# **Strategy and Sociability** The Mind, the Body, and the Soul of Chess

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Chess is a game of minds, bodies, and emotions. Most players recognize each of these as essential to playful competition, and all three are embedded in social relations. Thus chess, despite its reputation as a game of the mind, is not only a deeply thoughtful exercise, but also a test of physical endurance and strong emotions in its joys and failures. This exercise of thought, stamina, and feeling gets shaped, in turn, by chess's dependence on social arrangements among a player, a competitive other, and an audience. Like all forms of social play, games like chess rely on the community in which they occur. Having spent five years observing scholastic, collegiate, community, and professional chess and having interviewed players of various skill levels, the author argues that chess must be understood in light of the social relations and the communities that shape the competition. **Key words**: body in chess play; chess; components of chess play; emotion in chess play; mind in chess play; social relations

**C**HESS IS A GAME of contemplation, endurance, and action. It tests a player's mind, body, and emotions. These aspects of play seem highly personal, yet I argue that they depend on the presence and recognition of others. As a result, the game of chess remains, in every way, social. Chess requires a public identity, competition, and a real or imagined audience. Therefore, not only can cognitive psychologists and psychiatrists lay claim to understanding the game, so too can sociologists. A world may be biological and personal, yet it depends on social relations and community belonging, as is true of other worlds in which we participate voluntarily.

A surprisingly large number of Americans know how to play chess or at least understand its basic rules. According to Susan Polgar, a prominent grand master, there are forty-five million chess players in the United States. Others put that figure lower, but most estimates hover around forty million. In chess centers like Russia, Eastern Europe, Iceland, Cuba, and Argentina, the number grows far higher. Polgar guesses that there are seven hundred million players worldwide.

*American Journal of Play*, volume 6, number 3 © The Strong Contact Gary Fine at g-fine@northwestern.edu Even though many of these millions are not seriously committed to the game, the United States Chess Federation boasts a paid membership of some eighty thousand.<sup>1</sup> Chess constitutes an extensive world of play.

Having studied Little League baseball, high school debate, Dungeons and Dragons, and mushroom collecting,<sup>2</sup> I wished to examine a more extensive leisure world. For five years-from 2006 to 2010- I observed at tournaments, interviewed players, and read books, magazines, and websites. I wanted to examine the diversity of chess, and to this end I visited the Marshall Chess Club in New York, the open chess tables in Washington Square Park, several elementary school chess programs in New York and Chicago, weekly meetings of a suburban Chicago chess club, a collegiate chess team, a high school team, a private adolescent chess group, the games of a professional chess team in the United States Chess League, and several dozen tournaments of various sizes, including the World Open and the United States Open. During these years, I met a dozen of the top one hundred American chess players and became friends with several of them. I conducted interviews with some fifty players at various skill levels from grand masters to players of modest abilities. I had also my own memories as a chess parent in the late 1980s and early 1990s when I took my son to elementary school tournaments and, for two years, organized a chess club at his elementary school.

# The Social Mind

All agree that chess is a mental game. As Goethe remarked, "The game of chess is the touchstone of the intellect." Indeed its current popularity among ambitious parents stems from this belief. But just what is a mental game?

Scientists, philosophers, and scholars often treat the mind as something both individual and universal. We humans think as members of a species, and we individuals think through our own experiences—experiences, in part, shaped by our genetic endowments. But those who believe in cognitive universalism and cognitive individualism often ignore the fact that thinking also grows from a cultural context—nature and nurture depend on network.<sup>3</sup> Although the linkage between chess and cognition is strong, chess developed as a social game.

To succeed at chess, an individual needs skill in calculation and evaluation. The player must predict what is likely to happen, and he must judge which possible move will lead to a satisfactory result. According to psychologist Dennis Holding this skill reflects a process of search, evaluate, and know (SEEK).<sup>4</sup> Calculation develops tactics, whereas evaluation leads to strategy. As my friend Jeremy, an international chess master, explained, "You must calculate moves quickly and then interpret them coldly" (author field notes). This, then, suggests links between cognition and the social in chess.

Assessments of current positions depend on evaluations of future positions. Chess players claim to think "several moves ahead." Although we assume chess involves two competitors making tactical moves, the move does not constitute the basic element of chess play at a competitive level. Instead, the line—a set of planned moves that establish an extended strategy—does. While strategies are fragile, shaped by the decisions of opponents, they force the player to examine future actions, much as the philosopher George Herbert Mead suggests about baseball players.<sup>5</sup> This emphasis on lines of play underscores the importance of planning—as the saying goes, a bad plan is better than no plan.

Players predict how their opponents will act. Competitors depend on role playing, imagining an opponent's choices and responding accordingly.<sup>6</sup> At the highest level of chess, players consider their own games as well as those of their opponents. As one strong player remarked of an opponent, "Obviously he's going to download my games and examine them one by one to assess my strengths and weaknesses and predict how I'm going to play against him. I'm trying to imagine what he is going to conclude."<sup>7</sup> Psychiatrist Karl Menninger has pointed out that chess involves a "progressive interpenetration of minds."<sup>8</sup> Dialogue at the chessboard is internal as top players imagine the responses of their opponents, changing their assumptions as the game progresses. As a result, the calculation becomes dynamic, and players often shift their imagined futures. Put simply, an imagined future depends on new realities set by the choices of two active, calculating players. A player's opponent "can force [the player] to look at the situation with his [opponent's] eyes."<sup>9</sup>To gain an advantage, high-level tournament players examine computer databases to learn their opponents' stylistic preferences.

As Jeremy once explained when he arrived at the board half-an-hour late, having studied his opponent's past games, "He's very predictable, but I don't trust myself to figure it out over the board.... It also sends a message to your opponent that you are preparing by showing up late" (author field notes). Preparation does not only involve awareness of the preferences of a player's opponent but may also attempt to upend the opponent's expectations. In important matches, players prepare lines of attack different from their usual choices, leaving opponents unprepared. In crucial matches, players wish to ensure that their past games do

not predict their plans. A player who typically opens by moving the pawn in front of the king might surprise an opponent by opening with the queen's pawn.

Games can proceed in various directions, depending on the choices of the competitors. Like most games, chess is structured through decision trees. The number of potential moves at each point in the game calls for comparative evaluations. Players speak of chess "brilliancies"—surprising combinations that rely on the sacrifice of a piece—leading to triumph. As grand master David Bronstein points out, a brilliancy is a shared achievement: "The brilliancy prize is received by the winner alone, and no one ponders over the fact that the game is the product of the creativity of both players. . . . In chess you are left to your own resources, and at the same time you are strictly dependent on someone else. . . . Live chess, the game, is always 'thinking for two."<sup>10</sup>

Calculation is a skill based on intuition. While chess is taught, many strongly believe that talented players have a biological gift for the game. Along with mathematics and music, chess is a domain in which some children are credited as prodigies.<sup>11</sup> The great José Raúl Capablanca—a Mozart of the board—learned the game at age four. Not merely do these prodigies lack extensive training, they can sense proper combinations. As emphasized by the great early twentieth-century chess player and mathematician Richard Reti, accurately calculating moves in chess resembles skillful calculation in mathematics.<sup>12</sup> Internal calculation constitutes only a portion of the skills necessary to judge lines of play; more important is the ability to calculate in the context of a competition.

The number of future moves chess players can "see" is not identical with their chess ability. The riposte to the question of how many moves a player can see ahead is "one, the right one."<sup>13</sup> But this answer is misleading. Although analyzing possibilities may be valuable, the value depends solely on the responses of an opponent. When two strong players face off, each assumes the role of the other, creating a hidden interaction. As one top player reported, "When you look at the games of modern grand masters, so much of the fight is behind the stage. They are not happening on the board, because most players have already figured out the patterns" (author interview). Classic games receive thorough analysis by the playing community, and, as a result, they belong to a deep dialogue. Although the individual player must access this collective wisdom, the player does not think personal thoughts but instead those from a community.

Because chess depends on thinking in a social space, it becomes a game of imagined futures, role taking, and contingencies and possibilities. One of the more salient questions we ask chess players is how many moves ahead they plan. Seeing ahead gives them confidence, but it also can be dangerous. Their predictions can be wrong either because they misread a past or fail to see what might affect a future. Given this, players may not commit to a move until that calculation produces for them a belief the move offers a sure path to success.<sup>14</sup> Much guessing goes on at chess games about how they are progressing, and these guesses change as each move offers a new reality. Listening to observers kibitz-ing, I heard claims that a game was lost, coming to a draw, or certain of victory. Onlookers have suggested that a player resign a hopelessly lost position, only to watch that player triumph. People at chess games commonly disagree about which move is best. Consider this chat-room discussion about an early move in a match between two grand masters after one player moved his white pawn one space ahead to square c5 (five squares in front of white's left-side bishop: from the perspective of white "files," go left to right from "a" to "h" and "ranks" go from "1" to "8" toward black's side):

A kibitzes: they play like old men :-)

- B kibitzes: ive never seen c5 so early
- C kibitzes: c5 is horrible!!
- D kibitzes: very common here
- E kibitzes: it's played a lot by top players recently
- F kibitzes: yes, c5 is horrible says the 1000 [low] rated player
- G kibitzes: c5 is not horrible you fool
- H kibitzes: but common now.
- B kibitzes: c5 is the move any1 under [a rating of] 2000 [just below an expert player] never makes
- C kibitzes: if the top GM play c5, they weak [sic]
- I kibitzes: e5 for black solves all his problems puts an end to crap like c5 (Internet Chess Club website, May 22, 2010)

Without a context of the play action in a specific game, even the best player cannot judge whether c5 is a horrible or an impressive move. Even in context, it provoked a vehement debate. The wisdom of c5 as a move can be judged only after the fact by virtue of whether the line of reasoning behind it led to success or defeat.

The challenge in every chess game, as in many competitions, lies in discovering the answer to the question, "Where is the win?" Each contest begins with either player capable of triumph, and it is the collaborative sequence of moves that produces the outcome. Part of the challenge of assessments like the chat-room example comes from the fact that, even though the game is inevitably forward looking, the interpretation of the game can only be read backwards. A game's meaning is tied to the intersecting choices of two players with different experiences and different plans. Each wishes to disrupt the plan of the other. As Paul Hoffman remarks, "Chess players live in an alternative world of what might have been."<sup>15</sup>

Because chess involves thinking for two, great play only occurs with the collaboration of a talented opponent. As the chess grand master Savielly Tartakover pointed out, "Victory goes not to the one who plays well, but to the one who plays better."<sup>16</sup> Or as H. A. Kennedy has it, "A game of chess . . . is an argument. Every move is a definite stage in the controversy."<sup>17</sup> The same might be said of other competitive activities, such as tennis and bridge. As agonistic contests, games are relational, however cognitive or emotional they appear.

# **Chunks of Intuition**

The vast possibilities in chess, even in a simple game, suggest that individuals—even strong players—cannot memorize games. Rather, they recall chess positions as combinations or patterns. Players "chunk" information in packages of cognition. Outsiders frequently marvel at such feats as chess players playing blindfolded. Although normally players do not wear blindfolds, they often turn their eyes away while an opponent studies the board, and—even more impressively—they often play several games simultaneously.<sup>18</sup> How is this possible? The player does not memorize each square but instead remembers the relationship of pieces and the narrative of the game to keep track of how the pieces arrive at their locations. For my purposes in this article, it is crucial to understand how players lash information together, an understanding provided by several scholars including the Nobel Prize–winning American researcher Herbert Simon and the Dutch chess master and psychologist Adriaan de Groot.

These scholars claim that the cognitive focus in chess results from pattern recognition as opposed to brute memorization. De Groot discovered, not surprisingly, that the stronger the chess player, the more likely he is to recall positions. Elite players can reproduce 93 percent of such positions, whereas average players manage only 51percent.<sup>19</sup> Chase and Simon replicated De Groot's finding, but they also asked players to memorize random positions. Chess masters

could no better judge unlikely positions than weaker players.<sup>20</sup> In other words, the superior memory of the grand master results from the game context and not simply from better memory. Grand masters operate within a social world, a community of practice. It matters less that they are smarter than that they are experienced in thinking in context, that is, in light of their experience within the play of a game. They do not recall individual facts but relationships, through what experts call relational cognition.

Relational cognition—the chunking of information—is evident in a chess game. In a tournament, players have limited time to select their moves. They do not calculate the likely outcome of every option. In contrast, they select a few candidate moves—moves that appear to have the greatest likelihood of success based on chess theory and their own experience. Players with less access to theory and experience suffer a competitive disadvantage. They suffer from what one coach termed "board blindness."

Competitors are faced with the same board, but they do not see it in the same way. As one coach reported about a tournament game between two inexperienced high school players, "Neither player sees what they are seeing" (author field notes). Experience—chess knowledge as a form of personal history—builds success in pattern recognition. As one coach emphasized, chess resembles facial recognition: "You're going to be recognizing chess positions as your friends." My friend Jeremy gave the example of Boris Spassky, the Soviet world champion defeated by Bobby Fischer, claiming that he had received so much help from his Soviet colleagues that he failed to recognize a critical move. Jeremy added, "Forgetting moves means that you didn't understand it. Fischer never forgot anything because he created it." To learn a move, a player must internalize it.

Even though chess represents an exemplary form of cognition—the mind at its most productive—the claim that many decisions are intuitive<sup>21</sup> and automatic is surprising. Players desire to keep their "brain alert" or make it work at "warp speed" (author field notes). At some point, time-consuming calculation occurs, but often players simply "know" the right moves as a kind of tacit knowledge. Even if cognitive scientists emphasize the production of chess knowledge through the chunking of information and pattern recognition, those most familiar with chess commonly talk of "sensing" the right move. As world champion Capablanca allegedly informed a weaker player, "You figure it out, I know it."<sup>22</sup> In rejecting a move that others expected, Nigel Short, a strong grand master, commented, "It didn't smell right."<sup>23</sup> Great players— whose expertise cannot easily be shared—hold dearly to the idea of intuition, even if intuition can never be separated from tacit calculation. In numerous social worlds—from medicine to police work to chess—a belief in intuition becomes intimately connected to professionalism, separating the expert from the rule-based amateur. Yet, as I discuss, intuition proves insufficient for successful play. Competitors need a plan—a strategy—that permits them to plot their future course in the game.

# **Future Work**

Strategy is ultimately not about past or present, although it draws upon both. Instead, strategic choice involves an imagined and shared future. Chess games, with their agonistic structures, require envisioning the acts of others. Excellent chess players are not those who can make the right move but those who can imagine the right sequence of moves while their opponents make countermoves. We find this process in sexual flirtation, business negotiation, ballroom dancing, and criminal muggings. Each of these activities involves a sociological waltz in which the "players" plan ahead to achieve their objectives, whether the objectives require consent or conflict.

In the child's game Candyland, a player needs no plan. The game advances until its random plays produce a winner or the players decide to stop. Even games like poker and bridge, games that demand strategic thinking to create a style of play, use much less strategy in a given hand, and too few moves exist to permit the weaving of tactics into strategy. Chess is different.

Chess games often involve sixty moves for each player stretching over six hours. A chess game has a rhythm, an unfolding story. The number of moves expected in chess permits immediate tactics to become embedded in a long-term strategy. According to world champion Kasparov, "Every step, every reaction, every decision you make, must be done with a clear objective. . . . The strategist starts with a goal in the distant future and works backward to the present."<sup>24</sup> As grand master Boris tells his students when he insists they prepare for a tournament, "You should be philosophers of chess." Without this, he warns, they will fail. As one player commented about a loss to a titled player, "You can tell I didn't have a plan. I didn't know what to do" (author field notes). The strong competitor plans; the weak one simply plays.

#### Moves Ahead

In chess, you know the future by seeing ahead. How many moves ahead can you

see? The question builds on an image of cognitive magic. Chess aficionados joke about the matter like one coach who asserts, "I'm currently thinking eighty-two moves in the future." More seriously, many claim that Fischer could think thirty moves ahead, although perhaps this is a fantasy.<sup>25</sup> Kasparov points out: "Without a doubt, the question I am most often asked is 'How many moves ahead do you see?' As with most such questions, the honest answer is, 'It depends,' but that hasn't stopped people from asking or generations of chess players from concocting pithy relies. 'As far as needed' is one, or 'One move further than my opponent.' There is no concrete figure, no maximum or minimum. . . . It's more like figuring out a route on a map that keeps changing before your eyes."<sup>26</sup>

Kasparov's analogy of a journey emphasizes temporal structure. Seeing ahead depends on the stage of the game and on whether the moves are "forced," permitting an opponent only one plausible move, even if, when the plan is correct, that move will lead to disaster. One college player explained: "I would say on average [I think] at least three or four [moves ahead], depending on what the position is. It could go up to fifteen. That is pretty rare, though. You need a position where you can obviously say he has to make this move. Before I make a move, I say to myself when I make the move, 'What are the consequences?' Then you pretty much switch yourself over to their side and say 'Would I play this move in their position?'" (author interview). These examples emphasize how thinking within chess is social. In chess, when a player thinks about the future, he thinks about how his opponent imagines the same future, and, as a result, he tries to upend the opponent's plan.

## Sacrificial Moves

Initially a sacrifice seems counterintuitive. In making a sacrifice, the player objectively becomes immediately worse off on the assumption that some long-term benefit will accrue. A successful sacrifice presumes the opponent cannot imagine a disadvantaged future. The "sac" appears to be a mistake or an odd move, one that permits an opponent to capture a piece. But when the sac succeeds, the player eventually gains other, better pieces or a stronger position. Bobby Fischer's Game of the Century, played when he was just thirteen years old, involved the sacrifice of his queen. When he made the sacrifice, it seemed a child's error. Only later did it seem as brilliant.

Consider the following anecdote: "In the course of a game, Sir George Thomas asked [chess writer George] Koltanowski, 'I see you are an exchange down. Did you lose it, or sacrifice it.' Koltanowski answered, 'How am I to know? I'll tell you when the game is over. If I win, it was a sacrifice. If I lose, then it was a mistake.<sup>27</sup>

Koltanowski's response reveals the importance of reading the game backwards. As in many areas, we know whether a choice was wise because of subsequent events. Whether we are certain of all of the contingencies that flow from our decisions, we are forced to act, and then, if necessary, provide justification. Sacrifices are so beautiful and so dangerous because they depend on a future we do not know at the moment they happen. Ultimately, chess cognition proves to be both social and future oriented. It stands outside the head, continually unfolding, shaped by the choices of those who share a collective space of action.

# The Player's Body

The difference between mind and body is so common and obvious, we call it a cliché. Certainly this difference is meaningful in a limited way, as differences often are. Thoughts seem to be separate from one's physical reality. Despite the fact that heads ache and ideas produce pleasure, many view the brain as distant from the body. But this separation is misleading, and neuropsychologists commonly speak of "embodied thought," emphasizing that a firm distinction between brain and mind is not possible. The body affects the mind and vice versa. And, indeed, the body is as much a part of chess as is the mind. Along with watching the moves on the board, an opponent also sees and judges the player's body as he plays the game.

Through emotion, mind and body intersect, and both are shaped by society. Mind and body exist in communities. The body is not entirely "owned" by the self; it also belongs to those it interacts with. In arguing that the body is essential to social play and that thought is embodied and performed, I describe how the look of the body and its preparation for action are central to competitive chess.

#### The Body as Manikin

A body is a form of display. What you wear—and what you do not wear—conveys something about yourself and your community. Chess tournaments once seemed like formal domains where participants communicated their real or desired social class and their standing within the chess world. But today, informality rules, and anyone who attends a large chess tournament confronts a riot of style. The fact that the events are held in hotel ballrooms has an impact on

dress. Swimsuits and overcoats are rare, but, in general, clothing ranges from suits to slacks to jeans, from button-down shirts to t-shirts, and from bowties to bling. Top players more likely wear more formal attire, but much depends on personal preference and desired image. Some wear suits. Others look like bums. Fischer often complained about how poorly his colleagues dressed, even though as a juvenile, he had worn sneakers and jeans to tournaments. He changed when he was sixteen, noting, "People didn't seem to have enough respect for me, and I didn't like that, so I decided I'd have to show them they weren't any better than me.... So I decided to dress up."28 He complained, "When it was a game played by the aristocrats, it had more, like you know, dignity to it. When they used to have the clubs ... everybody went in dressed in a suit, a tie, like gentlemen, you know. Now, kids come running in their sneakers."29 Fischer believed that more formal dress expressed respect for the game. He argued that clothes make the man. Thus, his slovenly appearance later in life seemed a sad irony. With the exception of high-level matches, players usually dress for comfort. These days, only when the prestige of the event outweighs the desire for comfort do we see ties and jackets. How players dress reveals how they define the expectations of those around them.

## The Embodiment of Thinking

In whatever undertaking an individual engages, he has to ready himself, not only mentally, but in light of the activity's physical demands. The boxer, ballerina, soprano, and surgeon face different bodily demands that reflect cognitive challenges. In other words, they must perform through their bodies what is happening in their minds.

Because chess events are moments of focused attention, a player's body can absorb the blows of lassitude, but for each game—some lasting over six hours—they need preparation. Players must have sufficient stamina for competitive survival.

Alexandra Kosteniuk, a former Women's World Chess Champion, argues: "It's . . . a proven fact that thinking does use up calories, and many of them. For example, during the last world championship, which for me lasted 3 weeks from the start to winning the final, I lost over 5 kilos, only playing chess, not running or doing any other kinds of physical sports. I was able to hold on well thanks to the rigorous physical training program I had gone through the 6 months previous to the championship. . . . It's almost impossible to explain how physically demanding the game of chess is."<sup>30</sup>

Research suggests that, during chess games, a player's blood pressure and breathing rates rise. Nigel Short, in his championship match with Kasparov, lost ten pounds in the first three games.<sup>31</sup> Like Kosteniuk, many chess champions use an exercise regimen in preparing for important matches. Kasparov pumped iron, swam, and rowed. Fischer played tennis, noting, "Your body has to be in top condition. Your chess deteriorates as your body does. You can't separate mind from body."32 Some large tournaments hold golf or tennis tournaments for players. A grand master explained, "All the top players keep themselves in great physical form" (author field notes). Admittedly, when one glances around a chess tournament hall filled with overweight endomorphs, one might wonder how true these claims are. But, at the front of the hall, many of the better players are buff. It is not only heads and hearts that matter, stomachs and intestines do as well. Players who face games with long time controls eat in advance and may bring food to the table. As one grand master joked, "The most important movement in chess is a bowel movement" (author field notes). Being in time trouble and in intestinal trouble is a deadly combination.

To think about the body often suggests a focus on action, but some activities—and chess is one—depend on inaction. Two competitors gaze across a table in silence, only occasionally pushing a small wooden or plastic object a few inches, notating a few numbers and letters, and touching a nearby clock. This represents body movement in chess. Doing nothing is very much doing something. As those who must stay at rest can attest, such inaction can be challenging. Perhaps the hardest feat of acting is playing a corpse. One must be mindful to stay inert. A body can appear static, even while roiling. Realizing that you are about to lose a game you thought you had already won can produce turmoil. Chess grand master Pal Benko notes that "your body reacted exactly as though your life were being threatened: your heart pounded, your pulse raced, your stomach did flip-flops, your skin broke out in a sweat."33 Successful players have high levels of testosterone, and players generally record higher than normal levels of testosterone before their matches.<sup>34</sup> Bodily changes, however, reveal themselves behaviorally as well as chemically. Players try to release nervous energy, drumming their fingers or jiggling their legs. Former world champion Viswanathan Anand commented that he studies his opponent's body movements: "If the breathing is deep or shallow, fast or slow—that reveals a lot about the degree of his agitation. In a match that lasts a month, even a clearing of the throat can be quite important."35

At tournaments players can walk around, exchange cautious words with

friends, and use the public toilet. At the board, players may arrange themselves as they wish so long as they do not make noise or enter the space of an opponent. Rules do not prohibit staring, smiling, grimacing, coughing, or sighing. Players often sit quietly, holding their chin in their hands, resting elbows on the table, or leaning back in the chair, which emphasizes that sitting quietly can take many forms. Further, a player can move pieces with a flourish, hit the clock with passion, or write the move with panache. (One can also touch pieces, but only after announcing "J'adoube" or "Adjust.")

Exhaustion poses the greatest bodily threat to a chess player. Not only the game itself, but also tournament life is not conducive to rest. As one scholastic chess coach informed me, "A lot of these kids haven't slept well. Job one for everyone is to go to bed. The only thing you can give them is a good night sleep" (author field notes). Easier said than done.

Contemporary chess champions and high-level super grand masters play more tournament or match games than they once did. The great chess champion Capablanca played twenty games each year. Today an active grand master may play five times as many. However, although the total may be wearing, each game, shorter and less formal, is easier. At the first international tournament in London in 1851, time controls were not in place, and a game could last ten hours. Time controls were introduced a decade later to facilitate competitive tournaments and, perhaps, to protect the players. After the London tournament, star player Adolf Anderssen wrote: "Chairs and tables are small and low; all free space next to the players was occupied by a [recording assistant]. In short there was not a single space where you could rest your weary head during the hard fight. For the English player, more comfort is not required. He sits straight as a poker on his chair, keeps his thumbs in his waistcoat pockets, and does not move until he for an hour has [surveyed] the chessboard. His opponent has sighed hundreds of times when the Englishman eventually moves his piece."<sup>36</sup>

These changes—time limits and shortened games—are important, but even with them, a chess match strains the body. These strains might not be quite as evident as they are in rugby or boxing, but, because they are obscured by the belief that chess is all in the mind, they do not receive the attention that they deserve.

At most tournaments, games start in the late morning and early evening. Those that last six hours leave little time for recovery or relaxation. The top tournaments schedule one game per day; other tournaments may have games allowing each player sixty or ninety minutes a turn, permitting eight games in two or three days. Such schedules are enervating, and apocryphal stories abound: "One player was so tired that, as he nodded off in the opening, his head hit the board and scattered all the pieces. This woke him up."<sup>37</sup> Perhaps this collapse never happened, but the fact that we so often hear the story suggests a truth behind the fiction.

As they grow exhausted, players consider taking byes. Perhaps surprisingly, players are not required to play every round. Tournaments permit players to skip rounds and receive a half-point, ensuring that they will not lose the game. At most tournaments, they must play the last round or announce by the second round that they plan to take a bye. If not, they receive zero points for the final round, leaving without a check or a trophy. Players figure out what their bodies require and act accordingly. One coach suggested to his high school players that they should consider taking a bye during the middle of the tournament to prepare for the crucial final games. When a player won a long game after a bye the previous evening, he became convinced that the coach's strategy was wise (author field notes).

Like so many action regimes, chess demands that the body be displayed, prepared, and controlled. Changes in the rules of chess tournaments means that bodily control has shifted to produce shorter, more focused bursts of energy.

## **The Emotive Player**

Just as cognition is essential to chess play, emotion is too. Famed chess teacher David MacEnulty uses Goethe's claim about chess as the touchstone of the human intellect to suggest that it is equally "the touchstone of the human emotions." Chess, for MacEnulty, "touches on all branches of our being."<sup>38</sup> Emotion and cognition may appear to be internal, but they reflect the demands of society. They wrap the individual in a cocoon of interpersonal involvement.

Emotions are both performed and experienced. First, consider the powerful sensation of participating in the game, meaning those occasions in which we are fully engaged or are flowing with the activity. French sociologist Pierre Bourdieu describes this as "illusio," the commitment to the game that "pulls agents out of their indifference . . . to distinguish what is *important* ('What matters to me,' is of *interest*, in contrast to 'what is all the same to me' or *in-different*)."<sup>39</sup> Bourdieu's illusio as self-investment builds on Dutch historian Johan Huizinga's concept of illusion and seems experientially comparable to what psychologist Mihalyi

Csikszentmihalyi terms flow. In *Beyond Boredom and Anxiety*, Csikszentmihalyi describes flow as: "the holistic sensation that people feel when they act with total involvement. . . . Typically, a person can maintain a merged awareness with his or her actions for only short periods, which are broken by interludes when he adopts an outside perspective. These interruptions occur when questions flash through the actor's mind: 'Am I doing well?' 'What am I doing here?' 'Should I be doing this?' When one is in a flow episode, . . . these questions simply do not come to mind."<sup>40</sup> Csikszentmihalyi uses dancing, surgery, and rock climbing as examples of activities that depend on flow. And chess.

Csikszentmihalyi argues that these activities can separate us from our circumstances, particularly when we have the skills and motivation to perform at our highest level—the zone between being "on" and being overwhelmed. While each activity can generate attention, all of them occur within social space, as flow depends on the presence of others.<sup>41</sup> As Bourdieu puts it, "The *collusion* of the agents in the *illusio* is the root of the competition which pits them against each other and which makes the game itself."<sup>42</sup> Anthropologist Robert Desjarlais nicely suggests that chess constitutes a "socialized trance."<sup>43</sup> Csikszentmihalyi quotes two chess masters: "Concentration is like breathing—you never think of it. The roof could fall in and, if it missed you, you would be unaware of it. . . . When the game is exciting, I don't seem to hear nothing—the world seems to be cut off from me and all there is to think about is my game."<sup>44</sup>

While most players are not quite so unaware of their world as these dramatic images imply, participants can, indeed, lose track of time. They think about only the game. At one high school tournament, a young man urinated all over himself. His coach remarked, "He was so out of it. He was really into the game" (author field notes). Less dramatically, feet fall asleep as players remain awake. However, most players can distance themselves when they are not "on." If they are not calculating, players stroll, eat, or observe other games. The time controls of serious games prevent much chess from having the qualities that Csikszentmihalyi describes. Flow exists, but as moments in the course of routine. A player can get lost in a game, but finding oneself is rapid.

Flow also requires that both players possess approximately equal ability and that the game reflects this balance. As a result, flow depends on a social relationship in which each participant admires the ability of the other and, thus, feels that there is a challenge in the game. A contestant must play his best to triumph, and, thus, must engage fully in the action. This seems to suggest that the pair, respecting each other, will flow together. Still, one wonders whether both players will always be in a state of flow simultaneously, or can one partner be aroused while the other goes through the motions.

#### Emotional Display

We speak of emotion as bubbling up from within, as in flow, but emotions are also performed in public. Emotions are shaped by the desire of the individual to affiliate with his community. The display of emotions produces adjustments between the individual and the group in which he participates, and these emotions are particularly salient in freely chosen domains, such as games. The communication of emotions often occurs not through the physical signs of affect—often hidden in faces in repose (as in poker faces)—but in words that refer to internal feelings and that are taken as definitive by audiences.

The emotions of chess occur at the board and include such diverse sentiments as joy, dismay, and anger. As observers, we cannot experience the feelings we see in players. During a tournament, emotions can oscillate from elation to frustration. Only rarely will a competitor win or lose every game. As winners play winners and losers play losers, the sorting process produces mixed records and mixed emotions—peaks and valleys. And the emotions of each game shape future games, producing a knotted string of affect. Losers may not always be distressed, because some losses are satisfying, especially when a competitor can claim a "moral victory." In contrast, some victories—pyrrhic victories—are treated as defeats, because the cost of the victory outweighs the ostensible success. In contrast to moral victories in which a loss is, in effect, a triumph, an unimpressive victory against a poor player might damage a player's reputation, raising questions about the victor's talent. In organizational terms, a win is a win, and a loss, a loss, but in the chess community that makes judgments, this need not be the case.

## Joy as Juice

In the emotional realm, joy is fairly simple. It washes over a player as a happy sign of a successful present with the promise of a bright future. To be sure, joy is grounded on what has just happened, but it also provides an expectation of what is to come. As sociologist Antony Puddephatt points out: "Appreciating improvements in one's level of play serves to inspire players to continue or intensify their careers . . . . 'Oh, it's amazing when you beat somebody who you could never beat before. It's the greatest high in the world . . . it's like climbing a mountain."<sup>45</sup>A player receives validation by having attained a higher performance level, an

achievement that may be snatched away at any time. In a competitive world, joy depends on putting aside the errors of an opponent and attributing the triumph to oneself. At the same time, joy validates performance. One player offered: "I feel as if I couldn't do a wrong move. . . . I feel smarter, clever. Sadistic as it is, I can't stop a grin from breaking out on my face."<sup>46</sup>Although he may recognize the chance factors involved, his uncontrolled grin suggests just how pleased he is. The display of joy outside of ritualized moments (such as a game's immediate aftermath) can hurt a player's reputation. The individual must transform joy into modesty: no matter the level of ability, triumph must be presented without bluster. In other words, elation must be contained. Audiences permit the victor momentary public satisfaction (spiking the ball), but then a retreat to humility is essential. Like depression, joy is an emotion that must be tightly contained to prevent earning a reputation as a show-off or braggart.

## The Dismay of Defeat

Most forms of emotional display are constrained by social convention and local norms. In defeat, we expect some acknowledgment of disappointment, but players should suggest that the outcome is transient. Expected outcomes produce deference and grace, but surprising disappointments are more challenging, leading to internal despair or public anger. Players may recognize that they should be the good sports their community demands, but their untamed emotions take over.

Given the potential of emotion, I find it striking how placid competitions seem when viewed from the outside. One coach counsels his players to maintain a "poker face." Only small flashes of emotions shine through. As someone said to me of a well-liked master-level player, "He's calm, but he's bubbling inside" (author field notes). One player reported, "At the start of every game, I feel sick. Before games, I would be really nervous. I usually feel [nauseous] before my games." Another comments, "I lean forward and I get too crazy. My stomach starts going 'Mwooh.' I've got to play within the limitations of my health" (author interviews). These competitors feel the anxieties of status and self-evaluation.

Emotions oscillate during competitive events, but afterwards players must deal with the consequences. Given that chess games are rated, they affect the competitive identity of the player. Perhaps novelist Paolo Maurensig exaggerates a little when he remarked, "The players bear lifelong scars, neither body nor soul ever recovering fully. Anything that might reawaken memory of the mutilation is violently repulsed."<sup>47</sup> Much emotion is internally felt, but players express it in words. Despite many tournament victories, grand master Short remarks, "If I lose badly, I will feel like committing suicide."<sup>48</sup> Josh Waitzkin reports in a similar vein, "When you lose, it is as if someone has torn out your heart and stepped on it."<sup>49</sup> One tournament organizer speaks of a "chess grieving process" (author field notes). In extreme cases, competitors consider quitting because the pain outweighs the satisfaction. Self-doubt consumes even the best players. After defeats, Kasparov went into deep, inconsolable funks,<sup>50</sup> the adolescent Fischer wept bitter tears,<sup>51</sup>and Greg Shahade, the founder of the U.S. Chess League, characterized a loss as "really just the worst thing that ever happened in my life."<sup>52</sup> Disgusted with his play, Jeremy attributed his defeats to incapacitating headaches and considered withdrawing from a major tournament (author field notes). One strong player, returning to play after years of inactivity addressed the power of dismay.

I stopped after age 17. I retired. [He was winning the junior championship.] All I had to play was one more guy. I was ½ point ahead of everybody else in the tournament. . . . He was older than me and a stronger player. I was beating him, and in the last few minutes of the game I'm in time trouble, and I just throw away a rook. . . . I was so disappointed by it, so psychologically traumatized of losing. . . I was loving winning the game, like three feet above everyone . . . and then it was suddenly taken away with a blunder. I don't think I have ever quite recovered from that. It hurt me emotionally, and I remember just pushing the table away and got up and just walked out of the room. . . . I was never again committed to organized chess as a serious thing. (interview by Antony Puddephatt)

The defeat challenges his sense of deep involvement. As Erving Goffman emphasizes in his essay "Fun in Games," fun is the only justification for participating in self-motivated, voluntary activities. Fun is the guarantor of participation.<sup>53</sup> Within the world of games, players find many motivations, but fun offers the prime justification for their participation in an activity that ostensibly "doesn't matter."

## The Arrow of Anger

While despair often appears in verbal accounts, anger is performed, despite severe sanctions against its display. Chess observers delight in recounting

moments of anger, perhaps because such drama suggests that the game, otherwise insignificant, truly counts. Anger may be disruptive, but it reveals the commitment of the competitors. Despite the fact that fun is supposed to be crucial to the play, anger reveals the motivations that are hidden behind that rosy picture.

The amount of anger we permit players to display is socially controlled, and over time boundaries for legitimate public anger have narrowed through what Norbert Elias describes as the civilizing process.<sup>54</sup> As a result of their rarity and fascination, dramatic displays of anger become storied, transformed into legendary narratives. I heard several times about a player who was so upset after an unexpected defeat that he threw a piece at his opponent's forehead (author field notes). Of Kasparov it was said, that when losing, "He'd start swearing and muttering to himself in Russian. [When a fan approached] Garry shoved him up against the wall. A defeated Kasparov is a dangerous beast."<sup>55</sup> But his behavior pales in comparison to the antics of world champion Alexander Alekhine, who destroyed the furniture in his hotel room, or William the Conqueror, who smashed a chessboard over the head of France's crown prince.<sup>56</sup> Perhaps some of these narratives are apocryphal, but they find echoes in families as a once-superior father now finds himself routinely trounced by his son. Emotions respond to shifts in status.

# Models of Modulation

Given heated emotions, individuals must establish control to permit life to proceed more diplomatically. Life may be emotional, but we pride ourselves on civility. Social control works because of our self-control. This belief was stated nicely by Emanuel Lasker in 1913 when he described preparing for an important match: "During the course of the match, I expect that several times victory will smile joyfully on each of us, and several times defeat with its cold, evil eyes will stare us in the face, but neither of us, one must expect, will on account of this lose his self-control."<sup>57</sup> Playing chess requires the belief that while outcomes matter enough for competition, they do not matter enough for explosion. Again, we struggle to justify the commitment to play in the face of competitive urges that claim victory is more important than pleasure: "When you play chess, the important skill is perhaps to suppress an emotional reaction, because it can give your opponent an edge. [I ask, "How do you suppress your emotions?"] I think it is just the expression of your poker face. So if you are playing a match and I have . . . completely screwed up, instead of going, 'Gosh, why did I do that?' Instead of doing that, pretending nothing is wrong can help because it doesn't give your opponent the 'Oh, I got him now' edge. You know it is a mental thing" (author interview). This example encapsulates the dynamics of emotional control. Appearing to be in control directs attention away from failures on the board. One can deceive through emotional display.

In addition, disciplining emotions may shape behavior. The following discussion at a high school tournament is revealing: "Terry, a high school player, comments about a move that he missed, 'I was so mad at myself. I was so bummed out.' His coach comments, 'If you feel bad after the move, you have to know your emotions. You keep on thinking about your move [as opposed to the next move]. Mistakes never come alone. Games are lost on the second mistake [while thinking about the first mistake].' Donald, another coach, adds, 'You have to play without emotion. You can go outside and scream afterward, but you want to scream because you won'" (author field notes).

The importance of emotional control in stabilizing play becomes clear in its absence. While chess emphasizes the need for control, other competitions, such as tennis, permit acting out. One international master reported: "I threw a king once. I was upset. Throwing a king is like breaking a [tennis] racquet. 'Oh, no. You can't throw a king.' Chess would be better if you could. It would get more publicity. It would be more exciting. It's asking too much of players to bottle it up" (author field notes).

Emotional control modulates the game both through the player coping with a dynamic, pressured social scene and through maintaining a desirable definition of the game that hides cues that could expose the error. In either case, the dampening of affect depends on social relations.

# The Mind, Body, and Soul of Chess

I describe chess as a social world by addressing three features that seem removed from interpersonal relations—cognition, the body, and emotion. In each domain, chess excels. It is deeply thoughtful, a test of endurance, and strongly felt. Yet, these thoughts, embodiments, and feelings are shaped by the reality that chess depends on a player, a competitive other, and an audience.

A complex game such as chess requires sophisticated planning—what players call calculation and evaluation. This means that a player conceptualizes the future. He takes the current state of play and imagines its appearance after several iterations. In this he is forced to assume the responses of his opponent whose long-term interest conflicts directly with his own. When a player selects a strategy, the strategy must adapt to the tactics or strategy of his opponent. In this fundamental way, cognition is lashed to the social character of the game. Planning and expectations are built on the competitive structure of the game.

But cognition is not the sum of the imagined internal world of the chess player. Chess, like all activities, is embodied. It is a competition between two bodies, not just two minds. A tournament is a public congregation of bodies: shaven, coiffed, and attired. Community standards determine what constitutes a proper body.

When considering over-the-board games, two bodies are present. Of course, some games are brief and strain the body (and mind) minimally. However, the more intense the tournament, the more the body must be readied. Broken bones are unlikely, but other strains remain possible. Sitting and thinking affect legs, brains, and buttocks. Championship matches provide just such a test of neuron and muscle. The true athletic challenge of chess is that of inactivity.

Finally, there is the social side of emotion. Emotions in extremis produce stories, a means of knitting a group together as they create the experiences that are narrated and then referenced. The distance that stories travel reflects communal boundaries. These accountings reveal commitment: joy, anger, and despair suggest that voluntary activity matters for participants. Yet, not only are the stories social, so too are emotions. Felt emotion demonstrates that players care about their shared activities. But here society takes another form in limiting emotional display as social control creates a world in which placidity has priority.

Ultimately chess is a social game. Those components of chess that appear fully individual are truly communal, determined by shared standards. The mind and the body and the soul are collective enterprises.

#### Notes

1. Susan Polgar, "Staggering Chess Numbers," *Susan Polgar Chess Daily News and Information* (blog), January 31, 2007, Susanpolgar.blogspot.com/2007/01/staggering -chess-numbers.html; Belindalevez-ga [pseud.], "Chess Player Demographics," August 5, 2006, http://answers.google.com/answers/threadview/id/752764.html. Data for the United States Chess Federation come from its publications.

2. Gary Alan Fine, With the Boys: Little League Baseball and Preadolescent Culture (1987); Shared Fantasy: Role-Playing Games as Social Worlds (1983); Morel Tales: The

*Culture of Mushrooming* (1998); *Gifted Tongues: High School Debate and Adolescent Culture* (2001).

3. Eviatar Zerubavel, Social Mindscapes: An Invitation to Cognitive Sociology (1997).

4. Dennis H. Holding, The Psychology of Chess Skill (1985), 245.

5. George Herbert Mead, *Mind*, *Self*, *and Society: From the Standpoint of a Social Behaviorist* (1934), 177–78.

6. Paul Hoffman, *King's Gambit: A Son, A Father, and the World's Most Dangerous Game* (2007), 260.

7. Ibid.

8. Karl Menninger, "Chess," Bulletin of the Menninger Clinic 6 (1942): 82.

9. David Bronstein and Georgy Smolyan, Chess in the Eighties (1982), 42.

10. Ibid., 33, 41.

11. Fred Barlow, *Mental Prodigies: An Enquiry into the Faculties of Arithmetical, Chess, and Musical Prodigies, Famous Memorizers, Precocious Children and the Like, with Numerous Examples of "Lightning" Calculations and Mental Magic* (1951), 123. The claim that chess players can have savant syndrome seems less plausible.

12. William Roland Hartston and Peter Cathcart Wason, The Psychology of Chess (1984), 50.

13. This quotation appears to be apocryphal. It has been attributed to Richard Réti and to Al Jaffem. Stuart Rachels, "The Reviled Art," in *Philosophy Looks at Chess*, ed. Benjamin Hale (2008), 223.

14. Eric M. Leifer, "Interaction Preludes to Role Setting: Exploratory Local Action," *American Sociological Review* 53 (1988): 865–78; Benjamin DiCicco-Bloom and David Gibson, "More Than a Game: Sociological Theory from the Theories of Games," *Sociological Theory* 28 (2010): 249.

15. Hoffman, King's Gambit, 11.

16. Bronstein and Smolyan, Chess in the Eighties, 41.

17. Hugh A. Kennedy, Chips, Waifs and Strays: Anecdotes from the Chess-board (1862), 3.

18. Rachels, "The Reviled Art," 215.

19. Adriaan D. de Groot, Thought and Choice in Chess (1965).

20. William Chase and Herbert Simon, "Perception in Chess," *Cognitive Psychology* 4 (1973): 55–81.

21. Edward J. Kelly, "The Personality of Chessplayers," *Journal of Personality Assessment* 49 (1985): 284.

22. Tom Mueller, "Your Move," New Yorker, December 12, 2005, 64.

23. Dominic Lawson, End Game: Kasparov vs. Short (1994), 50.

24. Garry Kasparov, *How Life Imitates Chess: Making the Right Moves, From the Board to the Boardroom* (2007), 17–18.

25. Daniel Johnson, *White King and Red Queen: How the Cold War Was Fought on the Chessboard* (2007), 227.

26. Garry Kasparov, How Life Imitates Chess, 48.

27. George Koltanowski, Chessnicdotes II (1981), 54.

28. Ralph Ginzburg, "Portrait of a Genius as a Young Chess Master,"

http://bobbyfischer.net/bobby04.html.

29. Reuben Fine, Bobby Fischer's Conquest of the World's Chess Championship: The Psychology and Tactics of the Title Match (2008), 36.

30. Alexandra Kosteniuk, "Abolish Women's Titles? Ridiculous," *Chess News Blog*, October 17, 2009, http://www.chessblog.com/2009/10/abolish-womens-titles-ridiculous.html.

31. Hoffman, King's Gambit, 7.

32. Ibid.

33. Pal Benko and Burt Hochberg, Winning with Chess Psychology (1991).

34. Allan Mazur, Alan Booth, and James M. Dabbs, "Testosterone and Chess Competition," *Social Psychology Quarterly* 55 (1992): 70–77.

35. Vishy Anand, "Chess is Like Acting," *Chess News*, Interview in *Der Spiegel*, Sept. 29, 2008, http://www.chessbase.com/newsdetail.asp?newsid=4933.

36. David Shenk, *The Immortal Game: A History of Chess or How 32 Carved Pieces on a Board Illuminated Our Understanding of War, Art, Science, and the Human Brain* (2006), 112.

37. Harvey Lerman, "Four Fischers and Chess Plumbers Tie for First at USAT South," *Chess Life* (May 2007): 27.

38. Michael Potts, "The Peripatetic Caissa: Chess as a Supplement to Teaching Aristotle's *Ethics*," in *Chess and Education: Selected Essays from the Koltanowski Conference*, ed. Tim Redman (2006), 71.

39. Pierre Bourdieu, *The Rules of Art: Genesis and Structure of the Literary Field* (1996), 227–28. See also Robert Desjarlais, *Counterplay: An Anthropologist at the Chessboard* (2011).

40. Mihalyi Csikszentmihalyi, Beyond Boredom and Anxiety (1975), 36, 38.

41. Rock-climbing might occur in isolation, but typically climbers bring friends with them for reasons that are as much based on sociality as on safety. Richard G. Mitchell, *Mountain Experience: The Psychology and Sociology of Adventure* (1983).

42. Bourdieu, Rules of Art, 228.

43. Desjarlais, Counterplay, 14.

44. Csikszentmihalyi, Beyond Boredom, 39, 40.

45. Antony Puddephatt, "Advancing in the Amateur Chess World," in *Doing Ethnography: Studying Everyday Life*, ed. Dorothy Pawluch, William Shaffir, and Christine Miall (2005).

46. Csikszentmihalyi, Beyond Boredom, 64.

47. Paolo Maurensig, The Lüneburg Variation, trans. Jon Rothschild (1997), 81.

48. J. C. Hallman, *The Chess Artist: Genius, Obsession, and the World's Oldest Game* (2003), 1.

49. Josh Waitzkin, The Art of Learning: A Journey in the Pursuit of Excellence (2007), 44.

50. Fred Waitzkin, *Mortal Games: The Turbulent Genius of Garry Kasparov* (1993), 199.

51. David Edmonds and John Eidinow, *Bobby Fischer Goes to War: How the Soviets Lost the Most Extraordinary Chess Match of All Time* (2004), 22.

52. Transcribed video, http://www.chessvideos.tv/forum/viewtopic.php?t-2372.

53. Erving Goffman, Encounters: Two Studies in the Sociology of Interaction (1961), 17.

54. Norbert Elias, The Civilizing Process (1978).

- 55. Joel Lautier, quoted in Hoffman, King's Gambit, 128.
- 56. Hoffman, King's Gambit, 6.
- 57. Bronstein and Smolyan, Chess in the Eighties, 71.