

The Reviled Art

Stuart Rachels

“If chess is an art, it is hardly treated as such in the United States. Imagine what it would be like if music were as little known or appreciated. Suppose no self-respecting university would offer credit courses in music, and the National Endowment for the Arts refused to pay for any of it. A few enthusiasts might compose sonatas, and study and admire one another’s efforts, but they would largely be ignored. Once in a while a Mozart might capture the public imagination, and like Bobby Fischer get written about in *Newsweek*. But the general attitude would be that, while this playing with sound might be clever, and a great passion for those who care about it, still in the end it signifies nothing very important.”

—James Rachels¹

Bragging and Whining

When I was 11, I became the youngest chess master in American history. It was great fun. My picture was put on the cover of *Chess Life*; I appeared on Shelby Lyman’s nationally syndicated chess show; complete strangers asked me if I was a genius; I got compared to my idol, Bobby Fischer (who was not a master until he was 13); and I generally enjoyed the head-swelling experience of being treated like a king, as a kid among adults. When I wasn’t getting bullied at school, I felt special. And the fact that I was from Alabama, oozing a slow Southern drawl, must have increased my

mystique, since many northeastern players assumed that I lived on a farm, and who plays chess out there?

In my teens, I had some wonderful experiences. I represented the United States in world youth championships in France and Israel (both times finishing a forgettable fifth); twice I played the great Garry Kasparov in small simultaneous exhibitions (both times, he threw temper tantrums); I went to England, where the 18-year-old Nigel Short showed me around the Tower of London and the 73-year-old Miguel Najdorf affectionately roughed up my hair; and I played Bobby Fischer's rival, Boris Spassky—I was so in awe of him that I almost resigned just looking at him.² However, I had neither the killer instinct nor the work ethic to make it to the top. I almost retired from chess a complete failure, in my own eyes, but I did manage one “adult” success. By winning the U.S. Junior Championship in 1988—my sole victory in seven attempts—I earned an invitation to the *real* national championship, to be held in Long Beach, California. My opponents would mostly be Soviet-born Grandmasters, and everyone but me would be a professional player. I was expected to get clobbered. Instead, I tied for first, and for the last time I could be compared to Bobby Fischer, since, at 20, I was the youngest U.S. Champion since Fischer's phenomenal victory at 14.

So much for the bragging; now for the whining.

When I was 12, I thought I was famous. But as I grew up, I gradually realized that a chess celebrity is not a celebrity. In fact, I learned that what I did was neither respected nor admired by the general public. My proudest moment—winning the U.S. Championship—brought me satisfaction but no glory. By then I knew that my victory was not a national news story, but I was disappointed to discover that it was not even considered *local* news. In

Atlanta, where I was then a college student, the *Atlanta Journal-Constitution* declined to run a story about the tournament, while my college newspaper ran a story on page thirteen, devoting its front page to the minor accomplishments of a Division III college swimmer. In Birmingham, where I had grown up, the chess club president (a salesman for Skoal chewing tobacco) repeatedly phoned the NBC affiliate, trying to get them to mention my name on the local news. Finally, they told him they would, but at the crucial moment they instead ran a story about the evils of tobacco.

I retired from competitive chess in 1993, and since then I can't remember even once being asked to explain how I won a national championship, nor what it was like to have played world champions. In 1998 I used to dine weekly at an Italian restaurant in Syracuse, New York, with a retired British chess master. After the food and wine, we'd bring out the board for a few games. Perhaps to embarrass me, my friend would always tell our server, "He was the United States Chess Champion, you know!" Servers want to get good tips, so they usually feign interest in anything you say. Chess, however, seemed to be the exception. No server or manager ever took the slightest interest in the fact that a national champion was having a game of chess in their restaurant against an accomplished British master. I guess we just looked nerdy.

Chess in American Society

Some variant of this vain and self-pitying tale could be told by any successful American player. There is always the vanity, because people are vain and want to be recognized for their accomplishments. But there is also

the self-pity, because chess players all know that Americans are indifferent to, if not scornful of, the royal game.

Consider how chess is portrayed in our culture. If you want to define a character as a nerd, mention that he's a chess player. If you want a movie, book, or play to do badly, even a *good* one, center it around chess. *Searching for Bobby Fischer* (1993) was an excellent movie, but its box-office sales were poor. Since then, I can name only one movie in which chess was prominently featured.³ Tim Rice's musical *Chess* was wonderful, but back in the 80s it lasted only eight weeks on Broadway. If there has been another play about chess since then, I can't name it. The book you now hold in your hands was accepted by Open Court Publishing Company but rejected for their "Popular Culture and Philosophy" series, presumably because they thought it would not sell as well as a book on Harley-Davidson and Philosophy, or on the Atkins Diet and Philosophy, or on Buffy the Vampire Slayer and Philosophy. And probably they were right. As for television, that most ubiquitous form of American media, chess is a non-entity. You might catch Sam Farha playing *Texas Hold 'em* on ESPN, but you will never see Viswanathan Anand displaying his more impressive craft. Perhaps one day there will be a hit TV series called *Checkmate in Precinct 13: Philosopher by Day, Chess Master by Night*. If that ever happens, I'd be happy to work as a consultant.

For a brief moment, chess had a chance in the States. The 1972 Fischer-Spassky match riveted Americans like no other chess event. Fischer's face graced the covers of *Life*, *Newsweek* and *Time*; chess diagrams appeared in mainstream magazines; housewives who didn't know the moves watched Shelby Lyman's PBS coverage of the match; and Lyman himself—a rather uncharismatic ex-sociology instructor—was stopped in

public by Dustin Hoffman, who recognized him, but whom he didn't recognize. Bobby Fischer almost became our Arnold Palmer; he almost put chess on the map. But after beating Spassky, Bobby's mental health declined, and he became a recluse. When Fischer disappeared, so did chess from the public consciousness. *Searching for Bobby Fischer* effectively conveys the feeling of loss and isolation that pervaded American chess circles after Fischer left. What finally ended the Fischer era was not the passage of time so much as the rise of Garry Kasparov. By 1989, the world could see that Kasparov was an even better player than Fischer had been in his prime.

Part of this story, however, is not quite right. The Fischer-Spassky frenzy was about a Cold War clash, and about the public's interest in Fischer himself; it had little to do with chess. If Bobby had kept playing, it would have been great. Professional chess players might now make a decent living in America. The U.S. Chess Federation might have as many members as the American Contract Bridge League (USCF: 90,000; ACBL: 160,000). But Fischer could not have made chess popular in the United States. There are three reasons for this.

The first, peculiar to the U.S.A., is our country's deeply-engrained anti-intellectualism. In America, chess is regarded as the premier strategy game,⁴ but this accolade earns the game little respect. In Western Europe, where George W. Bush could not have become the president of anything, the chess professional enjoys a higher status.

The second reason is that chess is an anti-social activity—or rather, tournament chess is. Causal games can be social affairs, but serious chess is quiet and solitary. Tournament games typically last for hours, and though you are playing against a human being, you do not speak to him, and you are

not working with him—you are trying to beat him. Not many people want to spend hours alone with their own thoughts.⁵

The third reason Fischer couldn't have made chess as popular as golf or tennis is that the game's beauty is invisible to those who haven't labored over a chessboard for untold hours. I'll discuss that idea later.

Beauty in Chess

The New York Times honors two games with regular columns: chess and bridge. I have now been playing bridge obsessively for four and a half years (I played for four hours earlier today), so I could prattle on about its virtues. However, my father's attitude still seems justified to me. My dad played chess and bridge for over 40 years. Late in life, when he wanted to simplify his library, he threw out all of his bridge books. However, he could not bear to throw away all of his chess books. "Throwing away Fischer's games," he said, "would be like throwing away Shakespeare's plays."

Great chess games are breathtaking works of art. What does their beauty consist in? Some facets of a game's beauty can be grasped only by considering the game as a whole. For example, an entire game can embody the flawless execution of a plan (as when, in a Queen's Gambit Declined, White launches a minority attack on the queenside, creates a weak black pawn on c6, organizes his forces around that pawn, wins it, and displays good endgame technique). Or, the protracted struggle of a long game, with its tensions, its clash of styles, and its shifting fortunes, can have aesthetic merit. Or, a whole game can be satisfying because the victor made no detectable errors; reflecting on the game as a whole, we can see that the victor's performance was unspoiled.

Perfect play, however, cannot guarantee a beautiful game. For one thing, it is not enough that you play perfectly; your opponent must also play well.⁶ A master who has just crushed a weak player—a “fish,” “patzer,” “weakie” or “woodpusher”—will rarely keep the scoresheet; routine demolitions need not be preserved. This principle holds true for most other competitive activities, such as boxing. Muhammad Ali’s defeat of George Foreman in the “Rumble in the Jungle” in Zaire was beautiful only because Foreman’s power posed enormous problems for Ali; a fight between Ali and Howard Cosell would have been downright ugly. But even a game played perfectly by *both* sides can be dull, if both players lack ambition. For example, there is a line in the Petroff Defense that sucks all the life out of the game, even though it involves no “mistakes.”⁷ Or even worse, consider Huebner-Rogoff, Graz, 1972: 1.c4 draw agreed.⁸ There’s no beauty in that, just as there is no beauty in a boxing match if neither fighter leaves his corner.⁹

Although whole games can have aesthetic virtues, the main aesthetic units in chess are smaller: an idea, a plan, a position, a move, a theme, a clever sequence of moves, and so on.¹⁰ Most of a game’s beauty derives from these smaller units. The fan’s favorite is the tactical combination—a sequence of forceful moves that usually results in either checkmate or a decisive material gain. If a combination is spectacular enough, even the quiet tournament hall can come to life. Mikhail Tal, arguably the greatest tactician ever, said that he *liked* noise in the playing hall—a remarkable statement from a chess player—because it showed that the audience was riveted by his work-in-progress.¹¹ And legend has it that when Frank Marshall, the great American attacker of the early 20th century, played his most spectacular move ever, the spectators showered the board with gold coins. This legend is

probably true, although the real story might be that the onlookers had bet on Marshall's opponent, so now they were paying up.

What is it about these smaller units—the tactical shots, the motifs, the positional sacrifices—that accounts for their aesthetic value? The answer will depend on the example, but here are some typical explanations: “look at the coordination of White's queen and knight”; “I would never consider that move in a million years!”; “every black piece participates in the attack;” “zugzwang¹² in the middlegame—unbelievable!” One overarching theme is that chess is like humor: the unexpected can have special value.

Explanations of beauty, however, ring hollow in chess, much as they do elsewhere. In the end, the beauty of chess is something you grasp visually, if you grasp it at all. The move, the combination, the final position, *look* beautiful. You *see* it. Even when a Grandmaster thinks about a beautiful move while he's watching a dull movie, he “sees” the board in his mind.¹³

Chess Perception

Chess cognition is mostly unconscious. In studying a position, a master may quickly understand that there are three viable possibilities for the player on move. But how his brain has determined this, he has no idea. And even when he is deliberating among the viable options, there is typically little inner dialogue. Chess thinking is rarely linguistic.¹⁴ Also, chess cognition bears little or no resemblance to computer number-crunching. Contrary to popular belief, great chess players usually don't think many moves ahead,¹⁵ and judgment is more important than calculation.

Chess provides a striking example of how knowledge can influence perception. When a novice and a master look at a position, there is a

profound difference in their experience. The master *sees* the power of the pieces: he immediately knows which squares the bishop attacks; no conscious thought is required. More complicated matters can also be perceptual. A master can immediately perceive that a square is weak, a bishop is bad, a pawn is backward, and a queen is pinned. He can perceive all this in one or two seconds of scanning the board, while the novice has only taken in the fact that chess is being played on the board rather than checkers. As Thomas Kuhn might say, the master and the novice look at the same board but inhabit two different worlds.¹⁶ They “inhabit two different worlds” because, not only is the novice unable to perceive the board as the master does, but the master cannot perceive the board as the novice does. A master cannot see the bishop on e3 as a chunk of dead wood, any more than you can look at your best friend’s face and see a meaningless matrix of colors and shapes. The master *once* saw the board like this, but now there is no going back (unless there is some unfortunate neurological event). The best a master can do to understand a novice’s perspective is to look at a board on which the pieces have been haphazardly placed, without any regard for chess rules or chess strategy. Such a pile of pieces will resemble a “blooming, buzzing confusion,”¹⁷ even to a master.¹⁸

As a player gets better, his perception matures. After a while, he can perform tasks of perception and memory that seem amazing to others, though trivial to him. Here are some examples:

- *The colors of the squares.* There are 64 squares on a chessboard—32 white and 32 black.¹⁹ In Algebraic notation, they each have a name: a1, a2, a3, and so forth. If you name a square, I can immediately tell you what color it is. I don’t need to think; I just *see* the square in my

- mind: a3 *looks* black; h7 *looks* white, and so forth. A good player is intimately familiar with *each* of the 64 squares.²⁰
- *Blindfold chess.* A Grandmaster can beat you blindfolded, take the blindfold off, and then show you the game you've just played. Playing without sight of the board requires concentration (it is not trivial, like naming the colors of the squares), but any strong player can do it. Remembering the game afterwards is about as easy as remembering the details of a gripping story right after you hear it. A reasonably-played chess game fits together like a novel.
 - *Simultaneous exhibitions.* A master can easily play forty or fifty games at once by circling the inner perimeter of an enclosed group of tables, making one move at each board each time around. The hardest thing about giving simuls is all the walking involved. I could play a thousand games at once, for as long as I could stay awake, if only I could sit still while my opponents passed by on a conveyor belt.

Once, when I was giving a thirty-five-board simul, I noticed at one board that a piece had been moved to a different square while I was concentrating on other games. My opponent immediately apologized and put the piece back, blaming the error on his small child, who was watching. This was not a matter of “memorization”—I do not have a trick memory—the position just didn't make sense with the piece misplaced.

When Bobby Fischer was preparing to play Spassky in 1972, he studied Spassky's games in “the red book”—a book published in German, so-called because of its cover.²¹ Back then, there were no databases, and Fischer was lucky that this book containing 353 of Spassky's games existed and was in his possession.²² A friend of Fischer's told me that you could

give Bobby any number between 1 and 353, and he could tell you: all the moves to that game; the analysis of the game given in the book; and Fischer's own improved analysis. This is the most amazing feat of memory I have ever heard attributed to a chess player.²³

Changes in chess perception are typically gradual. Sometimes, however, you can experience rapid shifts. In the last round of the 1987 U.S. Open, I accepted an early draw offer from Grandmaster Lev Alburt. The position was dead equal, we were about to swap some pieces, and I did not expect to beat my famous opponent.²⁴ Afterwards, when I looked at the final position with my trainer, Boris Kogan, Boris said, "Of course you are a little worse here." "Why?" I asked. "Because your b-pawn is weak." "No, it isn't." So we played it out. Twenty moves later, Boris had captured my b-pawn with his knight, and I was sure to lose. So we played it out again, and the same thing happened (except this time, he captured my pawn with his *king*). Boris had convinced me he was right, but more amazingly, he had changed my perception of the position. The black pawn now *looked* weak to me. I could now see what Boris had seen.

When art lovers talk about what they "see" in a painting, I usually don't believe them. I usually think they're just being pretentious. If you suspect this of me, please know this: any chess expert can confirm what I've said about chess perception. And there is no issue about determining who the experts are. In chess, the experts are the ones who win. In other artistic areas, experts are harder to discern, and so claims about perception and beauty are harder to verify.

Perception and Popularity

Most of the fun in chess comes from appreciating the game's beauty.²⁵ This requires being able to see it. And being able to see it requires time and effort: it takes most people years to develop a competent perception of the board. This is the main reason why chess will never become popular in America—it's too hard. And this is why Fischer could not have been Caissa's²⁶ Arnold Palmer.

Of course, you don't need to be a Grandmaster to appreciate chess. Weaker players can enjoy the game, and it doesn't take years to become weak.²⁷ Different things *are* enjoyed at a lower level than at a higher level. For example, a novice might get excited by a simple knight fork, which a stronger player would find routine. But this is enjoyment nonetheless. Thus, chess fans need not possess expert perception; and so, perhaps chess can become more popular than I have suggested.

The fact remains, however, that even a rudimentary understanding of chess takes time to develop, and until it is developed, chess seems utterly dull. This is the curse of chess. Until you know a good bit about chess, you don't even possess the *illusion* of understanding it. Most other activities are not like this. I know nearly nothing about poker, opera, football, piano, and surrealist art, but this doesn't stop me from enjoying them occasionally. By contrast, someone who does not play chess will never enjoy looking at a great chess game. And if you know only a little bit about chess, looking at a game can be downright irritating, because you're frustrated by your partial understanding, and because you realize that, to understand more, you'd have to do something tedious: you'd have to figure out where all the pieces on the board can move to, in each position. And even if you do that, you may grasp a few particulars about the position, but the position as a whole will get lost like a forest for the trees, and the game will be a blur.

Chess Compositions

The composed problem is the highest form of art in chess. A problem consists of a position, a task, and a solution. Typically, the task is for White to force checkmate, or to arrive at an obviously winning position, or to force a draw from a starting-point that appears hopeless. There are also more esoteric tasks. In “helpmate” problems, both sides cooperate to checkmate Black as quickly as possible. In “selfmate” problems, White forces Black to checkmate him (naturally, Black is not allowed to resign!). “Retrograde problems” have us discern something about the past—for example, what Black’s last move was.²⁸ Since problems are composed, they can be crafted to perfection. By contrast, “study-like themes” arise rarely in play, and almost never in pristine form. In a game, the most thrilling variations tend to occur, not on the board, but in the notes. A beautiful variation can be thwarted not only by an opponent who wishes to avoid it, but also by an opponent who resigns. Thus, Fischer once described Robert Byrne’s resignation as “a bitter disappointment.”²⁹

When I was 10 years old I invented a variation on the helpmate idea. Consider any possible chess move—for example, Qe6. The problem is to find the shortest game ending with that move as checkmate. With Qe6, I discovered that mate can be accomplished in five moves. One solution I especially liked.³⁰ However, the problem is flawed, since there are other solutions.³¹ In the jargon of compositions, the Qe6 problem is “cooked,” since there is more than one “key” (a “key” is the first move of a solution). Grandmaster Pal Benko did not self-consciously work on this type of problem, but a wonderful problem he composed can be described as “find

the quickest possible mate with gxf6.” Benko did it in six.³² You now know everything that is known about this type of problem, since I have forgotten anything else I might have discovered twenty-six years ago.³³ I encourage you to compose some problems of this type.

Sam Loyd (1841-1911), Alexei Troitsky (1866-1942) and Genrikh Kasparyan (1910-1995) are three towering geniuses of chess composition. Like most composers, Loyd, Troitsky and Kasparyan are not remembered as players. And Grandmasters rarely compose. If a Grandmaster does, it is usually as a solace, late in life, when he despairs of achieving any more over-the-board successes. Grandmaster Jan Timman and former Champion of the World Vasily Smyslov have turned to problem-composing in recent years. Benko, one of the finest living composers, composed the least when he played the most.³⁴

I cannot exaggerate how marvelous chess problems are. There are *thousands upon thousands* of gloriously beautiful problems. They are awesome, fantastic, stunning. Yet, if chess players are ignored and shunned by American society, problemists are even more isolated and unappreciated—not only in America, but around the world. Just as American culture is indifferent or hostile to chess, chess players themselves are indifferent or hostile to chess compositions. Why is that?

If you show a chess player the starting-position to a problem, he is liable to sneer, “*That* position would never occur in a game!” And, indeed, chess problems tend to be “unrealistic” (except for endgame studies). The impracticality of problems might explain why many players are indifferent to them: many players are indifferent to *anything* that does not directly improve their game (for example, food, water, air, a date for Friday night,

and so on). However, the mere fact that problems are unrealistic can't explain the irritated disdain that a great many players have for them.

That irritation is explained by the other thing players often say about problems: "They're too difficult." Most problems are way too hard for most players. (Mate-in-two problems are the exception, since they can be solved fairly quickly by mechanical means, but that's no fun.) Most problems stump me too, so I conceive of the time I spend looking at them as time spent preparing to appreciate their solutions—not as time spent trying to solve them.³⁵

Problems are hard for tournament players partly because composers delight in the counterintuitive, where "counterintuitive" refers to the intuitions of the seasoned tournament player. Ideally, a key move should not be a capture or a check, because those are "obvious" moves—that is, moves that an expert might consciously consider.³⁶ Here is an example of a problem that trades on the unexpected. White begins the game with 1.f3; his next moves will be 2.Kf2, 3.Kg3 and 4.Kh4. Black must play so that these moves will all be legal. In reply to 4.Kh4, Black will deliver checkmate. But how? I'll put the solution in an endnote.³⁷

Remarkably, problems tend to be harder when they involve fewer pieces, because the mind has less to latch onto. As an illustration, consider the pawnless endgame of two bishops versus one knight. Human beings used to think it was drawn with perfect play, but computers have now proved that the two bishops win. The proof, however, is of no use to human players, since it consists in long, massively branching, unmemorable lines of analysis that employ no known strategic principles. If this endgame occurred between two top Grandmasters, they would be on their own, and you could get an even-money bet as to whether the bishops would win.

The world of chess compositions is like the chess world writ smaller. Society ignores chess players; chess players ignore composers. Chess players don't like problems for the same reason that greengrocers don't like chess: because it strains the brain. Humans can grasp a lot about chess, but most people don't want to; chess players can grasp a lot about problems, but most aren't interested. The chess composer is a tragic figure, even compared to the chess player. Kasparov and Fischer enjoy fame, and even players who haven't penetrated the public consciousness are renowned in chess circles. Yet the Kasparovs and Fischers of the composing world are largely unknown even to chess players. In America, Sam Loyd's name might elicit a tinge of recognition, but ninety-nine tournament players out of a hundred will not have heard of Kasparian or Troitsky, much less of Leonid Kubbel, Kenneth Howard, Eugene Cook, William Shinkman, Henri Rinck or Godfrey Heathcote. These geniuses remain obscure, even among the pushers of pawns. Is there any greater injustice in the world of art?

Pride and Sorrow in Chess

Chess writers often refer to chess as a sport.³⁸ One can understand why they want it to be a sport. Many sports are popular. Sports stars get rich. They sign autographs and appear on TV. Movies and books lionize them. They are allowed to perform at the Olympics. They are mobbed by admirers. Chess players would be happy if just one of these things were true of them.

When chess players call chess a sport, this strikes me not only as false, but as pathetic. It's pathetic in the same way it's pathetic to ask someone out on a date who said no the last three times you asked. American

culture has rejected chess. For the chess player to insist that chess is a sport is a way of not taking the hint.

Of course, chess has a lot in common with sports—they're both competitive activities. But chess is not a sport, because physical exertion is inessential to chess.³⁹ A great chess player could be paralyzed his whole life, but a sports star could not be. Note that sports practitioners are called *athletes*, but no one ever calls chess players athletes, presumably because “athlete”—even more than “sport”—connotes physical acumen.

What is chess, if not a sport? Chess is a strategy game. It is also, I believe, an art. Chess compositions are artistic creations in the fullest sense of the term. However, you might think that calling a chess *game* a work of art is dubious. Chess games are more about winning than creating; chess is a battle that resembles war more than painting. Yet this is a false dichotomy. A battle can *produce* objects of aesthetic value.⁴⁰ Chess is a game, an art, and a competitive struggle. That is nothing to be ashamed of, is it?

¹ James Rachels, “Chess as Art: Reflections on Richard Reti,” *Philosophic Exchange*, Nos. 15 & 16 (1984-85), pp. 105-115, quotation from pp. 106-107.

² During our game, Spassky asked my trainer, “Why is Stuart so nervous?” When I heard about this later, I was embarrassed. But I also thought that Spassky had asked a stupid question—who wouldn't be nervous, playing against Boris Spassky?

³ *The Luzhin Defence* (2000). Like most people, I never saw it.

⁴ I have heard it said that the Asian game of *go* is even more difficult than chess. In my opinion, chess is harder than bridge.

⁵ Chess's anti-social nature might help explain why so few women play chess. Bridge—a partnership game—attracts significantly more females.

⁶ This is a pun on the adage: “It is not enough to be a good player; you must also play well.” This adage has been attributed to the German Grandmaster Siegbert Tarrasch

(1862-1934) since at least 1898—see Armin Friedmann writing for the *American Chess Magazine*, August 1898, p. 63. The adage might sound better in German, which uses the same word (‘gut’) for both ‘good’ and ‘well.’ (“Es ist nicht genug, dass man ein guter Spieler ist, man muss auch gut spielen.”)

⁷ I have in mind a game that begins 1.e4 e5 2.Nf3 Nf6 3.Nxe5 d6 4.Nf3 Nxe4 5.Qe2 Qe7 6.d3 Nf6 7.Bg5 Qxe2+ 8.Bxe2 Be7 and then snores its way to a draw, without either side slipping up. In practice, the derision would be hurled on White, who has made no attempt to win despite having the advantage of the first move.

⁸ Admittedly, 1.c4 draw agreed is a better-played game than 1.c4 Black resigns (Fischer-Panno, Palma de Mallorca 1970). Panno resigned in order to protest having to play at a special time due to Fischer’s religious beliefs. And actually, the arbiters refused to accept Huebner and Rogoff’s one-move draw. They instructed the players to go back and play a few serious moves before splitting the point. Instead, Huebner and Rogoff went back and played a ludicrous, even whimsical, game in which both sides hung pieces and made unnatural moves. The arbiters also refused to accept that game. Eventually, Rogoff was declared the winner because Huebner refused to do anything else.

⁹ In this paragraph, I do not mean to suggest that the notion of perfect play is unproblematic. Since the goal of chess is to win, the “best” move in any position may be defined as the move most likely to lead to victory. (Or more accurately, the best move will have the highest expected utility, where a victory = 1, a draw = 1/2, and a loss = 0.) *Which* move is most likely to win may depend on the abilities of one’s opponent. The best move against one player might be third-best against another. This is why Emanuel Lasker and Viktor Korchnoi “play the opponent, not the board.”

Suppose you must choose between two moves, each of which should lead to a draw. Are the two moves therefore equally good? No, because one move might present your opponent with more practical difficulties. Paradoxically, a losing move might even be better than a winning move. Suppose you must either accept your opponent’s piece sacrifice (and thus endure an attack on your king) or else make your own sacrifice (and thus launch your own attack). It’s possible that neither attack should work, and so, “objectively,” you should accept the sacrifice. But since it’s easier to attack than to

defend, it may be that, in practice, both attacks are likely to work. In such a scenario, perfect play against a human opponent might be disastrous against God.

¹⁰ If architecture is frozen music, then chess is half-frozen music, since there is beauty in both static positions and lively sequences of moves. (Incidentally, the phrase “frozen music” is usually attributed to Goethe but is probably due to Schelling’s student, Henry Crabb Robinson; see Khaled Saleh Pascha, *Gefrorene Musik* (doctoral dissertation, Technische Universität Berlin, 2004).)

¹¹ Mikhail Tal, *The Life and Games of Mikhail Tal* (U.S.A.: RHM Press, 1976), p. 173.

¹² *Zugzwang* is a German word meaning “the compulsion to move.” When you’re in zugzwang, every legal move hurts your position. The bridge equivalent is being endplayed. A remarkable fact in chess is that the endgame of king and rook versus lone king—a trivial win for the stronger side—relies on zugzwang. If it were legal to “pass” in chess, then the king and rook could never checkmate the king. That fact would have profound implications for chess. Winning would become harder.

¹³ Forgive my use of the male pronoun to refer to chess Grandmasters. I do so because 99% of Grandmasters are male. Once I submitted an article to *Inside Chess* in which I alternated uses of “she” and “he,” but the editors got rid of all of my “she’s.”

¹⁴ Individual players do, however, have their little habits. Ben Finegold, a professional player from Michigan, once told me that, when it is his move, he always thinks, “Should I offer a draw?” even when he is crushing a weak player. I used to do the following. If I was debating between two moves—the move I wanted to play, and the move I feared was better—I would deliver a silent lecture on why the move I preferred was superior, to see if I could convince myself.

¹⁵ Upon being asked, “How far do you see ahead?” Al Jaffe replied, “I see only one move ahead, but always the best move.” Jaffe had reason to crow, since he had just defeated the great Capablanca. (This was reported by Al Horowitz, *Chess Review*, May 1946, p. 34.)

¹⁶ Kuhn says this about scientists who are looking at the same world but operating under different theoretical paradigms. See Thomas Kuhn, *The Structure of Scientific Revolutions*, Second Edition, Enlarged (The University of Chicago Press, 1970). Kuhn clarifies what he means by ‘paradigm’ in the postscript.

¹⁷ This colorful expression comes from William James, *The Principles of Psychology* (Cambridge, Mass.: Harvard University Press, 1981; originally 1890), p. 462.

¹⁸ Similar remarks are true of bridge. I was a bridge novice twenty years after becoming a chess master, so my memories of being bad at bridge are clearer. The biggest change in my bridge perception came when I learned to think of the hand in terms of suits. A bridge expert will instantly see four different battles looming, in clubs, diamonds, hearts and spades. Until you can see that much, bridge hands are very confusing.

¹⁹ Actually, the squares are usually not black and white, but they're always *called* black and white. When I was a kid, I once heard an elderly gentleman at the Birmingham chess club look at his position and complain, "I'm weak on the buff-colored squares." We laughed about that remark for weeks.

²⁰ A good friend of mine is in prison. When I visit him, I can't bring in a chess set, but I can bring in pocket change to use in the vending machines in the visiting yard. Sometimes we use the change as chess pieces. We don't have a board, so we play on a solid brown table. As we're playing, my friend can point to any spot on "the board," and I can immediately tell him whether it's white or black.

²¹ The "red book" is actually *Weltgeschichte des Schachs*, vol. 27, Eduard Wildhagen, ed. (Verlag Dr E. Wildhagen: Hamburg, 1972). Edward Winter pointed out that although the book contains 353 numbered games (plus Spassky-Fischer, Siegen 1970), the book's title page boasts of 355 games.

²² Fischer's great book—*My 60 Memorable Games*—was published three years before his match with Spassky. Fischer's friends have told me that Bobby was reluctant to publish the book, since he knew it would help the Russians prepare for him. But Bobby went ahead with publication, telling his friends, "What does it matter? The world is going to end soon anyway." As it turned out, the apocalypse Fischer believed in did not occur, but this did not help Spassky.

²³ Allen Kaufman is the friend of Fischer's who told me about this. Some people will be even more impressed by George Koltanowski's blindfold simultaneous exhibitions.

²⁴ The moves were 1.d4 Nf6 2.Nf3 e6 3.g3 d5 4.Bg2 Be7 5.0-0 0-0 6.c4 dxc4 7.Qc2 a6 8.Qxc4 b5 9.Qc2 Bb7 10.Bd2 Be4 11. Qc1 Bb7 12. Rd1 Qc8 13.a4 c5 14.axb5 draw

agreed (Alburt-Rachels, Portland 1987). The game should continue 14...axb5 15.Rxa8 Bxa8 16.dxc5 and then Black can recapture the pawn in either of two ways.

²⁵ The rest of the fun comes from winning (or, as Fischer put it, crushing the other guy's ego).

²⁶ Caissa is the goddess of chess.

²⁷ I most enjoyed the game, not at the height of my powers, but when my learning curve was most steep. Improving was the most fun.

²⁸ See Raymond Smullyan, *The Chess Mysteries of Sherlock Holmes* (New York: Knopf, 1979). Also see Bernd Gräfrath's essay in this volume.

²⁹ Bobby Fischer, *My 60 Memorable Games* (New York: Simon and Schuster, 1969), p. 301.

³⁰ 1.c4 f5 2.Qa4 Nf6 3.Qxd7+ Kf7 4.Qxc8 Kg8 5.Qe6 mate.

³¹ For example, 1.e4 d5 2.exd5 Nf6 3.Qh5 Kd7 4.Qxf7 Ne8 5.Qe6 mate.

³² 1.e4 e5 2.Qh5 Nc6 3.g4 d6 4.g5 Kd7 5.Bh3+ f5 6.gxf6 mate (Benko, 1982). Benko formulates the problem as "White (who moves first) Helpmates in six via *en passant* discovered mate." See Pal Benko and Jeremy Silman, *Pal Benko: My Life, Games and Compositions* (Los Angeles: Siles Press, 2003), p. 654.

³³ Aside from Qe6, the only other move I remember working on is Bab1. To play "Bab1 mate" requires promoting a pawn to a bishop, since there must be two white bishops that can move to b1 (the bishop on a2, plus one more light-squared bishop). Note that moving the other bishop to b1 must also be mate, or else one wouldn't need to specify that it was the a-bishop whose movement ended the game (the move would just be "Bb1 mate"). This condition can be satisfied when both Bb1 moves uncover an attack on the black king by a rook or queen. I might have achieved Bab1 mate in 15 moves, but I'm not sure.

³⁴ Pal Benko and Jeremy Silman, *Pal Benko: My Life, Games and Compositions* (Los Angeles: Siles Press, 2003), p. 567. Richard Reti was also a great composer, and John Nunn is a great problem-solver.

³⁵ I suppose this is a variant of "Can't win, don't try." My version is, "Can't win, tell yourself you're not trying."

³⁶ “My theory of a key-move was always to make it just the reverse of what a player in 999 cases out of 1000 would look for.” —Sam Loyd, as reported in *Lasker's Chess Magazine*, December 1904, p. 84.

³⁷ 1.f3 e6 2.Kf2 Qf6 3.Kg3 Qxf3+! 4.Kh4 Be7 mate. This problem is almost impossibly difficult because Qxf3+ is such a horrible move by normal chess standards; it is hard for a competent player to consciously consider it. We no longer know who composed this problem. There can be some disagreement as to whether it's flawed, because Black's first move can be either e6 or e5. In general, “cooked” problems are flawed, but here I find it natural to say that the problem has just one solution, with two trivially different variants. Qxf3+ is the real point of the composition.

³⁸ Bridge writers also like to refer to bridge as a sport. The discussion that follows about chess applies equally to bridge. (By the way, the title of this section—“Pride and Sorrow in Chess”—pays homage to David Lawson's book, *Paul Morphy: The Pride and Sorrow of Chess* (McKay, 1976).)

³⁹ Physical exertion does become important when the time control speeds up. A “specialist” at one-minute chess can make more than sixty moves in a minute, a feat that owes as much to dexterity as brainpower. Fast enough chess games might constitute sporting events. But whether they deserve to be in the Olympics is another matter.

⁴⁰ Compare James Rachels, “Chess as Art: Reflections on Richard Reti,” *Philosophic Exchange*, Nos. 15 & 16 (1984-85), p. 109.