214] Others used the phrase the Great Game to refer to war or international relations without the civilizing mission intended by Conolly. In *Vanity Fair*, for instance, as George prepares for Waterloo, "his pulse was throbbing and his cheeks flushed: the great game of war was going to be played, and he one of the players" (Thackeray 291).

[215] For instance, Walter Millar Thorburn's *The Great Game: A Plea for a British Imperial Policy* (1875) recommended Russia as a partner in civilizing mission (Becker 66-68). See also Yapp 180-185.

but these people [the British, the natives] – bah! It is too easy" (*K* 237).[216] Repeatedly, the Continental agents show they cannot compete with the superior spying of the British and Indian. Kipling's contempt for the Russian's poor game-play – which centers on physical assault rather than intellectual discipline – discourages the idea that he saw Russia as a worthy opponent, even if Russia appeared to be a potential one. If Kipling were collecting the anecdotes for Drayson's *Intellectual Whist*, the French and Russian agents would appear under "Unteachable Whisters." By contrast, Kipling's respect for Hurree Babu promotes the equality of partners in the game. Kipling's revision of the Great Game traded Russia for India and replaced paternalism with intellectual partnership.

Journalism on the Crimean War first shifted game-play metaphors more specifically to Russia. The *Nottinghamshire Guardian* reported in 1853 that Turkey "has completely checkmated the European powers in their imbecile game of diplomacy" by declaring war on Russia ("The Sultan" 5). By the end of the war, Russia appears as the game-playing antagonist "at her Old Game": seeking to fracture European alliances, especially between England and France, "no expenditure of fraud, of treachery, of lying, of cajolery, of money or of Machiavellianism, will be spared," including "scores of secret Russian agents" in order to "achieve this grand object" ("Russia" 6). The secret

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[216] Yapp calls this episode "a relatively minor, slightly absurd incident in a book which is, first and foremost, a plotless, picaresque novel about India and, secondly, a study of the rival attractions of the life of adventure and the life of reflection" (185). Yapp's assessment minimizes this episode in order to make a historical point about an overemphasis on Anglo-Russian antagonisms; but as valuable as his insight may be for history, it misreads the novel. This episode, the climax of the novel, receives more development than almost any other in the book and it continues the event that initiates Kim into the game in the first place. Speaking *relatively*, this episode may be *Kim's* most prominent.

"domestic intrigues" attributed to Russia mark its game as one of indirect diplomacy and oblique maneuvers (6). Russia's reputation for sly gaming continued throughout the nineteenth century, especially as suspicions of Russia's interest in India increased. Demetrius Charles Boulger, an expert on foreign affairs, borrowed "Connolly's coinage but emptied it of the idea of cooperation with Russia" (Becker 69).[217] During the early 1880s, Boulger consistently described Russia and England as opponents playing over Central Asia: "We have made our move on the political chess-board," he declared, "and it is now Russia's turn to make hers" (qtd. in Becker 70).[218] Cartoons in *Punch* reinforced his perspective. In figure 5.5, *Punch* figures Russia and Serbia as Maezel and his famous automaton chess player, also called "The Turk."[219] The pun – ruse, Russe – satirizes the Tsar's show of empty hands.[220]

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[217] As did Sir Charles Metcalfe MacGregor and Sir Charles Wentworth Dilke: MacGregor: "Between 1875 and 1884 [MacGregor] repeatedly used the game metaphor in the way that had *long been part of the language* and owed nothing to Conolly, Kaye or Thorburn" (Becker 70, my emphasis). Becker's focus on the phrase "Great Game" passes by just this important point: that the phrase had long been a part of the language, especially as cultivated by strategy literature and culture.

[218] This attitude towards Russia as an antagonist in gameplay continued through the early twentieth century, as in this short story published in *Punch* in 1922: "They tried to interest me in other pastimes. They made me play Russian PATIENCE once. A stupid rowdy game. The kind of game that Russians would play. There is probably a STATE SCHOOL in Russia for training PATIENCE-players. Intellectual support of the TROTSKY-LENIN regime, I have no doubt, was originally derived from the ranks of Russian *patientsia*" (Knox 5).

[219] In 1818, Johann Maelzel exhibited a chess-playing automaton throughout England. "The Turk," named after the wooden, Oriental figure that sat atop a large chest, matched wits with any opponent courageous enough to try a game of chess. Several newspapers, including *Blackwood's Edinburgh Magazine*, debated whether or not the machine functioned solely by mechanism. It "must be confessed," wrote *The Examiner*, "that it is not very flattering to the dignity of us creatures of reason to be excelled in an intellectual exercise by a compound of clock-work!" The automaton was exhibited at the Crystal Palace in 1851 and John Ruskin occasionally played against it: "I'm going to drive up the hill to the Crystal Palace, and I shall play some games of chess with the automaton chess player. I get quite fond of him, and he gives me the most lovely lessons in chess.... I

PSYCHO À LA RUS(S)E.

Russ-Masculine. "IT MUST BE PLAIN TO EVERYONE THAT I DO NOT IN ANY WAY INFLUENCE THE MOVEMENTS OF THE FIGURE!!"

Figure 5.5 Caption: Russ-Masculine. "It must be plain to everyone that I do not in any way influence the movements of the figure!!" October 14, 1876

never keep him waiting for moves and he crushes me down steadily" (Ruskin, "Letter to Charles Eliot Norton" 81). *The Cornhill Magazine* published an article on the automaton in 1885 that was reprinted in *The Star* and other smaller, local papers. Recent discussions of the "post-human" have revived interest in the Automaton chess player, a modern anxiety that literary critic James Berkley traces back to Edgar Allan Poe's investigation of the Automaton in 1836. Berkley argues that Poe counters the authority of technology by narrating "agency's confrontation with technological assemblages of seemingly unlimited and inexplicable power" in order to debunk the source of authority and reabsorb it as a textual device (364). For more on the chess-playing Turk, see Tom Standage, *The Turk: The Life and Times of the Famous Eighteenth-Century Chess-Playing Machine*.

[220] Yapp argues that "Anglo-Russian rivalry in Europe" presented more problems than did their rivalry in Asia (189-190).

Kipling aligns with these later writers of the late 1870s and 1880s in their use of the Great Game to mark Russia as the true opponent and threat. In 1885, Kipling began using the metaphor in his own articles on "The Central Asian Question," encouraging the Afghan emir "to take his place on the great chess board, ere the game [war with Russia] begins" (qtd. in Becker 71). Kipling's mistrust of Russia informed his literary writings as well, including the "virulently Russophobic 1890 short story, *The Man Who Was*," and, I would argue, *Kim* (Becker 71). As Becker points out, Kipling's "*Kim* endowed the phrase with a popularity and a meaning it had never enjoyed – by equating it with information-gathering and counter-espionage conducted by the Indian secret service's agents, often in disguise, and by their adversaries, undercover Russian agents" (71). More specifically, however, *Kim* popularized the phrase by linking it to strategy gaming powered by an intellectual sublime capable of sustaining an empire.

Comparing Kipling to other Victorian uses of imperial chess demonstrates just how differently Kipling understood the configurations of the Great Game. In "The Black Knight," a short story published in *The Strand* (1892), Raymund Allen depicts the British and Indians as chess-playing opponents. The story begins when a young man and retired colonel from the Indian Mutiny play a chess game with an unusual piece: a black-knight, with "grotesquely protruding eyes and maliciously grinning mouth," noticeably different in design from the "orthodox Staunton pattern... with which I was familiar" (Allen 331). After the game, the colonel relates the story of the fantastic piece, which he won in a battle for his life as a hostage of native troops. An evil priest controls the game but the colonel finally defeats the priest, both on grounds of intellectual superiority ("Suddenly I seemed to be gifted with extraordinary powers of calculation") and will power (337,

338). Having won the game, the chief escorts the colonel back to his comrades and, the next morning, the colonel discovers the black-knight from the night before in his pocket.

Like the brief notice of the "Indian Chess-Board" in *Punch*, *The Strand's* story explicitly draws binary connections between British, Indian; white, black; good, evil. It implies that local chiefs, while under the powerful spells of false religion and priests, will be controlled and prompted to cheat. The story, therefore, suggests that the civilizing mission of Conolly's great game must continue, even in mental terms. The intellectual struggle between priest and colonel subsists of calculation and will power; in both, the colonel proves stronger and more disciplined. The psychological strength he displays ensures his life but kills the priest, who dies in a nervous spasm. This story implies that chess playing will prepare British troops and even subdue India.

Kipling, on the other hand, pivots from these assertions and interprets the story differently. Yes, chess provides a common ground for the meeting of minds between British and Indian; but the depth and intellectual equality represented by such a hard-fought match suggests like-mindedness, a shared psychological strength that, united, proves unstoppable. Like the late nineteenth-century chess sets, little difference separates these two formidable opponents, once foes but now allies in a struggle against incompetent, if persevering antagonists. The French and Russian spies prove their unworthiness when they overlook one of the novel's best agents: the Bengali, Mookerjee Hurree Babu. "He represents... India in transition – the monstrous hybridism of East and West," concludes the Russian (*K* 238).[221] Many critics, including Said, have fallen into

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[221] Kipling's Russian describes the Babu Mookerjee in terms that Homi Bhabha would later label the "mimic man." See Kent's discussion of this connection and critics who

the same trap, reading a level of racism into the Babu's representation – he is, at times, not very manly. Eddy Kent's reading of the Babu, however, grants the Bengali pride of place: "Mookerjee plays the part of the cowardly Bengali babu just as easily and for the same ends as Creighton or Strickland play the part of the foolish sahib.... Mookerjee knows the proverbial rules of the game, and has enough intuition to apply his knowledge judiciously" (Kent 159-160). Remembering, therefore, that the Russian's assessment of the Babu comes from a player so short-sighted that he commits sacrilege by offending a holy lama should give readers pause before accepting it as Kipling's own. In fact, rather than a "monstrous hybridism," Hurree Babu represents a "beautiful impartiality," the kind of commitment to an intellectual sublime shared by British and Indian alike (*K* 61). Kipling welcomes the wild black-knight among the tame Staunton pieces and *Kim* builds his vision of British and Indian culture as worthy allies. Ironically, two illustrations from "The Black Knight" visualize this difference: the first figures India as both bumbling and dangerous but the second imagines an evening at chess between equals (see fig. 5.6). The intellectual sublime replaces the malignity of the first image and the guards watch the game like interested spectators in any good chess club.

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have read Mookerjee as a genuine mimic man, pp. 158-167; Kent argues that Mookerjee is only "faking it" (158).
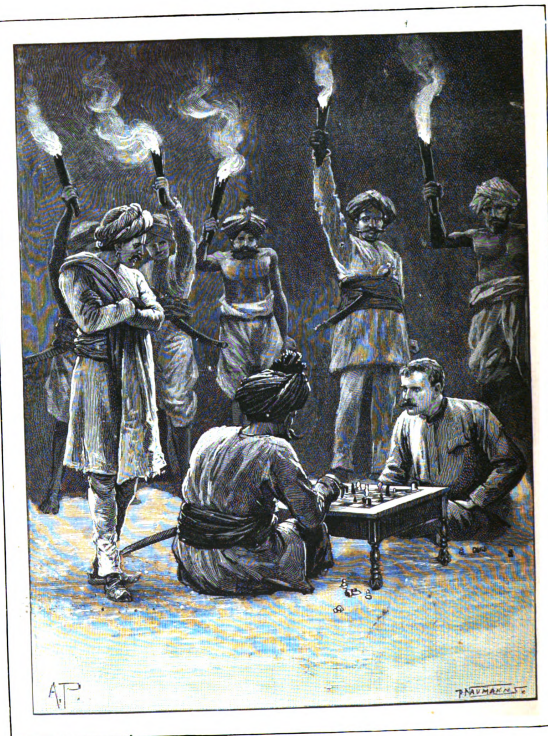
Figure 5.6 The illustration on the right is the frontispiece (p. 330) for "The Black Knight" in The Strand Magazine*; the one on the left appeared in the text (p. 337).*

III.   Empire, Sports versus Games

Boys that he [Mr. Prout] understood attended house-matches.... But he had heard M'Turk openly deride cricket – even house matches... — Kipling, *Stalky and Co.*, 1899

Kipling's denomination of the Great Game of empire as an intellectual sublime runs counter to the usual Victorian preference for sports. The ideological relationship between sports, empire, and masculinity in the nineteenth century has been well-

documented, especially by cultural historian J.A. Mangan.[222] Mangan describes the

agenda of Victorian athleticism as a *games ethic*: tying physical fitness to moral and

spiritual character as a cultural paradigm useful at home and abroad.[223] The games ethic

promoted by many mid-century school masters emphasized good sportsmanship,

perseverance, courage and, as Mangan points out, "the confidence to lead and the

compulsion to follow," key character traits for good imperialists (*Games Ethic* 18).[224]

Mangan's investigation into Victorian education for boys uncovers the many ways the

games ethic underlined and sometimes superseded lessons in the classroom. In *Stalky*

and Co. (1899), short stories of boys and school days, the housemasters, like Mr. Prout in

the epigraph above, abide by a games ethic: good boys attend and venerate house cricket

matches; those who do not, like M'Turk, prove unfathomable to Mr. Prout. Kipling,

however, only rarely approves of sport in *Stalky and Co.*, more often joining with

M'Turk's open derision; and, as seen in *Kim*, Kipling prizes games of a different sort:

great games. Kipling counters the games ethic of school masters and insipid schoolboys

with a games ethic of his own, one that is intellectual rather than moral, and concerns

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[222] For more on the "continuity between domestic games and imperial activities," see
Megan Norcia, "Playing Empire: Children's Parlor Games, Home Theatricals, and
Improvisational Play" (p. 294).

[223] In *Games and Empires: Modern Sport and Cultural Imperialism* (1994), Allen
Guttmann questions the ideological narrative told by "traditionalists" like Mangan (184).
From the perspective of modern sports, Guttmann relates examples of the "emancipatory
potential" of games as colonized cultures have turned imperial culture into their own
(182). "Cultural imperialism," he writes, "has *never* been the simple unidirectional
phenomenon some of its critics have made it out to be" (184-185).

[224] "It might be asserted that the morality of the playing field was a form of political
hegemony masquerading as moral education involving native image reconstruction....
However, given the complexity of human nature, it would be wise to recognise that for
many muscular moralists, sport was not a hegemonic masquerade but an ethnocentric
ethical end in itself" (Mangan, "Pursuit" 2612-2613).

intelligence rather than character.[225] From this perspective, Mangan's concept might be better named a *sports ethic*, and distinguished from Kipling's games ethic. Good players may and often must break the moral code established by the sports ethic; ultimately, the games ethic privileges the spirit rather than the letter of the law and encourages creative thinking worthy of the game rather than the code.[226]

Stalky and Co. comprises a number of interlinked short stories, episodes in the school careers of Stalky, M'Turk, and Beetle, all three members of the infamous Number Five Study. School fellows, prefects, housemasters – none are exempt from the cunning larks and revenges of the Number Five Study, except for the Head of the school, whom all the boys admire for his consistent justice, and the Reverend John, who treats the boys with respect and assigns them tasks worthy of their abilities. Boys attending the school primarily come from military families, especially those stationed in India, and expect to enter the army as officers. The headmasters represent conventional patriotism and authoritarianism, believing that "everything except compulsory cricket... corrupted houses and destroyed good feeling among boys, made youth cold and calculating, and opened the door to all evil" (*SC* 110). Kipling's rebellious trio reject Mangan's games ethic, or sports ethic, favored by the other boys who "play at cricket, and say, 'Yes, sir,' and 'Oh, sir,' and 'No, sir'" (32). Number five study imply that endorsing the sports

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[225] Yapp notes, "It may be presumed that Kipling, who had little opinion of games, intended his readers to understand that the associations of the Great Game would be different in an Indian language from those it attracted in English" (185). By this, Yapp believes Kipling only invokes the term as "an abstract concept" rather than any real game; but the stakes that attend the Great Game in *Kim* suggest otherwise as do Kipling's inclusion of actual games and the language of the gaming community.

[226] Kent argues that Kipling trains Kim to be a company man with his own values: "To slip into the eighteenth-century register of Edmund Burke, it is about cultivating men who will implement the spirit rather than the letter of the laws" (151).

ethic limits understanding and, as a result, inculcates the "compulsion to follow" at the expense of the "confidence to lead."

In *The Games Ethic and Imperialism* (1986), Mangan elaborates the links between moralism, athleticism, education, and empire. For his first case study, Mangan outlines the "simple imperial vision" of Hely Hutchinson Almond, a headmaster near Edinburgh, whose "unapologetic ethnocentricity" matched his contempt for "the bookish nature of the work required for entry to Sandhurst" (*Games Ethic* 27); he "recommended football, hunting, deer-stalking and climbing" instead (27). This quintessential example and men like him "were merely the more active... representatives of a widespread cult.... The outcome was a unique phenomenon: in the most bizarre locations could be found those potent symbols of pedagogic imperialism – football and cricket pitches" (43). As such, Mangan argues for sport as the "cement" of empire, an "agent of militarism, an instrument of imperialism and a source of moral hegemony" (*"Manufactured" Masculinity* 26). Cultural historian Patrick McDevitt challenges this view with the counter narrative that "English games... did not always serve the interests of the colonizers or help to maintain the Empire" (139). He offers examples of tactics introduced by non-English teams that were so effective British teams adopted the measures for themselves.[227] Kipling offers a third alternative. By turning from sports to strategy games, he provides an alternative curriculum, one founded on good thinking rather than law-based moral conduct. Stalky and his friends must learn adaptive critical thinking of the games ethic rather than the structured order of the sports ethic to survive

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[227] See McDevitt pp. 139-140 for examples, such as British teams adopting successful tactics from non-British teams.

in their future military posts. What the headmasters deride as "cold and calculating"

Kipling sees as necessary to imperial fitness.

Stalky and his friends think of their manipulations, both of the headmasters and of the narrative, in terms of a game very different from the ones analyzed by Mangan. Stalky even refuses to play with the most sport-loving headmaster, for "Stalky did not wish to play his trump with such an opponent" (*SC* 27). Later, to misdirect Mr. Prout, the boys improvise a scheme of money-lending within the school and, with the "game almost developing itself automatically," successfully redirect Prout's attention (108). Though Prout eventually puts a stop to their schemes, the boys revel in their clever maneuvers. They literally "had had a good run for their money" (130). Kipling traces the intellectual sublime here, on a much smaller scale, as the boys glory in their ability to outwit the headmasters within the confines of a boarding school. The light-hearted spurning of authority couldn't be more different from the typical sports ethic endorsed by Victorian boys' schools: "No one should overlook the fact that *morality* – more than pleasure, leisure or relaxation – was at the centre of the evolution of modern European sport of the late nineteenth and early twentieth centuries" (Mangan, *"Manufactured" Masculinity* 27). Kipling, therefore, reverses the formula of the sports ethic by aligning intellectual effort with pleasure, even when it turns "cold and calculating" and exceeds the moral guidelines of the school. In *Stalky and Co.,* the absolute dichotomy between headmasters and Number Five Study arises in part because the sports ethic of the former obscures their ability to understand or appreciate the superior intellectual ability of the latter. In each new chapter, the games ethic of Number Five Study triumphs over the sluggish, authority-based habits of those bound by the sports ethic. When the boys leave school for

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posts in India, Kipling makes clear that their colonial subjects understand and appreciate the games ethic, not the sports ethic. The boys of the Number Five Study, therefore, are the only imperial agents equipped to succeed and understand work in the colonies.

The games ethic promotes a comparative standard of intelligence familiar to readers of strategy games literature. The targets of Stalky's plots find themselves "thinking – hard" to keep up (*SC* 30): the prefect's "mind moved slowly" (240). Their exploits inspire their peers "as the full depth of the strategy dawned on" them (258). Number Five Study reserves their respect for their only intellectual equal at the school, the Head: "But they had to deal with a man more subtle than them all.... and the Head had seen what was hidden from the housemaster" (127). Kipling figures intelligence by the common trope of vision, the ability to see farther, faster, and deeper than others.   Only equals share in the intellectual sublime of such game playing; inferior persons cannot keep up and lack the mental insight to realize their inadequacy until too late.

The games ethic supported by Stalky, M'Turk and Beetle subverts authority and traditional moral codes through irony. For example, in order to secure greater freedom of movement, the boys join the Natural History Society despite holding the club "in contempt" (*SC* 2). The headmasters suspect the boys of false commitment, but the boys occasionally return with specimens that fulfill their duties, thereby "checkmating" the masters (18). The boys obey the rules to break the rules; and, although the masters know "they had falsely joined as a cloak for their misdeeds," the boys easily manipulate any evidence of wrong-doing into further proofs of their devotion to science (27). Whereas straightforward intentions and sincere good sportsmanship mark the sports ethic, irony and whimsical deception shape the games ethic Kipling imagines as the common tie

between British school boys and Indian colonial subjects. Though the boys certainly experience an intellectual sublime in their school-time capers, they will more fully engage it once they join the Great Game of empire. In effect, Kipling suggests that *some* English agents and colonized Indians share common intellectual interests that override other vectors of difference; both enjoy and appreciate the Great Game in ways that French and Russian agents or English headmasters back home or even the common British sporting soldier cannot. Within the visible British empire, therefore, exists the thinking empire, Kipling's true interest.

The rebellious cleverness of Stalky and his friends aligns with later configurations of the games ethic abroad. McDevitt reports that throughout the postcolonial British empire, "subordinate groups did not blindly accept these codes [of sportsmanship, respect for umpires and referees]; they resisted and altered them, including, for example, the common practice of bending rules while not breaking them, cheating strategically... and adding innovative tactics which took advantage of loopholes in the rules of a given game" (139). Whereas Mangan's case studies of the sports ethic in Victorian England recall the headmasters, Prout and King, from *Stalky and Co*., McDevitt's description of anti-imperial subversion sounds more like Stalky. Even though McDevitt discusses sports, the innovative ways those sports are being played cue the games ethic. Stalky and his friends not only resist the authority of their intellectual superiors but, in fact, seize as their own right the authority to judge their masters. Reverend John puts together the pieces for the unbelieving King: "Again the long arm of coincidence! *Summa*. You accuse them of trespass. Through some absurd chain of circumstances – they may or may not be at the other end of it – you and Prout are made to appear as trespassers. You

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evict them. For a time your study is made untenable" (*SC* 100). Institutional authority, short-sighted and narrow-minded, cannot interpret "the long arm of coincidence" for what it truly is: the revenge of boys more intelligent than their masters.

Stalky and M'Turk tend to supervise the Study's schemes but Beetle subverts the games ethic of the school in another way: by writing poetry. Verse, especially doggerel, forms one of the notable features of the sports ethic in Victorian England.[228] "Sporting prosody" provided a lingua franca for the sports ethic; "through repetitious trope, colourful epithet and horatory cliché, desirable ways of thinking about the world and a desirable pattern of behaviour were delineated" (Mangan, *Athleticism* 179, 206). Edwardian author P.G. Wodehouse "once claimed the distinction of being the only literate male in the United Kingdom who had never written a song about football, rhyming 'leather' with 'weather'" (qtd. in Mangan, *Athleticism* 179). The classic example, Sir Henry John Newbolt's "Vitaï Lampada," compares the cricket field with the battlefield:

> The sand of the desert is sodden red,—
> Red with the wreck of a square that broke; —
> The Gatling's jammed and the Colonel dead,
> And the regiment blind with dust and smoke.
> The river of death has brimmed his banks,
> And England's far, and Honour a name,
> But the voice of a schoolboy rallies the ranks:
> 'Play up! play up! and play the game!'

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[228] For more on verse and the games ethic, see Mangan, *Athleticism in the Victorian and Edwardian Public School*, Ch. 8 "Play up and play the game: the rhetoric of cohesion, identity, patriotism and morality," pp. 179-206; *"Manufactured" Masculinity*, "Games Field and Battlefield: A Romantic Alliance in Verse and the Creation of Militaristic Masculinity," pp. 190-204.

Beetle's poetry, by contrast, far from lauding conventional athleticism, directly targets unworthy authority figures. Twenty young students sing this song within earshot of Prout's open office door: "Oh, Prout he is a nobleman, a nobleman, a nobleman! ...He does an awful lot, / Because his popularity... His giddy popularity / Would suffer did he not!" (*SC* 117). Lectures and readings from the headmasters, their pet phrases, or direct allusions to their person provide the material for Beetle's bad poetry: "he would embody the suggestion about [King's] nose in deathless verse" (56). As Beetle explains, "You see I can always make him hop with some more poetry. He can't report me to the Head because it makes him look ridiculous" (51).

Beetle satirizes sports ethic verse with his own subversive subjects but Kipling incorporates it for more serious purposes. Kipling quotes Newbolt's "Clifton Chapel" as an epigraph to "A Little Prep.," the episode in which alumni return to the school for a football match against the current students: "*Qui procul hinc* – the legend's writ, / The frontier grave is far away; / *Qui ante diem periit, / Sed miles, sed pro patriâ*" (*SC* 158).[229] In this case, "prep.," the school shorthand for study periods, concerns the recent death of a former student on the frontlines and the heroic actions of another who tried to save him. The boys, therefore, admire the bravery of one well-aware of the cost paid by the other. Discussing their army prospects the boys reflect "'It will be a tight squeeze for Sandhurst this year.' 'And all to be cut up by those vile Afghans, too....' 'Wouldn't think there'd be so much competition, would you?'" (168). The students intrinsically resist the patriotic speeches of a visiting politician, without understanding why; but Kipling's speech tags

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[229] The Latin roughly reads: A man who died far from here, too soon, but a soldier and for his country (my translation). "The third line is on the plaque in Burwash church in Sussex, which commemorates Kipling's son John, who was killed at the age of 18 in 1915 at the Battle of Loos" (http://www.kiplingsociety.co.uk/rg_littleprep_notes.htm).

inform the reader: "...said Hogan, not foreseeing that three years later he should die in the Burmese sunlight outside Minhla Fort" (196); "Yet he did not know that Wake minor would be a bimbashi of the Egyptian Army ere his thirtieth year" (197); "(This is that Perowne who was shot in Equatorial Africa by his own men.)" (203). The instinctual distaste for the sports-ethic patriotism of the speaker extends through the whole school, so that Hogan, Wake, and Perowne, named only in this chapter, stand as boys who learned the wrong kinds of lessons too late. The abrupt contrast between the present speaker and the narrator's future knowledge of untimely and violent death underscores the shallow patriotism espoused by the speaker, a distinct glossing over of the terrible reality of warfare. Reading Kipling's ambivalence here against his jingoistic verse prompts the reader to reevaluate the conditions under which Kipling condones patriotism.[230]

In contrast to Hogan, Wake, and Perowne, the boys of the Number Five Study all survive their imperial appointments and reconvene with some others years later to reminisce. Only Stalky, once their fearless leader, remains as an active agent continuing his adventures in India; these are the stories the boys, now men, share most eagerly. Stalky becomes a highly successful, daring army officer who travels beyond bounds (*SC* 250), breaks the rules (267), and aligns himself with the local culture and authority that he respects more than the official power players (270-271). As his school fellows

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[230] Carole Scott offers a traditional view on Kipling's patriotism when she writes that "The callousness at school towards physical punishment becomes, in this context, simply preparation for a life whose high point is the glorification of war and the fighting man" (63). King's argument certainly applies to the sports ethic practiced by mid-Victorian boys' schools; but, as I suggest here, insofar as *Stalky and Co.* substitutes the sports ethic with one predicated on intellectual gaming, it also revises how we understand the "preparation" and "high point" of students like Stalky.

recount his daring adventures they connect his current exploits to his past history at the school. The friends recognize that Stalky's superiors' attempts at discipline only reincarnate the headmaster, King – "same as King used to blow us up" (269) – and that Stalky's frontline maneuvers "duplicated that trick" from bygone school days (271). This final chapter of *Stalky and Co.* draws explicit parallels between the time spent at school under education of the games ethic and the career of an imperial officer, linking Stalky's school exploits with his current combat strategies in the Great Game.

Stalky's assimilation to the imperial game comes through his ability to cross cultures between the English boys' school and Indian people groups. The Pathans and Sikhs both claim him and nearly come to blows over who Stalky belongs to more (*SC* 258-259); M'Turk "stumbled slap on Stalky in a Sikh village; sitting on the one chair of state, with half the population grovellin' before him, a dozen Sikh babies on his knees" (270-271). The exaggerated description conjures colonial rhetoric of the worshipful native adoring the white conqueror, winner of the sports ethic; but Kipling's substitution of a new games ethic, one based on outwitting, nuances the image. Local groups recognize in Stalky one of their own; more than his fluent Pashtu, respect for their religion and customs, the Sikhs and Pathans recognize an affinity in how Stalky thinks about engaging antagonists (252). In other words, they discern how Stalky's games ethic matches their own and differs from the institutional model. Stalky himself reinforces his difference: "if I thought that... two-anna basket-hanger governed India, I swear I'd become a naturalized Muscovite tomorrow" (270). Stalky compares the intellectual ability of his superior to the lowest Indian caste and therefore earns the respect of Sikhs and Pathans alike because he plays by their rules, the rules of the games ethic, and flouts

his commanding British officers for their inadequate sports ethic. Knowing Kipling's distaste for Russia, Stalky's threat implies that he knows who really governs India's thinking empire – and it's not any European attuned to the sports ethic of athleticism.

By rejecting cricket for chess-like great games, Kipling's game ethic reflects an anthropologically Indian style of thinking. Throughout the eighteenth and early nineteenth centuries, chess enthusiasts had debated which culture originated the game. Possible candidates included India, Persia, China, Greece, Egypt, Babylon – "nay, even the Irish and the Welsh" (Staunton, *Chess: Theory and Practice* 1). The research of cultural anthropologists, like Sir William Jones, ultimately determined India as the first originator of chess. Staunton's last work on the game of chess confidently declares in its opening sentence that "It has now been proved, beyond the possibility of question... that the original authors of the Chess-board and its arcana were the Hindoos" (*Chess: Theory and Practice* 1). In the original game, called Chaturanga, four players each held one corner of the board; opposite players were allies (3). Stalky's campaign, retold back home among his former school fellows, resembles this ancient form of chess: two groups of Afghanis confront Stalky's company of Sikhs and another British regiment. Stalky devises the means of turning the two Afghan companies upon each other by inciting old animosities and thereby securing an exit for his allied troops.

Guttman warns against interpreting a shared games ethic as "congruence between the intrinsic characteristics of a sport and the collective psychological disposition of its enthusiasts.... This kind of simple-minded ethnocentric psychological explanation will not do" (172); and yet, the conclusion of *Stalky and Co.* proposes something very similar. To the idea that "'There's nobody like Stalky,'" Beetle replies, "'That's just where you

make the mistake.... India's full of Stalkies... that we don't know anything about, and the surprises will begin when there's a really big row on" (*SC* 271). In context, Beetle's comment, "India's full of Stalkies," refers to other English schoolboys like Stalky. *Kim*, on the other hand, tells the other side of the story: Mahbub Ali, Creighton Sahib, Lurgan Sahib, Hurree Babu, E.23, and Kim himself – native or not – all Stalkies.

Modern readers may heed Guttman's warning, but Kipling rehearses the fantasy of "psychological congruence," during the broken jar scene in *Kim*. Lurgan Sahib tests Kim by making a broken jar appear to reassemble itself into a whole but

> a tremor came on him, and with an effort like that of a swimmer before sharks, who hurls himself half out of the water, his mind leaped up from a darkness that was swallowing it and took refuge in – the multiplication-table in English! .... The jar had been smashed – yess, smashed – not the native word, he would not think of that – but smashed – into fifty pieces, and twice three was six, and thrice three was nine, and four times three was twelve. He clung desperately to the repetition. The shadow-outline of the jar cleared like a mist after rubbing eyes. There were the broken shards... and thrice twelve was thirty-six! (*K* 153)

This scene welcomes an imperialist reading – after all, English (yess, smashed) and English education overcome the native illusion performed by Lurgan Sahib; in fact, critics often read this scene in binary terms, as opposing powers, native magic versus colonial empiricism.[231] Even more so, magic and math seem intellectual opposed as superstition and rationalism. Kipling's games ethic, however, they may have more in common than is usually allowed. For instance, Kim responds to Lurgan's test *mentally*. He does not reach out and touch the jar to confirm its physical status. Intuitively, he

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[231] Judith Plotz articulates a typical reading of the scene: "Kim's resistance to Lurgan's mastery involves shifting from an intuitive unitary Indian consciousness to his resistant isolated British consciousness, which is associated with the reductiveness and control of arithmetic.... this clear vision involves throwing off reciprocity and mutual recognition" (121).

recognizes the cognitive denominator of Lurgan's illusion as a contest in the mind, for the mind. Though so different in form, Kim's response implies that magic and math both trade in some kind of shared intellectual currency. That surprising discovery makes this scene an instance of intellectual sublime, a key moment when the reader and Kim suddenly understand how two unlike subjects might share cognitive congruence. This is, of course, the same analogy Kipling draws between Indian and British players of the Great Game. Because Kipling's games ethic emphasizes the intellectual congruence, however fantastic, between British and Indian games players, this scene exposes Kim's recognition of the broken jar as the realization that thinking in one culture can cross fluidly into another.

Far from condoning the sports ethic described from Mangan, *Stalky's* stories of British school life propose a games ethic of their own, one predicated on intellectual traits of cleverness, discernment, and creativity. Significantly, school life did ultimately prepare Stalky for service in India – but not in the way intended or championed by his housemaster, Prout. Kipling plays with narratives of correlation and causation, suggesting the fitness for imperial service may not tie to the sports ethic so surely after all but, in the end, that the British school system will still prepare its students for imperial service – if only by means of sabotaging that very system from within. Together, *Stalky* and *Kim* both make the case that Kipling does not condone the British empire wholesale. In fact, he adamantly rejects much of its institutional structure and approach to India because of its faulty, inappropriate sports ethic. If the British empire only subsisted of the sports ethic, Kipling might willingly resign it to the France and Russia; or, he might support Indian independence; however, he supports those elements of the British empire

that play by the games ethic, networks of players, the Stalkies – Indian and English – who play the Great Game and play it well. Kipling endorses forms of empire that generate this thinking empire and perhaps hoped his novels might convert more of the British empire in India from the sports to the games ethic. *Kim* picks up where *Stalky* leaves off and extends Kipling's argument for an intellectual games ethic abroad.

IV.   Gaming Communities as a Thinking Empire

Publication trends of mid-to-late-century games literature certainly made it possible to imagine what a thinking empire might look like. In Benedict Anderson's influential account of nationalism as *Imagined Communities* (1983), "collective motion" – whether of religious pilgrims, students taking administrative exams, or shipments of print literature – enables the unity across time and space necessary to a spirit of nationalism shared by disparate groups of people (54, 114).[232] Anderson's analysis exposes the shaping forces of government and empire that formed and adapted such journeys. In *Kim*, journeys converge on the Grand Trunk Road, "new people and new sights at every stride" (*K* 60). Kipling carefully describes how travelers enter and exit:

> It was beautiful to behold the many-yoked grain and cotton wagons crawling over the country-roads: one could hear their axels, complaining a mile away, coming nearer, till with shouts and bad words they climbed up the steep incline and plunged onto the hard main road, carter reviling carter. It was equally beautiful to watch the people, little clumps of red and blue and pink and white and saffron, turning aside to go to their own villages, dispersing and growing small by twos

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[232] See my earlier use of Anderson and what I'm calling "gaming communities" in Chapter 2 of this dissertation.

and threes across the level plain. Kim felt these things, though he could not give tongue to his feelings. (62)

Kim consolidates two types of journey into this one event: the religious pilgrimage to Benares that he shares with the Lama and the delivery of a message in the Great Game that he carries for Mahbub Ali. Like the Great Trunk Road and railways, the Great Game itself "runs like a shuttle throughout all Hind [India]" (224).

Anderson links the imagined national community to print-based forms, particularly the novel and the newspaper. Each enables different kinds of imaginative work: the novel allows multiple characters and plots to come into proximity, all within the apprehension of a reader; the newspaper performs the same task with an added emphasis on time: "the very conception of the newspaper implies the refraction of even 'world events' into a specific imagined world of vernacular readers; and also how important to that imagined community is an idea of steady, solid simultaneity through time" (Anderson 63). While the author "has not the faintest idea of his readers' individual identities, he writes to them with an ironical intimacy, as though their relationships with each other are not in the smallest degree problematic" (27-28). This key insight informs another genre of imagined community, the games journal; but unlike the novel or newspaper in Anderson's formulation, the games journal forms a community based on shared interests, not national borders.[233] As a result, what I'm calling the

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[233] Comparing the tone between the first and last issues of the *Westminster Chess Club Papers* (1868-1879), a monthly journal of chess, whist and drama, demonstrates Anderson's insight about the narrator's attitude towards his or her readership. In the inaugural issue, in a piece entitled "Our Cradle," the founders of the journal whimsically record their origin story: "Dear Readers, – our Baby is here; and... we, its nurses... beg you to listen to the circumstances attaching to its birth and growth to its present chubby proportions" (April 1868, 8). The editors promise that the "general tone and tenour of the Magazine will border on the severe: ....Every number will contain numerous bitter and

imagined *gaming* community existed alongside other kinds of imagined, national communities; but the gaming community, as one bound by a shared enthusiasm for an activity, developed across and between more conventional geographies. Games literature functions as a unique kind of imperial literature, the literature of a thinking empire rather than one based on political or military bounds. Games literature supports Kipling's understanding of the British-Indian empire as the possible seed for a future thinking empire.

One of the regular columns in the *Westminster Chess Club Papers* (1868-1879) provided an appropriate title for the gaming community it serviced: "The Chess World." This column contained notifications of important events for members of the chess world: obituaries of its notable patrons and players, notices of tournaments, testimony of its own expanding borders, and "the general doings of Chessdom" ("The Chess World" 251). References to the chess world display a prominent sense of membership: "we trust we shall never live to regret the day that ushered us into the Cigar Divan and the Chess world" ("Our Cradle," July 1868, 51). The journal's far-flung readership – answers to correspondents increasingly indicated origins in Ceylon, Madras, Punjab, Bombay – provided a sense of global significance: "Gentle reader, you, whose lot is cast upon the snowy steppes of Siberia, you whose camp is on the torrid plains of India, and you,

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cutting remarks and observations, from the pens of acknowledged masters in the art of reviling" (2). The final issue introduces a very different tone; after listing the many contributors and supporters in an acknowledgement of thanks, the editor, Charles Mossop, concludes: "I cannot part with these, our friends, without a pang.... but the best of friends must part, and I have now to bid you all farewell" ("Looking Back" 251). His closing remarks of friendship imply a stable readership over the journal's tenure, the "steady, solid simultaneity through time" achieved by those reading from the beginning in 1868. The sincerity of the closing issue contrasts with the droll irony of the first but also assumes that readers caught on and enjoyed the journal's tone.

whose home is 'located' in the land of the West..." ("The Chess World" Oct. 1877, 95).

The idiosyncrasies of this salutation develop the sense of the Chess World: the scare

quotes around "located" highlight distinctions between belonging to physical place and

community allegiance; the singular "reader" followed by three singular "yous" that each

mean, of course, multiple; even the attention to geographical difference – steppes, plains

– contributes to an overall sense of commonality between these gentle readers of the

chess world. Reflecting on its tenure, the journal professed that "to show the ubiquity of

the PAPERS Royal Robber wrote from India, one of our problem composers from Siberia,

Mr. Solomon from Jamaica, and Mr. Straker from Pernambuco, and Whist questions

came from America in abundance" ("Looking Back" 250).[234]

The Great Game, "running like a shuttle throughout all Hind," forms a network of

linked actors and events but do those networks also influence the shape of cognition

involved in its play? Kipling describes Kim's first mission as concerning "a small

portion of that vast mass of 'information received' on which the Indian Government acts"

(*K* 21); and yet, this "small" conspiracy involves Russia, five confederated kings, and at

least three spies. R.17, later revealed as Hurree Babu, passes information to Mahbub Ali,

who passes it to Kim, who delivers the message to Creighton Sahib, who shares the

message with the Commander. No single agent completes the task, in part because of the

network's complexity. Russia suspects "leakage of news," the federated kings suspect

Mahbub (21-22); together these suspicions force Mahbub to enlist Kim's help in

completing the information journey. The lama describes Kim's actions in the game "as a

stone thrown into a pool," and Kipling borrows the metaphor: "In two hours several

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[234] *Whist Studies* (1863) is an example of games literature published abroad – in Kurnool,
India.

telegrams [told of E.23's escape] and by the time the leisurely train [carrying Kim] halted at Saharunpore the last ripple of the stone Kim had helped to heave was lapping against the steps of a mosque in far-away Roum – where it disturbed a pious man at prayers" (208, 209). Kim never meets this pious man; their Great Game connection occupies a subordinate clause. Yet the fact that E.23's escape eventually ends with this pious man suggests that he plays a pivotal role in the game and, by default, must participate, successfully, in its modes of thinking. Otherwise, he'd be dead, not disturbed at prayers; Mahbub Ali occasionally reminds Kim that without quick wits, players at the Great Game might not live twenty-four hours beyond a small mistake. With this brief phrase, Kipling reminds readers that although Kim may be "at the center of the novel," there is no center to the Game (Said 155).

Proponents of extended mind theories seek to expand the definition of cognition beyond the nervous and cognitive systems embodied by the human organism. The traditional view of human cognition, popular from the mid-twentieth century, describes thinking as orderly problem-solving that processes sensory inputs. Cognitive scientists have modified the computational view with an alternative analysis on situated cognition, arguing that extra-neural systems play an important role in the thinking process. Situated cognition includes theories of embedded, embodied, and extended mind.[235] The most extreme view, the extended view, defines mind as a nebulous construct, one that includes cognitive anatomy, such as the brain and nervous body, the subjective experience of thought, and other objects or agents in the environment, such as lists, clocks, and thumb-drives. Whereas embedded and embodied views consider factors outside the human

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[235] See pp. 43-45 in the introduction; For more on embodied cognition, see Chapter 4 in this dissertation.

organism as influential in the cognitive process, neither goes so far as to "claim that

human cognition literally includes elements beyond the boundary of the human

organism" (Rupert 241). For instance, the philosopher of mind Andy Clark, the most

well-known advocate of the extended view, emphasizes the functional roles performed by

system components; the chessboard, for example, alters the memory role for the player

because it serves as a constant physical reminder about the state of the game. It

contributes to the cognitive "loop" that constitutes a player's thinking mind (*Supersizing*

14).[236] Despite its speculative purchase, proponents of the extended mind have failed to

distinguish it sufficiently from its more moderate cousins, such as modified

computationalism.[237] Its criticisms succeed in part because the variation among kinds of

cognitive tools, from chessboards to notebooks, make definitions of cognition so

expansive as to be empirically useless. Turning from cognitive science to literature,

however, highlights meaningful ways that texts entertain the extended mind.

Physiologically, the organism circumscribes thinking; but *Kim* explores how the Great

Game modifies thinking and extends it to imperial dimensions. Of course, imaginative

fiction allows for extended thinking far beyond that proposed by cognitive scientists, a

reminder that literary representation does not simply replicate science but often adapts

and expands on its principles. That being said, understanding the thinking generating the

Great Game requires an extended model, one that accounts for the individual but also

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[236] Clark's most recent work has shifted from the more extreme position of extended
cognition to embodied cognition (*Surfing Uncertainty: Prediction, Action, and the
Embodied Mind*, 2015). Clark modified his more extreme theses but remains within
situated cognition paradigms.

[237] For thoughtful and well-argued limitations of the extended view from the perspective
of empirical cognitive science, see Robert D. Rupert, *Cognitive Systems and the Extended
Mind* (2009).

networks of actively thinking communities. For Kipling, therefore, games extend the models of social thinking used by Charles Dickens from the nation to the empire.

Games literature promoted this view of extended thinking by imagining its audience as a gaming community united by shared standards of excellence, strategic play, and a shared language. *Lasker's Chess Magazine*, for example, described its mission thus on the title page of every issue: "The aim of this magazine is to convey correct information of all doings in the chess world, to cultivate a sound taste for the efficient and the beautiful in chess and to spread the love for chess among all peoples speaking the English tongue" (Lasker, "Editorial" 165, see fig. 5.7). The emphasis on English, here, expands the notion of readership beyond national borders but also attests to the problem of how a thinking community will communicate. In *Kim*, game-based language and strategic vocabularies unite culturally diverse communities and Kipling seems to suggest that language diversity will simply not be a problem. The commander tells Creighton sahib: "Practically**,** they showed their hand six months back. But Devenish would have it there was a chance of peace. Of course they used it to make themselves stronger. Send off those telegrams at once, – the new code, not the old..." (*K* 37-38). Games provided a common language, both in terms of banal metaphors, like showing one's hand, and as a common terminology between players as diverse as Creighton, Kim, Mahbub Ali, and Hurree Babu. Kipling plays with the overlap further when he narrates the conversation between the Russian and French spies, who speak of "our game" (237). Despite coming from a variety of places and displaying a range of skill levels, that these characters all think in terms of games suggests the common denominator of strategic play.

The abstract, logic-based qualities of a game cross language barriers, as even "The Black Knight" attests. The colonel acknowledges his inability to fully understand the dialect spoken by the chief; but through pantomime eventually understands the invitation to play chess. Once seated at the board, however, the highest kind of intellectual contest ensues, without the need of any language. The movements of the game supplant language as the medium through with engagement occurs. The gaming community, therefore, though tied to English by its published literature, extends beyond language in ways unexplored by Anderson. If the "widespread acceptance" of the sports ethic "enabled the British to export their pastimes to the rest of the world and allowed British subjects all over the globe to connect with Britain through those games," then Kipling works to promote the games ethic to the same ends (McDevitt 138). The print materials of gaming literatures suggest otherwise and undermines his vision for a thinking empire based on "beautiful impartiality" (*K* 61).[238] *Lasker's Chess Magazine* puts it more realistically: the language of the gaming community, in the nineteenth century and even today, must be English because this is the language of its print materials. Perhaps Kipling hopes the intellectual structures of the Game might transcend language – chess is chess whether the knight be figured as an elephant or a horse – but gaming literature provides a sobering limit on his ideal.

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[238] Here, the games ethic overlaps with the sports ethic. Allen Guttmann notes that "with a bit of exaggeration, the language of modern sports is English.... The peoples of the world have borrowed these and other sports terms from the English language because modern sports are to a large degree a British invention" (1-2).

From the Editorial Chair.

The aim of this magazine is to convey
correct information of all doings in the
chess world, to cultivate a sound taste for
the efficient and the beautiful in chess
and to spread the love for chess among all
peoples speaking the English tongue.

The international tournament at Barmen, Germany, was scheduled to be commenced August 12 and to continue to the 30th. The reports at hand indicate a most successful gathering of experts and amateurs, the entry list in the minor tournaments aggregating sixty-eight while in the two divisions of the master class there are thirty-two players. In the A class of the masters, which is limited to players who have won at least two prizes in international tournaments or other chess tournaments of importance, the entries are: Alapin, Berger, Burn, Bernstein, Gottschall, Janowski, Leonhardt, Marcozy, Marshall, Mieses, Schlechter, Tschigorin, Wolf, Suchting, Bardeleben and John. In the B class, which is limited to sixteen players, eight of the master class who have not reached the distinction required for entrance in the A tournament, and eight minor players, the entries are; Caro, W. Cohn, Swiderski, Neumann, Lee, Taubenhaus, Przepiorka, Bordenstein, Hanin, Spielmann, Leussen, Reggio, Schwan, Salve and Peterson. The prizes for the B. class are donated, the first prize being contributed by the city of Barmen. The distribution of prizes in the B class is arranged so that of the first six prizes three are for the masters and three for the amateurs, and if the first four are masters the fourth will receive the seventh prize, etc. The officers of the Congress include Prince Dadian, patron, A. Molineus, president. Among the contributors is Isaac L. Rice.

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Figure 5.7 This title page for Lasker's Chess Magazine *showcases the journal's mission statement immediately before an article on an international tournament.*

Kipling promotes the games ethic as a meaningful expression of the gaming community. For Kipling, strategic thinking is not a universal quality because France and Russia cannot play; but, on the other hand, strategic thinking is not racially or culturally bound. In other words, he suggests that while thinking transcends culture, to some extent, its expert practice requires shared cognitive predispositions. Some British officers and some Indians – those who have proved their intellectual skill by surviving to play the great Game – share the same kind of gaming mind that successfully builds a gaming

community through a games ethic. By aligning the thinking empire and gaming

community, Kipling also reconfigures internal conflicts and unrest. The pious man at

prayers, for example, resists the political oppression of the British empire but he may

appreciate the thinking empire condoned by Kipling. The same result occurs for the

British – recognizing the wily cleverness of their own subjects forms a bond of

intellectual respect between the two.

V.   Novel of Empire as a Great Game

The ultimate analogy is between the Great Game and the novel itself. To be able to see
all India from the vantage point of controlled observation: this is one great satisfaction.
Another is to have at one's fingertips a character who can sportingly cross lines and
invade territories.... It is as if by holding Kim at the center of the novel (just as Creighton
the spy master holds the boy in the Great Game) Kipling can *have* and enjoy India in a
way that even imperialism never dreamed of... — Edward Said, *Culture and Imperialism*,
1994

Said's comprehensive reading of *Kim* describes Kipling's endorsement of the

British empire as empire the way it should be, a partnership between East and West

without conflict (145-146, 155). The novel shows that "natives accept colonial rule so

long as it is the right kind. Historically this has always been how European imperialism

made itself palatable to itself," Said adds (149). In this chapter, I've extended Said's

interpretation, suggesting that one particular way Kipling saw this relationship between

Britain and India was as intellectual equals, worthy opponents in strategic gaming but

even better partners. Such a claim positions Kipling against the popular notion of

preserving and disseminating the strict intellectual hierarchy of empire, such as that most familiarly expressed by Thomas Babington Macaulay's *Minute on Indian Education* (1835).[239] This nuance, therefore, requires a reassessment of another aspect of Said's argument, mainly that "the ultimate analogy is between the Great Game and the novel itself" (155). Said's sense of the congruence between the Great Game and the novel draws on its geographic concerns with mapping: Kim plays the game by ostensibly surveying the land, as do the French and Russians. Said ties this kind of knowledge to the ways the novel appears to serve up all of India for its Western readers.[240] As I've already pointed out, *Kim* spends a good deal of energy demonstrating just how much happens off-page, beyond the novel's reach; but more importantly, I want to add to Said's notion the idea that the novel functions analogously to the Great Game by inviting its readers to join in the types of thinking central to the work of memory and foresight required by whist and chess. The overlap between narrative and game metaphors means that Kipling trains the reader as a player, appropriately enough, through the narration of thinking and consciousness. Rather than competing metaphors, novel and game prove assimilable and co-dependent, especially when considered from a cognitive angle.

Kipling even figures the geographical survey work as an intellectual endeavor parallel to strategic gaming. First, it requires the memory of whist or blindfold chess:

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[239] Macaulay uses Russia as an example for his proposed scheme of education for India. "The languages of western Europe civilised Russia," he says. "I cannot doubt that they will do for the Hindoo what they have done for the Tartar" (Macaulay, par. 16). Kipling's sense of Russia's inferiority, even after their so-called civilization, therefore, suggests that he would not advise the same program for India, even if he believed India needed civilizing. *Kim*, therefore, may be read as making the case why India does not need the suggestions proposed by Macaulay's *Minute*.

[240] Plotz makes a similar statement: "All India, especially that which is out of bounds, is Kim's province" (115).

"Yes, and thou must learn how to make pictures of roads and mountains and rivers – to carry these pictures in thy eye till a suitable time comes to see them on paper" (*K* 117). As the narrator reflects through Kim, "Here was a craft that a man could tuck away in his head" (162). Colonel Creighton lectures Kim like the author of a games manual, tagging important keys with metacognitive instructions, "Remember this" (118). The foresight of chess comes in through the improvisational present of the Great Game, thinking ahead to what other agents might do or how to shape circumstances to one's advantage.

From Kim's earliest training, intrigue depends on the tale and its telling. Mahbub Ali tests Kim for Mahbub "knew the boy's value as a gossip. Sometimes he would tell Kim to watch a man who had nothing whatever to do with horses: to follow him for one whole day and report every soul with whom he talked. Kim would deliver himself of his tale at evening, and Mahbub would listen without word or gesture. It was intrigue of some kind, Kim knew" (*K* 18). What makes Kim's information a tale? After all, "report" seems the more operative word, a catalogue of "every soul with whom he talked." Kipling's choice of the word tale draws attention to the memory-function of narrative. Kim must remember the activities and dialogue for one protagonist for one whole day. The form of tale-telling lends itself to the act of memory Kim performs even as it comments on the nature of a tale. The length of Kim's tale appears arbitrary, marked off by time – one day – rather than a meaningful sense of beginning, middle, and ending; but, in the context of the Great Game, one day's random events gain significance in the larger narrative managed by Mahbub Ali. In the Great Game, players know coincidence or even an appearance of picaresque only exists within a limited perspective;

if the Great Game could be known in its entirety, the tapestry, woven by the "shuttle running throughout all Hind" would become legible.

The players of the Great Game think of themselves as storytellers. Hurree Babu congratulates Kim on his success which had been reported from agent E.23 to himself: "He told me; I tell Mr. Lurgan; and he is pleased.... All the Department is pleased" (*K* 219). The sharing of departmental tales parallels the bad news travelling along telegraph lines that disturbs the pious man at his prayers. Babu delights in retelling the tales of his exploits: "When Lurgan was told the tale later, he mourned aloud that he could not have" witnessed the performance himself (237). The Great Game actually consists of these retold tales, the self-reported exploits of its agents. "It will be good times," Babu promises Kim, "when we all tell thee tale up at Mister Lurgan's" (280-281). Storytelling serves as a source of collective memory for the game and its players. "'How comes it that this man is one of us?' thought Kim... and the reflection threw him into the most pleasant day-dreams.... Kim fell to telling himself the story of his own adventures through the past three months..." (161). The model of storytelling recalls the end of *Stalky and Co.*, when classmates gather to recount Stalky's adventures but differs in key respects. In *Kim*, the protagonists return to tell their own tales, to each other but especially to their mentor, Lurgan. By contrast, Stalky leaves the telling of his story to other narrators – most literally to his friend Beetle, who is revealed in the final chapter as the unidentified narrator of the whole book. In both cases, stories recast the intellectual sublime of the narrated Game into collective pleasure shared among listeners. In *Stalky*, the friends as home admire their friend from afar; but in *Kim*, the storytellers are the players and they share with other skilled individuals. By extension, therefore, Kipling

implies that the reader belongs to this inner-circle of capable Game players, allowed to share in their storytelling by virtue of reading his novel.

Kipling's alliance between narrative and gaming also pulls in a potentially problematic third party: history. Historian Geoffrey Hamm, for instance, criticizes historical accounts of the Great Game for relying too much on anecdotal evidence and "vignettes" that "[lack] structure, or at least a broader historical narrative" (398). Hamm mistrusts the self-reporting of imperial subjects as unverifiable tales and suggests that Kipling takes advantage of the romantic possibilities of these anecdotes to weave popular history on fiction's loom. Instead, Hamm recommends the account by Edward Ingram, *The Beginning of the Great Game in Asia, 1828-1834* (1979) as appropriately historical, writing that "does not dwell on anecdotes or minor personages; his characters are secretaries of state, governors general, and prime ministers" (401). Hamm's criticism points up Kipling's paranoia: where Kipling sees French and Russian spies, Hamm might only see tourists. On the other hand, Hamm's rejection of "anecdotes or minor personages" ignores *Kim's* major claim: that the Great Game primarily consists of just such seemingly unimportant details. Perhaps the Great Game never existed as such – Hamm claims that, as historians now know, "India was never threatened by a Russian invasion" (401) – but Kipling's novel suggests that the ultimate reality of history, confirmed after a century, matters less in the present than the beliefs of the players in the game. Rather than "[seeing] all India from the vantage point of controlled observation," as Said suggests, *Kim* insists that even history must accept its limitations before a subject like the Great Game, which can only be known in pieces through its players. In this sense, then, the anecdotes and vignettes provide a powerful framework for a novel like

Kim and comment on the power of fantasy, the imagined life of a Great Game primarily suspended by propaganda, desire, and fear. The novel of empire, therefore, legitimizes highly selective representation by its own humility: it allows for blind spots of power because it admits the limits of its own powers. At the same time, its resource to minor, fictional characters, just the kinds of figures passed over by history, challenges how history tells its story.

Like Maria Edgeworth and Wilkie Collins, Kipling trains and rewards the reader for following the text as if it were a game, in this case, a *great* game, as Kipling tests the reader's memory and determination of salience. Three times in the novel, Kipling mentions a person the reader never meets: Lutuf Ullah. The first time, Lutuf Ullah appears as a spot of local color, a detail in setting, an example of an absent homeowner: "Locked doors showed that the owner was away.... Thus: 'Lutuf Ullah is gone to Kurdistan'" (*K* 18). Kipling offers Lutuf Ullah as a representative figure, just one such door belonging to one such absentee; but a few pages later, Mahbub Ali wires his "sub-partner at Delhi": Lutuf Ullah (22). "This was entirely in the way of trade," the narrator assures us; readers already know that trade includes more than horses and that pedigrees of white stallions contain international secrets. Finally, Mahbub Ali uses the name to cover his business with the police: "I came here seeking for my partner, Lutuf Ullah" (140). The absent Lutuf Ullah may be carrying on the Great Game elsewhere, occasionally contacted by his partner Mahbub Ali. Or, Lutuf Ullah may not really exist at all. Perhaps Mahbub Ali only uses the name Lutuf Ullah as part of the game – that is, the real Lutuf Ullah may actually be gone to Kurdistan without any idea that his absence provides Mahbub with a convenient fictional partner, the kind of reality that lends truth to

his subterfuges. Kipling never clarifies the point; Lutuf Ullah never appears to reclaim his stolen identity or to confirm his part in the Great Game. Lutuf Ullah, the minorest of minor characters, ushers the reader into the novel's potential for intellectual sublime by inviting the kind of highly attentive reading crucial to success in the Great Game.

Kipling invites the reader to think along with Kim and participate in Kim's memory: "Then he smoked and thought, knees to chin, under the belly of the gun, and the outcome of his thoughts was a sudden and stealthy departure in the direction of Nila Ram's timber-yard" (*K* 15). From the point of view of narration, Kipling obscures Kim's thoughts. He tells us only that Kim's thinking eventually produces an outcome. Attentive readers, however, do not need more explicit narration. The key phrase, Nila Ram's timber-yard, allows for the reconstruction of Kim's thoughts. Kim stored a costume in a "secret place" in the timber-yard and goes to retrieve it (3). Kipling confirms the reader's deductions when Kim returns wearing the garments. The effect makes Kim's thinking implicit just at a moment of difficult recall for the reader. As Plotz notes, "It takes a highly-trained reader to penetrate the sheer density of this novel.... Such demands on the reader not only far exceed those of contemporary young adult fiction (and all but the most exigent adult fiction) but even those of other highly literary Victorian and Edwardian children's texts.... Kipling wrote quite consciously for children who would read and reread the same book at different ages with increasing powers of comprehension" (125). In this novel, thinking produces outcomes and therefore encourages the reader to think along with the characters as a means of following the plot.

Kim literally values the thinking process. "'I'd give a month's pay to find out what's goin' on in that little round head of yours,'" Father Victor tells Kim:

'There is nothing,' said Kim, and scratched it. He was wondering whether Mahbub Ali would send him as much as a whole rupee. Then he could pay the letter writer.... Perhaps Mahbub Ali would visit him.... Surely he must know that Kim's delivery of the letter to the officer at Umballa had caused the great war.... But if Mahbub Ali did not know this, it would be very unsafe to tell him so. (*K* 104)

Father Victor, of course, has no idea Kim knows so much about the Great Game or proves himself such an adept player. Kim's recognition that Mahbub Ali, despite being the source of the letter, may not actually know its impact shows the gaming instinct that make him such a valuable recruit for Mahbub Ali and Colonel Creighton. This passage stands out as one of the few times Kipling narrates Kim's consciousness. Kipling preserves the narrator's privilege of invading Kim's internal processing but also emphasizes the individual's privacy of consciousness. Kim conceals his thoughts from Father Victor even as his claim of "nothing" belies "something." Throughout his education at the military school, "[Kim] showed nothing of his mind... but awaited the play of circumstances with an interested soul" (116). The military school abides by the sports ethic and Kim keeps his mind closed until a better, worthy game appears. Kipling's narration of consciousness throughout *Kim* wavers between the hidden and the revealed, just as games literature recommended strategic means to achieve the same effect at the game table.

To best align the novel with strategic gaming, however, Kipling often represents conscious thinking as spoken language, using a narrative strategy Dorrit Cohn calls "narrated monologue": "But Kim slept little, and his thoughts ran in Hindustanee: 'Well is the Game called Great!'" (*K* 224); "'And all that trouble,' he said to himself, thinking as usual in Hindustanee, 'for a horse's pedigree!'" (38). In both of these representative cases, Kipling renders thoughts explicitly as self-dialogue, thinking as speech to oneself.

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At times, Kipling risks clarity for the sake of this effect: "'We all be on one lead-rope, then,' said Kim at last, 'the Colonel, Mahbub Ali, and I – when I become a chain-man. He will use me as Mahbub Ali employed me, I think. That is good, if it allows me to return to the road again. This clothing grows no easier by wear'" (118). The speech tag indicates that Kim "said" these things but the context suggests otherwise. Kim "says" this while being lectured by Colonel Creighton making it difficult to believe that he would so explicitly unmask the Colonel's designs in his very presence. The non-sequitur about his clothing formally underscores the fact that Kim indeed says these things – in his own head. Kipling pushes this effect to extremes of switching from internal to external dialogue without warning: "'I [Kim] think that Lurgan Sahib wishes to make me his afraid. And I am sure that the devil's brat below the table wishes to see me afraid. This place,' he said aloud, 'is like a Wonder House. Where is my bed?'" (149). Kipling overturns the idea of reading as a linear process. In this case, the back-application of information assimilated while moving forward through the reading of the sentence provides final clarity. In these moments, Kipling's explicit thought-content provides the illusion of legibility promised by games manuals as the province of skilled players.

Kipling represents the Great Game as a narrated consciousness through focalization. In terms of the facts of the story, Kim and Hurree Babu confound the French and Russian spies by taking advantage of circumstances perpetuated by the Europeans. Kim reflects that "this collapse of their Great Game (Kim wondered to whom they would report it), this panicky bolt into the night, had come about through no craft of Hurree's or contrivance of Kim's, but simply, beautifully, and inevitably" (*K* 248). The narration verges on free indirect discourse as the parenthetical anchors the consciousness

to Kim. Kipling shares Kim's feelings but chooses his own means of expression, rather than directly narrating Kim's thoughts. Kim underscores the centrality of the tale to the Great Game – even the European spies, though strikingly inferior, still must report their trials to someone as a means of maintaining the game. Kim and Kipling emphasize the element of chance, the "collapse," "panicky bolt," brought about only by circumstance, not by superior gaming. Hurree Babu, however, remembers it differently: "'If I had done it myself,' thought Hurree, 'it would not have been better; and, by Jove, now I think of it, of course I arranged it myself. How quick I have been! Just when I ran down hill I thought it! Thee outrage was accidental, but onlee me could have worked it – ah – for all it was dam well worth'" (249). The apparent dissonance between their accounts recall's Hamm's objection to anecdote as a source of historical accuracy; but in this case, Kipling pursues the expression of the individual's thought process, his conscious action, rather than historical truth about the political niceties of the Great Game.

Readers experience the intellectual sublime through narration of consciousness and mental experience focalized by Kim. Kim's appeal arises in part from his ability as a youth to match wits with wily adults and from the evident joy such encounters engender. Before going to school, Kim finds joy comes in the unknown mysteries of the Great Game. Using his street-based training, he reasons that "fools are not given information which leads to the calling out eight thousand men, besides guns.... Consequently – and this set Kim to skipping – there was a mystery somewhere" (*K* 116). The skipping embodies Kim's feeling, the excitement inspired by rational deduction. Kipling figures Kim's deductive process as a kind of foresight: it reveals the presence of previously unregistered "mystery somewhere." The element of intellectual discovery resonates with

colonial trajectories: intellectually seeing beyond parallels moving towards unknown

territories. This heightened awareness energizes Kim, even in more institutional settings.

Once in school, Kim "rejoiced to use his sharpened mind over the tasks they set him"

(124). He senses an intellectual maturity, a "sharpened mind," and takes pleasure in

using it.

These episodes perform the intellectual sublime and invite readers to participate

in Kim's knowingness. When Kim's "quick wit told him that he was being tested in

some fashion or another, ...he stood on guard" (*K* 115). Kim's attention alerts the reader;

his "quick wit" recognizes the task, Kipling articulates its form, but the reader must

carefully follow. This effect succeeds whether or not Kim clearly sees the termination

point, especially when the narration follows Kim's immediate thought processes: "'Oho!'

thought Kim, behind close-shut eyes. 'Once again it is Mahbub.... Now what is to do,

Kim? I know not where Mahbub houses, and if he comes here before the dawn they will

shoot him.... First then, Kim must wake and go away, so that they shall not suspect. A

bad dream wakes a man – thus –'" (137). Following this thinking, Kim moves into action

and saves Mahbub's life. Or, again, Kim "could not quite see what new turn the game

had taken, but stood resolute to profit by it" (66). The reader waits, resolute, along with

Kim until clarity arises. Conversely, at times, "Kim saw the trap at once. If he had said

'bay mare' Mahbub would have known by his very readiness to fall in with the

amendment that the boy suspected something. Kim replied therefore: 'Bay mare? No. I

do not forget my messages thus. It was a white stallion'" (107). The innocent reader,

unprepared for the depth of Kim's intellectual maneuvers, nevertheless follows Kipling's

careful pacing: the prompting of a trap, the explanation of the trap, and confirmation of

Kim's insight all follow along the syntactical cadence differentiated from Kim's spoken response. Kim's verbalization skirts the trap but also reminds the reader of its basic terms. On the color of a horse – bay, white – depends Kim's success of failure. Simultaneously, even as Kipling lays out the terms of the trap, he allows the reader to parse through the complexity of the thinking dynamics, which appear something like this: Kim knows that if Mahbub knows Kim knows then consequences will follow. The conditional structure complicates an already cognitively layered interaction. When Kim describes Creighton as "a man after his own heart – a tortuous and indirect person playing a hidden game," readers know that most of *Kim's* tortuous and indirect cast must be characters after Kipling's own heart, for most play the hidden games of tortuous and indirect persons (116).

That Kipling invites even the reader into the Great Game through participating in its structures of thinking overturns interpretations of the novel that focus on isolation. Plotz, for example, understands the Great Game as a purely British endeavor that "[forces] on Kim a role that progressively impedes fully human communion between him and the Indian world" (118). Of course, the novel imagines and conditionally approves an idealized thinking empire; but that very vision involves finding and articulating potential for unified action, not division. Even within the antagonisms of the Great Game, as long as players participate in shared modes of thinking, they play together. This is how Kipling includes the pious man at prayers but excludes the French and Russian spies. To miss the fact that the Great Game *is* the Indian world, in many respects, is to miss how Kipling, at least, understands India and to miss why he supports the rule of a thinking empire, a gaming community, rather than condoning the British

empire as a political entity. Far from being a "device" of "British control over India," the

Great Game promises, in *Kim's* fictional fantasy, neutral territory more ancient than chess

or Chaturanga (Said 161). Esty notes that "Kipling's India does not assume the form of

an organic nation pegged to teleological time, but rather an endlessly morphing

multicultural state with no clear or final political form. Everything is always changing in

this game, but the game itself does not change" (17). From the perspective of the

intellectual sublime, Kipling's India needs no final political form precisely because it

already has the Great Game. Kim does not democratize power; it reorganizes it along

lines of intellectual ability. It suggests a thinking empire might reasonably replace those

aspects of the British empire founded on the sports ethic but it insists that this new

thinking imperialism eschew racial distinctions and abide by the standards set by playing

the great Game. In effect, *Kim* takes literally Drayson's suggestion in *Intellectual Whist*

that games provide better assessments of mental ability and career potential than do

conventional exams; and, perhaps the creators of the KIM games read Kipling this way

too.

VI.   Conclusion

Understanding how and why Kipling can use the lama's sacred quest to figure Kim's allegiance to the concept of empire is the key to Kipling's novel – a key that this volume, despite the many talents of its contributors, never quite manages to produce. — William Blackburn, "The Influence of Anxiety," 1992

This chapter cannot produce the "key" mentioned by William Blackburn but it does comment on the relationship between the lama's quest and Kim's game by pointing out the congruence between game players from east and west, modes of thinking that provide the kind of congruence Kipling hopes will preserve imperial India – the India he knew as a child. Having known none other, this India serves Kipling as the ideal.

Furthermore, however, I want to conclude by speculating that Kipling perceives a point of recognition between the game players and the peaceful holy man, the Buddhist Lama who mentors Kim. As it turns out, the lama plays the game as well as any of the others; in fact, in some ways he lives the game, having absorbed its reality as his own. Twice, the lama tells Kim about intrigues carried out between Lamaseries (*K* 212, 259). For the lama, this key word applies just as easily to holy sites as it does to the street bazaar. As abbot of his lamasery, the lama must have been involved with these intrigues, at least enough to know of their presence and to retell the story, just like a good agent in the Great Game (260). Kim attributes his own education as a player to the lama and even tells Mahbub that "he [the lama] made me what I am – though he did not know it" (176). Remembering the lama's sagacity, however, readers might suspect that the lama *did* know it. After all, when Kim disguises E.23, he believes the lama pays no attention; but the lama later informs Kim that "I watched thee" (208). He sees farther than Kim,

accurately perceiving that this act of disguise would "[loose] an Act upon the world, and

as a stone is thrown into a pool so spread the consequences thou canst not tell how far"

(208). The lama's vision, not the imperial survey, consolidates all of India: "I saw all

Hind... I saw every camp and village" (287). The lama seems the least strategic player in

the novel; all his actions come from disinterested, spiritual motives and most other

characters believe him holy, but mad; but the best players in the Great Game appear as

fools but are not fools; as Kim thinks of Colonel Creighton, "Well, if he could be a fool,

so could Kim" (116).

The lama, of course, does not play for imperial stakes; I am not suggesting that he

somehow oversees the Great Game played by Creighton, Mahbub, and Kim, or that he is

the true mastermind behind it all; but he does possess many of the qualities of a Great

Game player and it's worth pointing out that Kipling never narrates the lama's

consciousness, not even in terms of direct thought report. He is the most obscure

character, matched only in this respect by Lurgan Sahib. In effect, our externalized

perspective on the lama makes it difficult to perceive the intellectual congruence he

shares with men like Creighton or Mahbub. And yet, we might argue that Kim senses

their similarity; and, furthermore, because action represents the outcome of thoughts in

the novel, his gamer-like activities, such as watching Kim while going undetected by

Kim himself, suggest that were we to read the lama's mind we would be surprised to find

another fool who is not a fool.[241]

This reading of the lama, though speculative, pushes the thesis of the chapter

further along its trajectory: Kipling not only perceives Indian game players as capable of

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[241] Kent makes a similar argument regarding Mookerjee; see above, pp. 346-347. See
discussions of playing whist as mind-reading in this dissertation, pp. 114-116.

British modes of strategic thinking but also includes the most unlikely persons as potential gamers. In other words, beyond the secret service, this kind of thinking registers with distinctly and most purely Indian habits of life. The Great Game, therefore, belongs not only to empire but firstly to India – it was being played, Kipling would argue, long before the British ever arrived. In a strange way, preserving the British empire in India, at least in its gaming forms, means forwarding something distinctly Indian and distinctly intellectual, seeing ancient Indian Chaturanga in modern British chess. In this way, "understanding how and why Kipling can use the lama's sacred quest to figure Kim's allegiance to the concept of empire" becomes more about how Kipling uses empire to illuminate the shared modes of intellectual strategy practiced by characters as seemingly different as the Lama and Colonel Creighton. Rather than helplessness, then, the lama represents the intellectual sublime, winning the game, in some sense, at the end of the novel by "abstracting my mind," and, oddly enough, a fitting leader or mentor for Kipling's thinking empire (*K* 287).

The ambiguities of Kipling's imperial posture have consistently generated new critical interpretations. Simultaneously, he supports imperial Britain while maintaining a deep reverence and respect for Indian culture. This seemingly fundamental opposition, however, makes sense in the intellectual context of the Great Game. Here, Indian illusion and British mathematics unite as extensions of Chaturanga and chess. The same thinking that preserves the lives of Mahbub Ali, Kim, and Hurree Babu also supports the Lama. Reflecting on the great diversity of cultures contained within Indian borders, Kipling seems to wonder: can the British really be so different as to remain unassimilated? Perhaps outwardly; but inwardly, *Kim* promises, the same kinds of minds may bond over

shared modes of strategic thinking and the imperial relationship be reconfigured along lines of intellectual partnership that tie together the international gaming community. Kim *is*, then, a "paean to Empire" (Hamm 396) – but not the British empire. Instead, it imagines and celebrates the potential for a thinking empire capable of transcending political and cultural categories. This formulation does not disband imperial power structures, as such; instead it suggests the rightful arbiters of that power would be an intellectual class of gamers. How might this future thinking empire, so entwined with the British empire at the point of the novel, somehow replace it? The novel doesn't say. More problematically, its fantasy that a thinking empire might evolve from the current British empire only disavows that empire in terms of its sports ethic. It moves too quickly towards the intellectual sublime of the future with an enthusiasm that assumes an intellectual sublime makes reparations for the past.

Finally, I would like to conclude with a brief reflection on the relationship between history and literature that *Kim's* Great Game exposes. Yapp "[confesses] to a deepening unhappiness with analyses of empire which rest heavily on a strategic inspiration. Reading the history of the British empire in India and in the Middle East one is struck by both the prominence and the unreality of strategic debates.... for me the term [the Great Game] stands as a shorthand for a mistaken, strategic view of empire" (197-198). Yapp's discomfort with histories organized around political masterminds leads him to downplay strategic gaming when, ironically, Kipling used the gaming to make precisely Yapp's point. Neither *Kim*, nor even its numerous storytellers, nor history, Kipling might add, fully tell the Great Game. Too much happens off the page. Significantly, no historical leaders appear in the novel; in some ways, even more

radically than George Eliot's *Romola, Kim* eschews the "Cavours of the world." Kipling

transposes Collins's rational sensation into an intellectual sublime that prioritizes the

game over any one thinker. Like Dickens, Kipling extrapolates the gaming community

from the individual player, implying that in such a large game, its players must be

playing with other players even without knowing or seeing their identities. Kipling's

games, therefore, exist with and perhaps beyond history and literature, rather than within

them. It is, however, this very vastness, the fact that we cannot know the Great Game in

all its dimensions, that ultimately lends itself to Kipling's fiction and fantasy of the

thinking empire.

The growth of the gaming community plateaued in the early twentieth century:

the first World War, for instance, disrupted organized matches and clubs lost many of

their members. Chess evolved after the world war and a new school, called

"Hypermodernism," challenged Victorian models. Competitive bridge replaced whist,

and other new games, especially board games, rose to prominence in domestic circles.

Literature continued to draw on games, such as "A Game of Chess" in T.S. Eliot's *The

Wasteland* (1922) and *The Royal Game: Chess Story* (1941), Austrian author Stefan

Zweig's psychological look at Nazism. Newspapers still published chess columns and

short stories on chess but its increasing professionalization eventually diminished its

public interest. Technological advances revived the gaming community in the 1980s and

today, of course, video games constitute an economic powerhouse, and support a truly

global, massive gaming community.

CODA: GAMING COMMUNITIES NOW: ARE WE STILL THINKING WITH GAMES?

For gamers in the nineteenth century, thinking with games meant exercising and developing cognitive skills, like memory and attention, that also contributed to character traits, such as calm decision-making and the ability to weigh options. This training of mind and character primarily applied to the gaming table but also intersected with social domains. For writers, thinking with games contributed to narration of consciousness and rational thought processes, especially in terms of coordinating thinking between and among individuals. The distributed, yet standardized forms of the gaming community suggested that thinking networks might stretch from metropole to province, both in terms of replicated experience – many whist tables, many voices, as Dickens puts it – and in terms of long-distance engagement, as in correspondence or telegraph matches. Thinking with games implies a second meaning in such correspondence: first, the back and forth communication that carried out the game but also the correspondences among players produced by the game, its standard rules, strategy and habits of thinking. Anticipating the fifth international chess tournament, held in Vienna 1873, the *Daily News* celebrated the way chess crossed borders, for "no other game is played in so many different countries. No other pastime excites at once the admiration of the German, the Russian, the Englishman, and the Brahmin" ("International," *Daily News* 2).

We cannot endorse those thinking networks without, of course, acknowledging that the global thinking generated by the gaming community comes deeply indebted to imperial structures. And it remains an open question, one still asked today, whether social thinking with games should be encouraged. We might wonder whether today's gaming community even expresses or engages in the kinds of distributed thinking that distinguished gaming practices, literatures, and communities in the nineteenth century. Are we still thinking with games in terms of cognition, culture, and narrative forms? And how does the gaming community of the nineteenth century reflect on its current manifestations?

Chess clubs, tournaments, and even publications still flourish. Bridge has replaced whist and it has its competitions and clubs, even career players; but although bridge and chess clubs persist, they no longer play the public and social role for the twenty-first century that they did for the nineteenth. That place now belongs to online and video games; changes in technology have altered gaming much as Hoyle once did with his handbook. Now, "massively multiplayer online games" (MMO) may accommodate thousands of players, all interacting in the same unscripted, virtual world. At the other end of the social spectrum, single players might contest a program run on artificial intelligence (AI) – or even watch such software programs compete against other programs in tournaments designed specially for AI, as is organized for the online platform of Sid Meier's Civilization.[242]

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[242] Starting positions and profiles are drawn for the AI, which are then turned loose to play out several rounds. Before the tournament begins, viewers can place bets on who they think may win or how they think the AI will act. The game's progress is closely documented and written up for an online forum. The current tournament, season 3, is

Video games have expanded the profitability of gaming communities and solidified the viability of the professional gamer. The industry grossed more than 91 billion dollars in revenue in 2016 and is expected to grow another 10 billion in 2017 (Takahashi). One of the fastest growing categories has been eSports, tournament style competitions that command large amounts of prize money. In 2014, Robert Morris University Illinois added eSports to its athletics program and offered scholarships to train a varsity team to compete in "League of Legends" (Levy). League of Legends hosted 125 tournaments in 2016 and offered more than 10 million dollars in prize money (Lofgren).

Economists began to take a more serious interest in games as players showed increasing interest in spending real money for virtual items or upgrades. The popular smartphone game, Candy Crush Saga, rakes in over 2 million dollars a day in revenue, all from in-app purchases; more than 44 thousand users install the free game every day ("Candy"). One surprising business opportunity revolves around character development: gamers want more advanced capabilities without putting in the hours required to build up their avatars, an effort that has been outsourced to China (Harford). Gamers then purchase advanced avatars that have been trained, "consumed and produced in a synthetic world" from eBay or other online retailers (Harford).[243]

Much like the gaming communities of the nineteenth century, online gaming culture produces a vast amount of written literature, especially in online forums for strategy or multiplayer games. The Wiki page devoted to World of Warcraft, one of the

currently in progress (as of December 2017). Its videos and written material can be viewed here: http://www.realmsbeyond.net/forums/showthread.php?tid=8892

[243] Harford reports (in 2006) that an advanced Jedi Knight could be purchased on eBay for $686.

most dominant MMO games, was the largest Wiki in 2009 with four to five *million hits a month*.[244] Such sites contain essays about games, characters, tips on strategy, and cheats. Online chatrooms reproduce a sense of the club or the correspondence column in Victorian periodicals. Though its members may never meet, they share a sense of social engagement fostered by the medium of the game, its strategic problems, and the forms developed for communication and interaction around the game and its strategy; and they know, much like their nineteenth-century counterparts, that many others, thousands of minds, share this interest in out-thinking the game as evidenced by online contributions and competitions. Certainly today's gaming community, though reminiscent of that in the nineteenth century, promises larger rewards and audiences. And yet, today's technology platforms only underscore what telegraphs and newspapers once suggested: that thinking with games crosses cultural, national, social, and even cognitive borders.

In 1983, responding to the first wave of "videomania," psychologists Geoffrey and Elizabeth Loftus wrote *Mind at Play: the Psychology of Video Games* to investigate whether gamers still think with games (3). Echoing Pole's question – "What is the nature of the mental processes which are comprehended in the play of a Whist hand?" (*Philosophy* 11) – *Mind at Play* asks: "What aspects of mind figure in the performance of an act requiring complex skills, such as playing video games?" (Loftus 43). The authors describe how video games exercise various "components" of mind, like sensory memory, attention filters, and imagination work, such as spatial rotation.[245] When gamers combine these components, they practice cognitive "strategies" that can be improved over time (64). For whatever reason, whether biology or conditioning, different players are better

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[244] The page developed into an independent site in 2010, now called WOWpedia.

[245] See Loftus pp. 45-63.

at combining some of these components than are other players. Some gamers may be better visualizers while others may be better at diving their attention, managing recall, or motor skills (60-61). Video games may strain attention but they do not reward deliberate, slow thinking. Just the opposite: much cognitive work prompted by video games happens at the rate of a fifth of a second or less (44). Because "the quality of many mental components is measured in terms of the amount of time that a component takes to do something," time becomes the factor that, in video games, determines skill (44).

Recalling the distinction I established between rational and nervous sensation in chapter three, we might say that video games prioritize nervous forms of cognition while strategy games prioritize rational. Allen Newell proposed a helpful model in 1990 for thinking about various orders of cognition in time (Lories 3-5). Strategy games and video games both fall into the "cognitive band" but whereas strategy games primarily exercise the "unit task," video games exercise "deliberation" (see fig. 6.1). This dissertation ranges beyond the time bands most closely associated with gaming because the writers I discuss pushed the cognitive possibilities of games into rational and social bands.

Duration	Action	Temporal band
month		
week		social band
day		
hour	task	
10 min	task	rational band
1 min	task	
10 sec	unit task	
1 sec	cognitive operation	cognitive band
100 msec	deliberation	
10 msec	neural circuit	
1 msec	neuron	biological band
100 μsec	organelle	

Figure 6.8 Time bands and levels in Lories p. 4 (adapted from Newel, 1990)

The nineteenth century perspective highlights the many points of cognitive overlap between game-playing then and now. Games today, as in the nineteenth century, still require practice and study, even if that practice concerns reflex conditioning as opposed to memorization work. Cognitive scientists have found that expert gameplay, whether for chess or for video games, reflects the ability to see the "whole" from many parts, a skill psychologists call "chunking" (Loftus 79).[246] The fewer information chunks that brain has to process, the more quickly it completes its task. Expert chess players eventually stop seeing individual pieces and instead see the whole board as a

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[246] Intelligence matters less in this case than time and practice: with 10,000 hours of practice, the chess expert will experience over 300,000 small pieces of information or "chunks" (Harré). For more on board games and habitual "intuition," see Wan, Xiaohong, et al., "The Neural Basis of Intuitive Best Next-Move Generation in Board Game Experts."

configuration: pawns as a wall of defense, for instance, rather than eight single soldiers. By seeing the pieces in related chunks, expert chess players more easily remember board configurations. Similarly, video game experts learn how to focus their attention on the screen, tuning out distracting graphics. If George Eliot wrote *Romola* today, Tito might be an undisciplined video gamer instead of a chess player; but he would still fail to train his instinctual responses and lack the discipline necessary to seeing beyond the individual pieces most proximate to himself. Tito would likely purchase an avatar on eBay, rather than training it up himself.

If anything, video games have reinvigorated the question: do games make us smarter? Or do video games reduce cognitive capacity? Op-ed columns and internet forums frequently debate what screen-based games might be doing to our brains.[247] One study in Australia found that in terms of internet usage, teens who played video games scored higher in reading, math and science than those teens who spent their internet time on social media (Anderton). These results could simply mean that teens likely to do better in these subjects also prefer playing video games but researchers at Yale University confirmed similar results and even showed that students who played video games improved on those who received extra instruction from a tutor (Shapiro). Studies such as these build off the work of Daphne Bavelier, whose research in the cognitive science of video games suggests that action games train their players in recognizing "perceptual

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[247] The online debate platform, "intelligence[2] debates," hosts four experts in cognitive science, two for and two against the motion "video games will make us smarter." After listening to the arguments for both sides, participants can vote online and add their own comments. Visit https://www.intelligencesquaredus.org/debates/video-games-will-make-us-smarter for more information.

templates," a cognitive function that ultimately increases performance and learning abilities (Bejjanki).[248]

Bavelier's interest in perceptual templates accords with the patterns of thinking and reading habits encouraged by Edgeworth, Collins, and Kipling. Perceptual templates are recognized forms stored in our memories that provide short-cuts for understanding. In practical terms, templates reduce the amount of information we perceive from our environment, a strategy for handling cognitive load. For instance, if we want to leave a room, we simply walk out the door; we don't evaluate the window as a possible exit point.[249] Even more radically, we recognize doors as doors despite their many different configurations (rotating, automatic, twist handle, round shape).[250] For Edgeworth, Hoyle's whist provides a standardized, procedural template. *Belinda* experiments, therefore, with the extent to which players familiar with the patterns of the game will adapt those structures to other forms, like the novel. Similarly, Collins and Kipling both exercise their reader's attention by encouraging readers to "see their way," to look ahead by practicing disciplined recall or rereading.

Whether or not games make us smarter, video games are making artificial intelligence smarter. Advances in machine learning have developed programs that

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[248] Video games have already been shown to improve attention capabilities, such as faster detection of change. Such aspects of attention are also linked to "enhanced performance in visual tasks," such as mental rotation and multitasking: "Such benefits even seem to carry over to real-world domains, because pilots and laparoscopic surgeons have been shown to outperform their peers after fast-paced, action-packed video game training" (Bejjanki). See also Michael Casey, "Could Playing Video Games Make You Smarter?"

[249] See Clark, *Supersizing* Chapter 4 for more on how humans use their environment to reduce cognitive load.

[250] Robots have made incredible progress in computation but still struggle with their bodies. See Daniela Hernandez, "How to Survive a Robot Apocalypse: Just Close the Door."

observe and learn across thousands of scenarios.[251] Researchers for self-driving cars, for instance, have turned to Grand Theft Auto for realistic representations of stop signs that can be studied by computer algorithms. DeepMind researchers even constructed an artificial neural network by running their program through many different kinds of games ("Why AI researchers like video games").[252] The applications extend beyond gaming into the real world: DeepMind helped optimize energy use in Google's data centers.

This kind of programming even has implications for narrative and new literary forms. With the development of "emotional AI," computer generated personalities can now have their own beliefs, abilities, and responses capable of generating a storyworld unique to the AI (Stuart). Versu, for example, "[creates] interactive text-based stories based around intelligent and emotional characters" (Stuart). Designers Richard Evans and Emily Short endowed their characters with role-based parameters that could evolve over the course of interactions not only with the player but with the other characters, behind the scenes and without player involvement or even awareness.[253] "Enjoy a level of social freedom you haven't experienced in games before," Versu's website claims. "Stab characters in the back, or sweet talk them until you have them doing exactly what you want" (versu.com).

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[251] See also Blake Hester, "Artificial Intelligence is Learning How to Develop Games" and Ian Millington and John Funge, *Artificial Intelligence for Games*.

[252] "Play up, play up and play the game," suggests the article, borrowing this quote from Sir Henry Newbolt's nineteenth-century poem about cricket, "Vitaï Lampada." In this case, however, playing the game does not prepare young men for war so much as it hones the thinking abilities of artificial intelligence.

[253] Evans, one of the developers for Versu, was taken aback when one of his own characters, a doctor designed to be pleasant in general, was rude to him. As it turned out, Evans had been rude to another character, a servant, earlier in the game and the servant had told the doctor, who remembered and responded to Evans accordingly (Stuart).

In some ways, video games today even activate history and literary culture for players. Many video games draw nostalgically on late-century Victoriana, sometimes labelled "steampunk" and characterized by a science fiction aesthetic inspired by nineteenth-century industry. *Victoria: an empire under the sun* (2003) is a civilization-based game that emphasizes internal affairs more than diplomacy or war. Victorian literature also inspires video games, such as *Dr. Jekyll and Mr. Hyde* (one of the earliest video games, published in 1988). In the newest installment of *Assassin's Creed*, *Syndicate*, players arrive in London circa 1868, to find the Church and Monarchy rapidly losing power to Templar crime-rings (Margini). In order to complete their missions, players meet and/or receive help from Charles Dickens, Arthur Conan Doyle, Charles Darwin, Benjamin Disraeli and Queen Victoria herself. At Georgia Tech, students can take "Gaming with the Victorians," a course that "[facilitates] the continued development of multimodal communication strategies by engaging with both nineteenth-century literature and video games that adopt... Victorian settings to tell their stories."[254] We might even say that video games – hallmarked by serialization, excessive numbers of characters, subplots upon subplots, an ultimate quest, immersive story, consumers hungry for more – fill the cultural space once inhabited by the nineteenth-century novel.

Or do they?

Ian Bogost warns interactive stories in games fall short of those in more conventional forms, such as cinema, TV, and books, and even suggests that "games' obsession with story obscures more ambitious goals" ("Video Games"). Bogost, a video

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[254] This website is, unfortunately, no longer available; but the original citation belongs to: J. Stephen Addcox, "Narrative and Play." *Gaming with the Victorians: 2016 Course*, 16 Oct. 2015. For more on Victorians as video gamers, see Austin Sirkin, "How Victorian Era Gamers Would Have Played Computer Games Using the Analytical Engine."

game designer and professor of media at Georgia Institute of Technology, argues that rather than storytelling, video games might more fruitfully pursue their own ends: the formal exposition of the video game medium itself. Early video games, he reminds us, were not realistic because computers were not powerful enough to support mimetic environments. Technology has changed that since the 1990s but simulated people still remain strikingly unrealistic. Bogost highlights What Remains of Edith Finch, a game of family history worked out by finding clues around a house. "Why does this story need to be told as a video game?" he asks. The game does allow players to rotate points of view, playing at times as characters, animals, and objects; but doesn't narrative focalization accomplish the same thing? Ultimately, Bogost suggests that What Remains of Edith Finch does not aspire to tell a better story than other mediums but, instead, performs a self-reflexive function, using "materials of games to make those materials visible, operable, and beautiful." Games, he concludes, "are the aesthetic form of everyday objects":

> Think of a medium as the aesthetic form of common materials. Poetry aestheticizes language. Painting aestheticizes flatness and pigment.... Sure, yes, those media can and do tell stories. But the stories come later, built atop the medium's foundations. What are games good for, then? Players and creators have been mistaken in merely hoping that they might someday share the stage with books, films, and television, let alone to unseat them.... Games are not a new, interactive medium for stories. Instead, games are the aesthetic form of everyday objects.... If there is a future of games, let alone a future in which they discover their potential as a defining medium of an era, it will be one in which games abandon the dream of becoming narrative media and pursue the one they are already so good at: taking the tidy, ordinary world apart and putting it back together again in surprising, ghastly new ways. (Bogost, "Video Games")

For Bogost, the aesthetic work of video games defamiliarizes material and perceptual reality.[255]

If video games, as Bogost suggests, make everyday objects newly visible, strategy games expose thinking. This is perhaps best seen in prefaces to games literature that describe mental components and capacity before turning to the subject at hand, gaming. In his understanding of games as aesthetic mediators, Bogost rediscovers what nineteenth-century authors already practiced. Games were not narrative engines but rather a means for aestheticizing cognitive forms. Such might explain why we don't find *more* texts like Carroll's *Through the Looking Glass* – precisely because games already perform aesthetic work. Strategy games made thinking less abstract; each move implied logical deductions that, even if unrealized by the player, could be analyzed by others. In effect, as the writers of games literature well knew, games delineated thinking into scientific and object-based forms: for chess players, reading "R-R8 mate" in a periodical chess column not only suggests the movement of a rook; it also indicates a consideration of the whole board and future checkmate. For Alan Turing, "R-R8 mate" satisfied one proof that machines could think (435).

Authors brought games into their texts, therefore, as vectors of cognitive activity capable of aestheticizing the mind, a narrative strategy that developed alongside experiments with fictional consciousness. Recall Dickens's sense that even individual games must be understood for their formal and cognitive differences rather than for their

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[255] For a great example of this point, watch comedian Conan O'Brien's YouTube review of Wilson's Heart, an interactive discovery game that uses VR technology to insert the player into the game environment. Doing so often presents unusual challenges: hands don't grab items the same way, discarded clipboards reappear, and perspective becomes oddly skewed.

analogies. Dickens's distinctions between whist, chess, and Speculation indicate an aesthetic priority of strategy games: the aestheticization of *thinking*. Furthermore, thinking with games in texts extends to the reader beyond representation or versimilitude. Games in novels, therefore, foreground the role of the reader that Bogost appears to downplay. Whether reading a novel or playing a story game, readers do not exercise autonomy; but they do engage and enliven an artifact that would otherwise remain inactive. Novels, in short, may think with games without actually being games.

John Ruskin understood thinking with games, even if others regarded him as a mediocre player.[256] In a letter he writes: "I'm going to drive up the hill to the Crystal Palace, and I shall play some games of chess with the automaton chess player. I get quite fond of him.... I say I shall play *some* games, for I never keep him waiting for moves and he crushes me down steadily, and my mind won't be all in my play, today" ("To Charles Eliot Norton, 14 Feb. 1874" 81). Ruskin anticipates the plot of his games, for his mind won't be focused enough. Without strained attention, deliberation, he knows the automaton will outthink and therefore outplay him. Ruskin enjoys the crushing down, however, because in exchange he receives "the most lovely lessons in chess" (81). Ruskin observed the aestheticization of thinking in the black and white forms of the chess board. Games in novels also record this observation: the movement of thinking from mind into world, among players, across nations, through empires.

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[256] See the Introduction to this dissertation, pp. 33-34.

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