

More than a Game: Sociological Theory from the Theories of Games*

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Sociologists are fond of game metaphors. However, such metaphors rarely go beyond casual references to generic games. Yet games are little social systems, and each game offers a distinctive perspective on the relationship between rules and constraints, on the one side, and emergent order, on the other. In this article, we examine three games—chess, go, and (Texas hold ‘em) poker—for sociological insights into contested social arenas such as markets, warfare, politics, and the professions. We describe each game’s rules and emergent properties, and then offer a brief theorization of the social world through the “lens” of that game. Then we show how a study of the three games advances the sociology of strategy by enriching ideas about skill, position, and strategic dilemma.

INTRODUCTION

In seeking to understand the unknown, mysterious, or abstract, the human mind draws comparisons to the known, familiar, and concrete. When these comparisons are made explicit, we call them metaphors or analogies. Natural scientists draw on metaphors when struggling with phenomena that defy easy observation, such as the expansion of the universe or the movement of electrons around an atom’s nucleus. Sociologists are in a comparable position inasmuch as relationships, groups, and nations are “things” that cannot readily be seen. Famous sociological metaphors include viewing society (or some part of it) as an organism (the biological metaphor), a theater (the dramaturgical metaphor), and a multidimensional space in which actors are situated (the field metaphor).

Another favorite metaphor is that of the game. Game metaphors are appealing, in part, because they seem to invite deeper understanding of rule-governed systems without the risk of reification that comes from likening society to, say, an organism. However, despite sociology’s fondness for game metaphors, their potential as models for analysis has hardly been tapped. Most game metaphors are casual, meant mainly to evoke intuitive notions of competition, strategy, and skill. Rarely do they indicate a deep understanding of particular games, much less a close comparison between what transpires on a game board or card table and what happens on the battlefield, in the marketplace, in party politics, or in other arenas of social life.

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Our objective here is to begin taking games seriously as potential sources of insight into the relationship between rules and constraints, on the one hand, and emergent phenomena in social systems, on the other. We start by considering some of the ways in which game metaphors have been used in sociological analysis, observing that most game metaphors involve only vague and fleeting references to some generic game with the goal of making a preconceived point. We contrast this with analogies in the natural sciences, in which knowledge of a well-understood phenomenon is used to shed light on another that is less well understood. We then consider three games: chess, *go*, and (Texas hold ‘em) poker. Consistent with our position that the details of a game matter, we begin our consideration of each game by reviewing its rules, constraints, and emergent properties—the game’s inner logic. Fresh from that experience, we offer a rapid theorization of the social world through the “lens” of that game, taking each as a kind of prototheory of society that highlights unseen connections and shapes expectations (which, when formalized, become predictions). Finally, we consider how the study of these games contributes to existing theoretical discourse about strategic action, particularly with respect to our understanding of notions of skill and position, and of the strategic dilemmas that actors face. Throughout, our main contention is that the study of specific games promises distinct analytical payoff.

GAME METAPHORS IN SOCIOLOGICAL THEORY

Sociologists study games on occasion (e.g., Avery 2009; Puddephatt 2003), but they liken social life to games with abandon. Usually such allusions serve to highlight some property or properties of the setting under study that the author can expect the average reader to already associate with games. Those properties include: that, like games, some areas of social life are rule-governed (Geertz 1980), goal-oriented (Long 1958), and possibly competitive in that there is some coveted reward that not everyone can possess (Bourdieu and Wacquant 1992); that action involves discrete moves (Goffman 1969) and perhaps something approximating alternating turns (Elias 1978); that skilled “play” involves the use of strategies (Bourdieu 1991; Finlay and Coverdill 1999); that with extended play one develops an instinctive “feel for the game” (Lamaison and Bourdieu 1986); that earlier actions constrain subsequent options for oneself and others (Slez and Martin 2007); that a setting may demand that participants ignore external distractions (Goffman 1961); that play is engrossing (Burawoy 1982; Goffman 1961); that roles are differentiated and knowingly coordinated (Mead 1962); that rules are arbitrary, in the sense that they are based on convention rather than physical laws (Kaminski 2004); and that, as a consequence of rules’ arbitrariness, many different games are possible (Burawoy 1982).

Any one of these purported similarities can be subject to criticism. For example, the rules of social life are rarely as clear as those of a game (Garfinkel 1967), actors might not agree on what the rules are, and powerful actors may rewrite the rules (Bourdieu 1991). Here, however, we are concerned with a different line of critique. Almost all authors who use game metaphors refrain from identifying any *particular* game, and instead seem to have in mind some sort of prototypical, Platonic game. The trouble is that, as Wittgenstein (1953) argued, no such game exists, and even a casual familiarity with several games reveals that the emergent properties and

strategies of a game, and the experience one has in playing it, depend on its specific constellation of rules.

Granted, there have been occasional references to specific games. Leifer (1988a), for instance, suggests that like expert chess players, skilled social actors act ambiguously, not committing to a recognizable strategy until its success is assured (see also Padgett and Ansell 1993). Garfinkel (2008) draws upon the game *Kriegsspiel*, or double-blind chess, for a model of how experiences yield information that can challenge previous understandings. And Latour and Woolgar (1979) perceive a parallel between the development of a *go* board and the relationship between chance and necessity in the development of a scientific field.¹

However, even when a specific game is invoked, the analogy only lasts as long as the author needs to make a specific point, such as that action can be a gamble or that behind the façade of polished scientific journal articles is a welter of false-starts, mistakes, erratic equipment, and laboratory politics. Rarely does anyone ask: What else can we expect to find in the world if this analogy holds, and what are the abstract conditions under which it might? (An exception is Boorman's (1969) book on Maoist strategy, based on an analogy to *go*, to which we return later.)

There is, of course, game theory, which began with the insight that some social settings are like games in that each player's payoffs are determined by his or her own actions and those of other players. But though game theory grew out of mathematical analyses of highly simplified versions of games like poker (Leonard 1995), game theory as it is now practiced is not based on an analogy to any particular game. Rather, it involves the detailed analysis of highly simplified situations that are dubbed "games" though they bear little resemblance to games in the colloquial sense and indeed are not games that anyone would play, given the choice (Leifer 1988b). That is, game theory does not mine game analogies so much as redefine what a game is, and in such a way that the subfield's mathematical tools can be brought to bear in determining what the solution is to a particular game—one or more equilibria.

That game analogies (in the proper sense) might have more to offer is suggested by the history of analogies in the natural sciences. There, the most productive analogies are based on the comparison of a familiar system (i.e., solar system) to one less well understood (i.e., an atom) in order to mine the former for insights (including hypotheses, theoretical framings, and causal accounts) applicable to the latter (Gentner and Jeziorski 1989; Hesse 1966).² An example is the kinetic theory of gases, radiation, and electrical conductivity based on the idea that the behavior of each could be likened to the behavior of visible objects abiding by the laws of classical mechanics—this before it was accepted that gas actually consists of microscopic particles (Isaacson 2007:67–68). Another example is the nineteenth-century conjecture that space is filled with ether that transmits light, based on an analogy with the way in which sound is propagated through air or waves through water.³ A third is the analogy drawn between computers and the human brain, which saved psychology from behaviorism with the promise of a rigorous understanding of mental

¹In between vague allusions to generic games and analogies to specific games are allusions to particular types of games, such as the general gambling metaphor in Goffman (1967:149–270) and Bourdieu's (1976) comparison of an unidentified card game with the situation of a family seeking the greatest advantage through the marriage of its children.

²Because these systems are often very different from each other, the term "analogy" is sometimes preferred to "metaphor," to reflect the fact that the comparison is between sets of relations rather than elements (Gentner and Jeziorski 1989).

³Granted, this prediction was not supported by later research, but it was an important impetus for Einstein's theory of relativity (Isaacson 2007:111–13).

representations and the operations that access them (Pinker 2007:84). Finally, field theory got its start when equations used in fluid mechanics were extended to other sorts of systems, giving us gravitational fields, magnetic fields, and more recently, social fields (Martin 2003).

Of course, the social sciences are different than the natural sciences. For one thing, predictions come much more readily to the latter than to the former. For another, social systems are much more complex than natural systems, ensuring that any analogy is imperfect at best. Nonetheless, the implication of the foregoing is that we are only going to learn the full extent of what game analogies offer if we start by studying the games themselves.

THREE GAMES

For illustrative purposes, we focus on three games: chess, *go*, and Texas hold ‘em poker. All three are what Guttman (1978) calls “intellectual contests”—games that test cognitive skill rather than physical dexterity or brawn (though physical endurance and discipline are advantageous in intellectual games), and that pit players against each other in the sense that what one side wins, another loses. Chess and poker are favorite game analogies in social science, journalism, and everyday conversation, and are the sources of such familiar tropes as “checkmate,” “endgame,” “bluffing,” and “poker face.” However, they are very different games. Poker is a game of imperfect information with a very important element of chance. Chess, in contrast, is a game of perfect information with no element of chance. Our third game, *go*, although also played on a board, comes from a distinct cultural (originally, Chinese) tradition, and is sometimes contrasted with chess as an alternative model of conflict that emphasizes connections and the control of territory rather than direct clashes on a well-defined front (e.g., Lai and Hamby 2002).

Our approach in this section is unconventional and requires some additional justification. First, we feature multiple games rather than just one because we are less invested in any particular game analogy than in demonstrating the potential analogical value of specific games as such. For that, three games are better than one, though naturally this comes at the expense of the extensive development of any one analogy. Three games also allow for comparisons of how different emergent phenomena arise from different systems of rules and constraints.

Second, rather than develop one or two empirical applications in depth, we draw upon a large number of diverse but, for the most part, fleeting examples. One reason is that we believe that a succession of short examples is more effective in demonstrating a given analogy’s range of applicability. Another reason is that an in-depth example would probably call for the simultaneous application of several game analogies, raising complications that, for reasons of space, we cannot address.

Finally, and perhaps most strangely of all, we are less concerned with how a game *is* played than with how, according to its master theorists, it *ought* to be played. To be sure, there is research on the social dynamics surrounding the play of chess (Puddephatt 2003) and poker (Zurcher 1970), but it does not concern us here. Instead, we look to the most sophisticated understandings of chess, *go*, and poker as articulated by the games’ respective theorists. Our rationale is that these theorists have the most to tell us about the deep implications of the games’ rules and constraints. We take such writings not as descriptions of how the highly

skilled minority play—though they may be that as well—but as explorations into the nonobvious implications of rule systems, especially in strategic settings.

Chess: Rules and Emergents

Chess is the quintessential Western game of strategy under conditions of complete information. (As the rules of chess are generally known, we do not recount them here.) There are 10^{40} ways in which the pieces on a chessboard can be legally arranged (Kasparov 2010), and each presents players with a unique set of possibilities and vulnerabilities. Consequently, the “theory” of chess is an uphill battle to characterize and analyze in abstract terms something that seems highly contingent upon precise details (Watson 1999)—a feat that sociologists must often perform.

The first true chess theorist was arguably Aron Nimzowitsch. Most famously, Nimzowitsch contested the received wisdom that control of the coveted central four squares requires occupying them directly, and advocated instead keeping them in the sights of bishops and knights located at some remove. More generally, Nimzowitsch sought to theorize chess strategy abstractly in order to provide players with a way of thinking about positional development that was sensitive to the details of a game but not overwhelmed by them. It is largely for this reason that his work is important to us here. Of particular interest are his ideas of tempo, static and dynamic weakness, and prophylaxis.

We start with tempo. A turn is a coveted resource in chess (with some exceptions, to be discussed below), and it is a cardinal sin to squander one. One can do this, for example, by taking two turns to move a piece to a location that could have been reached in one. In such an instance, Nimzowitsch would say that one has “lost a tempo.” One can also lose a tempo, or several tempi, when one is forced to retreat a piece, especially if that means reversing a previous move, or when one loses a piece that took several turns to develop when there is nothing else to show for the effort.

An example, from Nimzowitsch ([1930] 1991:5), is in Figure 1.⁴ This is how the board stands after white has moved nine times and black eight times. Basically, there has been a good deal of action, and black and white are each down a bishop and two pawns. However, black is distinctly worse off in positional terms with only a modestly developed and vulnerable queen to show for his efforts.⁵ White, on the other hand, has developed two knights and a rook, has advanced a pawn into the center of the board under the protection of the knight at e2 (the square at the intersection of file e and rank 2), and has moved her king to relative safety. The explanation, in brief, is that white developed her pieces in the process of successfully defending against an attack by black’s queen, which was forced to retreat. Nimzowitsch’s assessment: “White has 5 tempi to the good . . . whereas Black can show only one visible tempo” (Nimzowitsch [1930] 1991:5). It is almost as if black has sat out much of the game while white was permitted to move, but of course, this obscures the interesting play that had this apparent imbalance in the action record as its outcome.

Imbalances in tempi are most apparent early in a game, when we can easily assess how much progress a player has made away from the starting configuration.

⁴In algebraic notation, the course of the game thus far has been 1.e4 e5 2.f4 d5 3.exd5 Qxd5 4.Nc3 Qe6 5.fxe5 Qxe5 6.Be2 Bg4 7.d4 Bxe2 8.Ngxe2 Qe6 9.0-0.

⁵An article like this cannot avoid liberal use of pronouns. We adopt the convention of referring to white as female and black as male, but otherwise refer to players as male.



Figure 1. Black's loss of tempi to white.

However, Nimzowitsch is better known for principles that are more at home in the middlegame (when most pieces have been moved out of their starting positions but few have been captured). One is the contrast between static and dynamic weakness. A group of pieces is *statically weak* when it cannot defend itself. In contrast, a group is *dynamically weak* if the movement of any of its constituent pieces increases the group's vulnerability to attack. Nimzowitsch's insight was that one form of weakness does not entail the other. In particular, a position can be statically strong but dynamically weak, if the pieces are effectively guarding one another in their current configuration but would be vulnerable to attack were one or two pieces moved.

Another of Nimzowitsch's signature ideas is that of "prophylaxis." Prophylaxis means taking measures to prevent an opponent from embarking on any line of effective action by putting reprisals in place and immobilizing his pieces. A vivid example offered by Nimzowitsch ([1930] 1991:181) is in Figure 2. Here black has achieved nearly complete prophylaxis of white, who can hardly move a piece without it being immediately taken. (Only the white pawns on the b and h tiles can be nudged forward without immediate consequence.)

A related concept favored by Nimzowitsch is *zugzwang*, when any move made by a player worsens his position. *Zugzwang* (or at least the threat of it) is common in the endgame, typically when one side has only a king remaining and realizes that any movement will imperil it. This is illustrated in Figure 3, which is actually a case of "mutual *zugzwang*" because each side would prefer the other to move first. If white moves first (to c2, the only option, because pawns capture by moving diagonally forward and a king cannot put itself in check) black will be able to guide his pawn to promotion, and then white will not stand a chance of winning. If black moves first the game will end in a draw regardless of how he moves: if black abandons the pawn to the white king (by heading north) neither side will be left with sufficient "material" to win (since a lone king cannot check a king), while if the black king stays close to the pawn by moving to d3, the result will be a stalemate (and thus, by the rules, a draw) since white will then have nowhere safe to move (because any move off of d1 would put the king in check, which, again, is forbidden).



Figure 2. Prophylaxis of white by black.

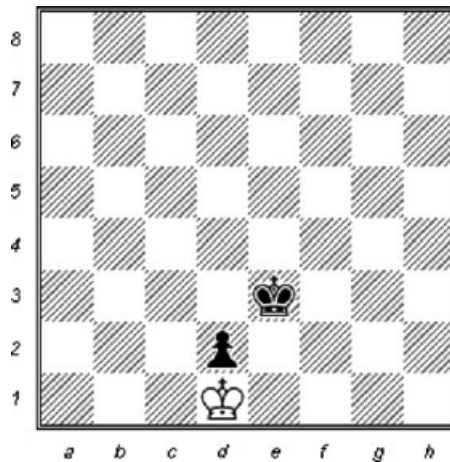


Figure 3. Mutual zugzwang.

Zugzwang is an interesting phenomenon because it is overwhelmingly to one's advantage to move in chess. This is because moving normally allows one to maintain the initiative and keep one's opponent in a defensive stance rather than giving him the space to implement a plan of his own. Before his retirement from professional play, Gary Kasparov was renowned for maintaining the initiative until checkmate, never giving his opponents much breathing room. The importance of maintaining initiative is demonstrated by the 504,225 games currently stored in the chessgames.com archive where white, who always moves first, won 37 percent of the time and black only 27 percent of the time.⁶

Though it is not specific to Nimzowitsch, we conclude with the concept of *tension*. A game of chess sometimes develops to the point where little or no capturing has occurred despite many pieces having been advanced. To the observer, such games

⁶<http://www.chessgames.com/chessstats.html>; accessed December 28, 2009. The rest of the games ended in draws, which are particularly common between skilled players (Leifer 1988b).

almost seem cooperative, as if neither side is eager to reveal its true aggressive intentions. This results in a state of entanglement where it becomes increasingly difficult for either side to move without taking an opponent's piece and/or putting his own piece at immediate risk. Eventually, a piece is taken, and a cascade of further captures ensues. The term "tension" refers to this complex situation of mutual threat and vulnerability, which at any moment can blow up and leave a board much transformed, and oftentimes greatly simplified.

Society Through the Lens of Chess

Chess works best as an analogy in tightly contested settings in which each side directly and continuously threatens the other and has something approaching complete information about the other's actions and resources. Not surprisingly, given that chess was originally played as a simulated war game (Shenk 2006), chess analogies are common in military and geopolitical analyses (e.g., Allison and Zelikow 1999). Such analogies work inasmuch as, first, many "moves" are readily visible to an adversary, and second, there is a modicum of turn-taking inasmuch as after one side acts, it awaits a reaction before deciding on its next step.

With some care, however, the analogy can be extended much further. One insight of the chess analogy is that small losses can create enduring and even insurmountable inequalities that highly favor one party as the eventual victor. This is because the loss of any one skirmish compromises one's ability to muster the forces needed to prevail in others. This is obviously a factor in military contests, controlling for the availability of new recruits and appropriations, but also holds when litigants square off in court or when political candidates meet in televised debates. In chess-like settings, the loss of a battle is rarely a harbinger of anything but worse to come.

A second insight is the possibility of positional sacrifice, when some resource is sacrificed because its loss is more than offset by the gain in position. Examples include when someone wins friends by throwing lavish parties or when a company distributes free software (that was costly to develop) so as to get a foothold on users' computers in advance of selling something more lucrative (Kasparov 2007). In each case, one ends up with less stuff (at least temporarily) but is in a better position to make use of it.

A third insight of the chess analogy is that over time players' positions become increasingly entangled, and each side finds it more and more difficult to maneuver without precipitating a crisis. Examples range from geopolitics to intimate relationships. At one extreme is the situation faced by President Kennedy during the Cuban missile crisis, when any move against Cuba might have invited Soviet counteraction on any one of several fronts where an uneasy impasse had developed—Berlin and Turkey, in particular, being very much on the minds of the president and his advisers (Zelikow et al. 2001). At the other extreme is the state of mutual accommodation that married couples gradually work out, largely on a tacit let's-not-go-there basis (where the spouse need not actually be an adversary). In chess, when positions are entangled, new action becomes increasingly difficult to undertake without triggering a crisis. This sense of an imminent blowup was familiar to Kennedy and his advisers even before missile launchers were photographed on Cuba, and is not unknown to spouses contemplating a significant change of career, goals, or lifestyle.

A fourth insight is the possibility of tempo imbalance. Tempi are lost when a president has to abandon a much-trumpeted effort to reform Social Security, when a drug that was expensive to develop proves too dangerous to administer, and when a

data set that took forever to compile fails to deliver publishable results. In each case, time and resources have been sunk into a doomed project that was pursued at the expense of other projects that might have been more successful. Tempo disparities can also arise when one presidential candidate launches a fundraising campaign before another, or when one person simply talks faster than another. Whenever contestants start from a neutral position—of having no campaign funding, of having deployed no ground forces, of having not said anything, of having not published anything—speed of development is paramount.

That said, there are times when action is perilous, and this possibility, against the backdrop of the general advantages of tempo and initiative, is a fifth insight of the chess analogy. For example, in the wake of 9/11, the Democratic Party in the United States was unable to put up any resistance to President Bush's agenda without seeming unpatriotic, and so in a sense was challenged to initiate any action of its own. In extreme cases, action is so perilous that the situation can be fairly described as one of *zugzwang*, in which *any* move worsens one's position. A near-example was when, in one of the 2008 presidential debates, the candidates were asked whether they would characterize Russia as an "evil empire" in the (re-)making. Barack Obama was forced to answer first, and found himself in a difficult position: to answer in the affirmative would have invited John McCain to recycle an earlier claim that Obama lacked political savvy, while to answer in the negative would have invited McCain to take a principled stand and "call a spade a spade."⁷

One reason action can be perilous is that one's position is, at present, as good as it can get. Another is that there are times when any move commits one to a particular kind of strategy for which countermeasures are available. In chess, moving a bishop in one direction rather than another can commit one to a strategy favoring control of that side of the board and neglect of the other side. In such situations, it is advantageous to postpone broadcasting moves for as long as possible, so long as initiative is not lost as a result. In romantic situations, this could mean postponing the signal that you are attracted to another person in the hope that they will signal first (Leifer 1988a). In a military confrontation, this could mean postponing the deployment of men and matériel, for fear of tipping the enemy off to one's plans. In academics, it might mean postponing the presentation of controversial research before it is complete. And in politics, such a consideration cautioned President Obama against any early signal of his choice of a replacement for Supreme Court Justice David Souter.

A sixth insight is the tension between tactics and strategy (Luttwak 1987). On the one hand, the here-and-now presents a wealth of immediate threats and opportunities, but to focus on these at the expense of a long-term strategy may endanger the path to victory, especially if it means being lured into a trap. On the other hand, strategy without tactics blinds one to those same threats and rewards. This is a dilemma keenly felt by any political actor, from individual politicians to global superpowers, as well as parents of young children (who are always tempted by short-term fixes discouraged by experts as ultimately counterproductive) and social movement activists. Grandmaster Savielly Tartakower once said that "[t]actic is knowing what to do when there is something to do; strategy is knowing what to do when there is

⁷As it was, after Obama labeled Russia's attack on Georgia "evil" but not the country itself, McCain reached for the broader view, though not so as to explicitly disagree with Obama: "Depends on how we respond to Russia and it depends on a lot of things. If I say yes, then that means that we're reigniting the old Cold War. If I say no, it ignores their behavior." McCain, in essence, was articulating the situation of *zugzwang* not as it existed vis-à-vis the debate, but as it existed vis-à-vis international relations.

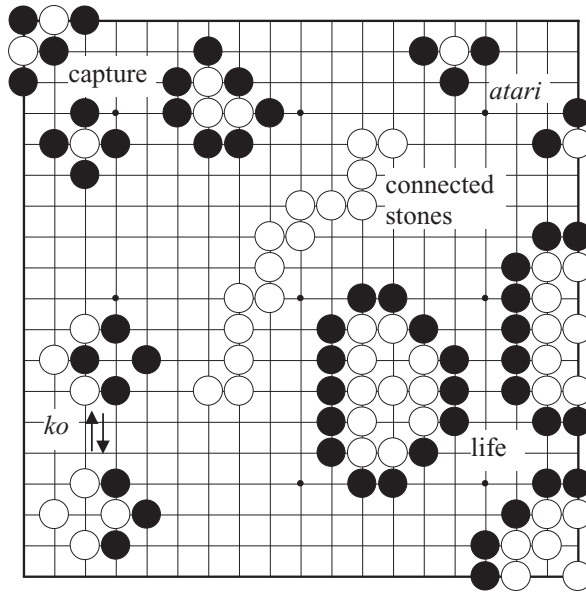


Figure 4. Basic *go* concepts.

nothing to do” (quoted in Kasparov 2007:36). But in crowded and contested social arenas—the household, the office, Congress, the world—there is rarely nothing to do, and long-term vision seems to be the first thing to go.

Go: Rules and Emergents

Go (the Japanese name for the ancient Chinese board game *wei-ch'i*) also features two players but is starkly different than chess. (Because we cannot assume familiarity with *go*, we begin with a primer.) The game is normally played on a square board of 19-by-19 intersecting lines. *Go* players take turns placing white or black pieces, or “stones,” on the line intersections, adding pieces to an initially empty board. Stones have no mobility once placed. The main objective of the game is to encircle as much territory as possible. This objective leads to a secondary one, which is to capture the opponent’s pieces by surrounding them, resulting in their removal from the board. By Japanese rules, a player’s final score is determined by the number of intersections his or her pieces surround minus the number of stones lost to the opponent (Shotwell 2003).

Surrounding an opponent’s pieces entails occupying all of the intersections contiguous to them along both vertical and horizontal lines. In the game’s terminology, this means denying an opponent’s pieces of all of their “liberties,” figuratively suffocating them (Shotwell 2003). Some examples of successfully surrounded pieces (of white by black) are in the upper-left corner of Figure 4. In each case, the white pieces are surrounded and thereby captured.

When a group of stones stands to be captured on an opponent’s next move, absent immediate countermeasures, it is said to be in *atari* (Shotwell 2003). This is the counterpart to the idea of a *threat* in chess; in both cases, one or more pieces are at imminent risk of capture. Some examples of white pieces in *atari* are in the upper-right corner of Figure 4.

One can protect one's stones against capture in two ways. First, contiguous stones share their liberties, and are consequently more difficult to surround. An example is the snake-like group in the center of Figure 4. This group has a total of 24 liberties, which is also the number of black pieces needed to surround it. "Saving" one's pieces frequently involves chaining them together in this fashion, and thus defensive play often entails racing to connect disconnected groups (Kim and Soo-hyun 1994:104–14).

The second way of defending one's pieces is linked to an important emergent phenomenon, one that follows logically from the intersection of the game's rules and the board's geometry. There are, in *go*, configurations of stones that are uncapturable in principle. This is because they have two distinct internal liberties, or "eyes," both of which need to be filled to capture the group but neither of which can be occupied in a single move. Such configurations are said to be "alive" (Kim and Soo-hyun 1994:35), or to possess the property of "life"; some examples are in the bottom right of Figure 4. Were black to place a stone in any of these internal intersections, the stone would already be surrounded by white and would have to be immediately removed. (This is called "suicide," and is prohibited in any event.) To capture any of these groups, black would have to fill both liberties at once, whereupon (according to the rules) white's pieces would be removed and it would not be counted as suicide. But that would mean placing two stones in a single turn, which is forbidden.

Another emergent consequence of the rules of *go* is the phenomenon of *ko*. Both chess and *go* discourage positional repetition. Chess achieves this through the three-fold repetition rule, which allows a player to declare a draw if he or she has a way of recreating, for the third time, a chess position identical to one seen twice before in the game. Similarly, in *go*, a player may not reproduce an earlier board, something most likely to occur when, for example, white's capture of a black stone can be immediately undone by the capture of white's capturing stone through replacement of that black stone. Such a situation is illustrated in the lower left-hand corner of Figure 4. In principle, these two configurations could alternate indefinitely, with white placing a stone in the center of the top configuration so as to produce the bottom one (after the black stone is captured), and black then reciprocating so as to produce the top one again. This is *ko*. To avoid that, the rules stipulate that a player may not perpetuate the *ko* without first moving elsewhere on the board, which has the effect of moving the game forward even if players return to the site of the *ko* later on (Kim and Soo-hyun 1994:48–49).

One deceptively simple maxim informs much of good *go* play: "your opponent's good move is your good move."⁸ This loosely parallels the chess idea of a block, the difference being that chess blocks involve placing one's own piece along the path of the opponent's piece's intended trajectory, whereas in *go* a block involves occupying a position before the opponent can. Blocks are important in *go* because a move that benefits one side is almost always valuable to the other, in the very least as a way to stymie the former's plans. Another reason that blocks are so pervasive is that a block is always possible in *go*, subject to knowledge of what counts as a good move. This is because a stone can be placed at any unoccupied intersection whatsoever, essentially dropped from above rather than moved along the two-dimensional plane and subject to obstacles, as in chess.

Another emergent characteristic of *go* is the fundamental tension between rapid and secure development of one's stones. Because the main goal of *go* is to encircle

⁸<http://senseis.xmp.net/?GoProverbs>; retrieved July 16, 2010.

territory, there is a strong temptation to place one's stones at wide intervals, especially in the opening. However, such haste can result in formations that are porous and easily attacked. There is, in fact, a big difference between stones that are placed with only one or two intersections between them, and stones that are placed three or four intersections apart. The former may form the outline of an ambitious territory more slowly than the latter, but with the benefit that most attacks can be repelled because the attacking piece is likely to confront one defending piece immediately, and find others nearby (Kim and Soo-hyun 1995).

Still another important concept is that of *sente*, and its opposite, *kote*. *Sente* is usually translated as "initiative," and refers to a move that demands a (*kote*) response from a competent opponent. However, *sente* lacks the almost automatic association with aggression that initiative has in chess, for a move can be *sente* even when it poses no immediate challenge to an opponent's stones or territory (Smith 1956:56). This is because territory gained by one side is lost to the other, so that any territorial claim by black will eventually be at white's expense, and vice versa, even if it is in an area of the board that white does not presently have a presence in.

However, in another respect the desirability of *sente* mirrors that of initiative in chess, for in *go*, too, the player to move first (traditionally, black) has a distinct advantage. This has long been recognized, and white is traditionally awarded some bonus points (*komi*) to offset the disadvantage of moving second. At present, the Japanese rules stipulate a *komi* of 6.5 points though the number has drifted upward with time as the increased quality of play has amplified the value of this initial advantage (Shotwell 2003).

That said, inaction can sometimes be preferable to action, at least with respect to a particular group of stones. A move that puts one into *atari*—which allows the opponent to capture on the next move—is to be avoided, for instance. And similar to mutual *zugzwang* is the phenomenon of *seki*, which refers to a situation in which black and white pieces are entwined in such a way that neither can make further progress toward surrounding the other because whoever moves first puts himself into *atari* (Shotwell 2003:74).

Society Through the Lens of Go

As an analogy, *go* works best in initially uncrowded environments in which the objective is territorial control (at least figuratively) and, once again, there is perfect information regarding the disposition of everyone's forces. As with chess, there are immediate military applications. In particular, it has been observed that *go* is a ready analogy for Eastern military strategy. Boorman (1969) developed this view in great detail in his book on Mao's strategy during the Chinese Civil War. Boorman explains that Mao, who was a *go* enthusiast, sought first to win the support of peasants before attempting to sway, often by force, the more elite populations in the cities. This is doubly analogous to the *go* strategy of beginning on the board's corners and edges (which are most easily defended) so as to build a foundation for action in the center, for the peasants were both socially and geographically peripheral.

The *go* analogy has also been sporadically applied to geopolitics. It has been suggested, for instance, that China is averse to dramatic actions (such as ultimatums and U.N. resolutions), instead preferring low-profile moves (such as investing) that incrementally extend its influence to distant parts of the world (like Africa). *Go*-like thinking may also guide China's interpretation of U.S. alliances with Japan, Taiwan, and South Korea as consistent with a strategy of encirclement (Lai and Hamby 2002).

As with chess, however, the analogy can be extended further. One important insight provided by *go* is that a move's consequentiality is decided by its context. Four sorts of contexts render a move immediately consequential. First, the move forges a connection between heretofore disconnected elements. This is an important dimension of coalition-building in social movements, when groups with disparate interests join forces in pursuit of shared objectives (McAdam et al. 2001; Mische 2007). Another example is the previously unthinkable connection recently made by experimentalists between psychology and economics, multiplying the threat to sociologists who once could trust the first field to have little to say about social systems and the second to have little to say about actual humans. Second, the move significantly bolsters the defensibility of a tenuous connection. A failed example was when John McCain, as a presidential candidate with questionable conservative credentials, tried to strengthen his connection to conservative voters through his choice of running mate, only to find that the move jeopardized his connection to independents. Third, the move amounts to an incursion into virgin territory, giving the actor a first-starter advantage, such as when Xerox introduced the first photocopier (Lieberman and Montgomery 1988). Fourth, the move involves an initial foray into some area dominated by the opposition, giving notice of intent to challenge that control. Recent examples include Google's introduction of a web browser, challenging Microsoft Explorer and Mozilla-based programs (Netscape and Firefox), Microsoft's attempt to penetrate the search engine market, and China's and India's 2007 and 2008 launches of lunar orbiters.

The opposite of a consequential move is one that is inconsequential. One reason a move can be inconsequential is that it merely strengthens an already strong position or connection. Another reason a move can be inconsequential is that it amounts to an attempt to salvage a situation that is beyond hope. Such a move, of course, is wasted, and thus risks giving *sente* to the other side. Thus a skilled actor knows when to give up a battle as lost, such as when John McCain abandoned Michigan as unwinnable during the presidential election. (However, a limitation of the analogy is that, in many situations, withdrawing from a lost cause indicates that one is willing to abandon difficult battles, a fear that overhangs so many U.S. military operations.)

The combined result of the first two points is that skilled players are drawn to areas of uncertainty—to regions where the outcome has yet to be determined in favor of either side; recall the vast sums of money spent on the so-called swing states during the 2008 presidential race. Other examples, drawn from the "culture wars," include the recurring battles over abortion rights and gay marriage, both of which amount to *ko* situations insofar as neither side seems able to clinch a decisive victory and neither is willing to quit the fight. (To extend the *go* analogy further, such groups might be advised to direct their attention elsewhere in the hope that such hot-button issues might prove more tractable once the world changes in other respects.) Moreover, when players are drawn to the same area, it is frequently in order to do about the same thing—to woo some uncommitted demographic, to capture a problem area for a particular profession (Abbott 1988), or (in the military case) to take hold of a strategically important village or hill.

Of course, when dealing with uncertainty it helps to have a home base that is secure—a region of control that is effectively unassailable. Abbott (1995) gives the example of public auditing for the accounting profession, a responsibility over which it had a monopoly, even as it expanded outward into more contested areas such as tax law (also claimed by lawyers) and into (initially) unstructured areas such as management consulting.

Poker: Rules and Emergents

If chess is the quintessential Western game of complete information, poker is the quintessential game of information scarcity and uncertainty—about the state of play in the present and about what the future holds. The goal of poker is to form the best five-card hand where, for instance, four of a kind beats three of a kind and a pair of kings beats a pair of eights. There are many varieties of poker, distinguished by, among other things, whether any of one’s cards are visible to others, and whether cards dealt face-up “belong” to a single player or are shared by all (as “community cards”). Here we focus on one variant of the game, Texas hold ‘em, in which each player has two personal “hole” cards, but players share access to up to five community cards (the “board”). This variant is particularly interesting because cards are dealt in stages, so that players are faced with uncertainty as to how the hand will unfold and must make choices with that uncertainty in mind (much as in social life). We further limit ourselves to the “no limit” version of the game, in which a player may bet all of his resources at any moment, which eliminates artificial limits on betting and thus increases a player’s range of options, as well as his risks.

Each hand of no limit Texas hold ‘em (NLTH) is dealt over four successive rounds. An example is diagrammed in Figure 5. First, two hole cards are dealt face-down to each player. Second, three cards are turned face-up in the center of the table; these are called the “flop.” Then, a fourth card is turned face-up on the table, called the “turn.” Finally, a fifth card is turned face-up, known as the “river.” After each of the four steps of the deal, there is a round of betting in which players decide, in fixed order (i.e., going around the table) whether to drop out of the hand (fold), stay in but not bet (check), or bet. If someone has already bet in a given round, a player

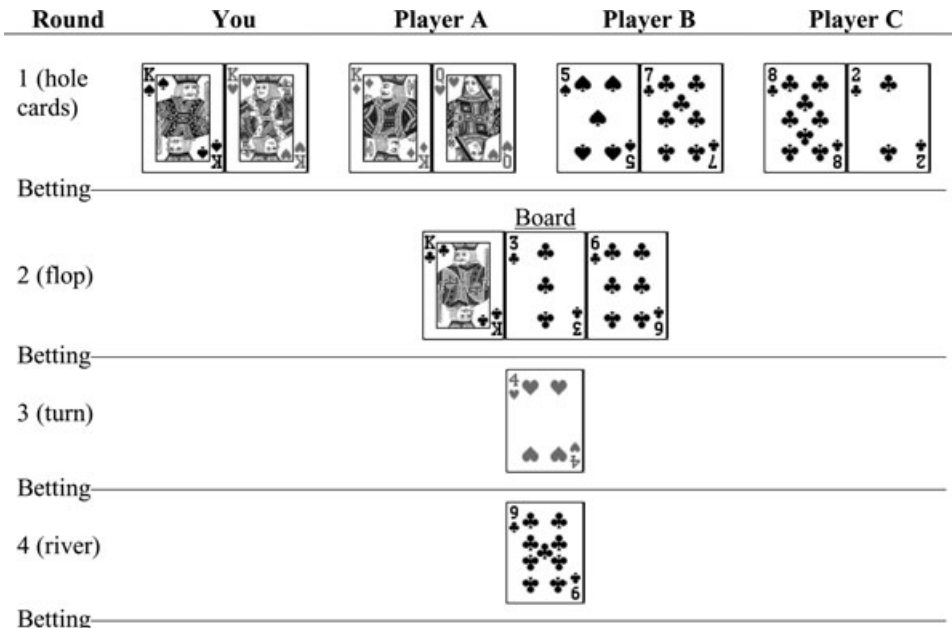


Figure 5. Stages of a poker hand.

may fold, put in an amount of chips equal to the bet (call), or put in more than the bet (raise). If all but one player folds, that player wins and the hand is over, even if there remain board cards to be dealt. If more than one player remains at the end of the hand, they compare their cards in a “showdown.” Texas hold ‘em also features forced bets known as “blinds,” required of the two players sitting next to the dealer, which, in tournaments, increase at fixed intervals (e.g., every 10 minutes).

NLTH is the most popular form of poker today, and its popularity combined with its complexity have inspired much thought and writing about how to play it well. Over the past 30 years, the masters of NLTH have increasingly extolled the benefits of an aggressive but disciplined style of play, where one favors betting and raising over checking and calling but infrequently relies upon pure bluffs (betting a great deal on a very weak hand with the hope that everyone folds). This is a change from the days when the most serious players recklessly bluffed (or cheated) their way to victory (McManus 2003, 2009) while everyone else politely bet and raised as if the game were a form of lottery: you bet and then chance selected the winner (Harrington and Robertie 2007).

According to Doyle Brunson—author of “the Bible” of poker (Brunson 1979)—the main advantage of aggressive play is that you can win *both* by getting everyone to fold *or* by having the best cards. The first is illustrated by the seemingly paradoxical tactic of betting early in a hand in order to scare those with weaker hands into folding. This might appear surprising since the sooner a weaker opponent folds the less time he has to put money into the pot. However, someone with a weak hand is not likely to bet much, unless his hand suddenly improves as more cards are dealt—to the possible detriment of whoever initially had the stronger hand (Sklansky [1976] 1997). Consider the example in Figure 5. Here, you have $K\spadesuit K\heartsuit$ and are the first to bet. There are three other people in the hand, and they have $K\diamondsuit Q\heartsuit$, $5\spadesuit 7\clubsuit$, and $8\clubsuit 2\clubsuit$. If you raise, the people with $5\spadesuit 7\clubsuit$ and $8\clubsuit 2\clubsuit$ will most likely fold. However, if you check, everyone will stay in. You check, and the flop comes $K\clubsuit 3\clubsuit 6\clubsuit$. Now you are dominating the person with $K\diamondsuit Q\heartsuit$, but are facing imminent defeat to player C’s sudden near-flush. While superficially this is because C was extremely lucky, on a deeper level it is because you failed to protect against exactly this sort of occurrence. In general, the only people you want in the hand with you are people who have hands that are *almost as good as your hand*. This is because boards (flop, turn, river) that help them are likely to help you even more whereas boards that help someone with a very dissimilar hand are likely to help them and *not* you, and thus possibly leave them with the superior hand.

While betting more often than calling or checking has been accepted as the new meta-rule, under the umbrella of aggressive play are a range of strategies arrayed between the poles of tight and aggressive play and loose and aggressive play. The difference between tight and loose players derives mainly from their approach to the hole cards that begin each hand. A tight and aggressive player usually only stays in when his hole cards are relatively strong. The most valuable hole cards, those that are most likely to produce a win by the end of a hand, are AA, KK, and QQ. A loose and aggressive player will also play such hands, but in addition will bet with hands like 5–6s (where the “s” means that the cards are of the same suit) and 4–4. The benefit of “loose play” is that it makes one difficult to read (Hellmuth 2003), and lower ranked hole cards sometimes provide the kernel for a winning hand that is difficult for opponents to protect against. Furthermore, a loose and aggressive player can sometimes dominate the “rhythm” of a game by forcing those with less steely

nerves to tighten up their play for fear of having a weak hand raised, thus reducing their freedom of action. (While another loose and aggressive player may wrestle for control of the rhythm, such a state rarely lasts long before one or another tightens his play or is knocked out by the luck of the draw.) Rarely, though, do good players play hole cards that hold no promise whatsoever, in spite of the centrality of bluffing to poker in the popular imagination.

Behind aggressive play, and indeed all smart poker play, are comparisons between two sets of odds: the odds of winning a hand given the cards you currently hold, and the pot odds, or the ratio of the amount of money in the pot to the amount you have to call to remain in the hand. When the odds *against* winning are less than the pot odds the bet is a good one, mathematically speaking (Sklansky 1999:35). Of course, making a good bet does not mean a player will win, and sometimes there is advantage to be gained from making a bad one. However, if a player predominantly makes good bets he will, in the long run, do better. And it is by manipulating *other* players' pot odds that one can drive them out of a hand. This is done by betting big and forcing them to do the same (that is, to call the bet) to remain in the hand, thereby reducing their pot odds, possibly to the point that they judge it more prudent to fold.

Of course, one cannot know one's odds of winning a hand for certain without knowledge of others' cards, and many other emergent features of poker arise from the fact that hole cards are held in private. One is the importance of "reading" an opponent, based on, first, how he has bet in the hand so far, which may provide clues as to what cards he holds; second, what cards he has displayed at past showdowns, which provides information on how he plays particular kinds of hands (e.g., whether he is prone to bluffing); third, what cards he has shown in the past by accident; and fourth, any physical behaviors ("tells") that in the past were associated with particular hands as revealed in showdowns (Caro 2003).

Conversely, one has an interest in controlling the information one reveals about oneself, and this leads to the great value placed on impression management in poker. But whereas for Goffman (1959) impression management means, in part, acting consistently, consistency in poker is dangerous because it makes one predictable—if, for instance, others determine that one consistently bets heavily on mediocre hands. Thus, a more robust strategy is to play a wide range of starting hands, and to be found to be doing so at an occasional showdown. This is why the loose and aggressive style is considered by today's most successful players to be the zenith of poker strategy (e.g., Hansen 2008).

A number of other considerations condition what counts as good play, however, including the number of players left in the hand, one's position at the table, the size of the blinds (compulsory bets), and the value of one's chips.⁹ To take just the second of these for purposes of illustration, strategy is affected by the logic of position, which refers to the order in which players bet after cards are dealt. On the first betting round the person to the left of the big blind (who is two to the left of the dealer, which is a position that rotates) bets first, followed by the player to his left, and so on around the table. On later betting rounds, the person to the dealer's immediate left bets first, and the dealer bets last. From an information perspective, betting late—that is, after other people—is better than betting early because those

⁹Harrington explains that there are at least 11 things that every poker player should consider before making any play (Harrington and Robertie 2007).

who bet late can better judge the relative strength of their hands in light of the decisions made (to bet, call, or raise) by those who bet earlier. Consequently, a hand (such as 6–7s) that is playable by someone in late position (if no one else bet) might be dangerous for someone in early position because the latter would have no way to judge its relative strength. Of course, everyone knows this, and information concerning position is highly influential in how players read one another's bets.

Society Through the Lens of Poker

As an analogy, poker, and NLTH in particular, works best when adversaries have imperfect knowledge about their respective resources in the present and everyone is vulnerable to an uncertain future. Poker analogies are familiar to scholars of the Cold War, in part because neither side could be completely certain about the other side's capabilities, and in part because threats of a nuclear first strike (in particular, by the United States) may have been bluffs (Freedman 1986). For the analysis of Cold War bluster, however, one could just as well use the more simple game of five card draw, in which all cards are dealt at once. Texas hold 'em per se begins to pay off as an analogy when everyone's fate hinges on an unpredictable future—a circumstance that, once again, is found in many areas of social life.

We start with consequences that do not require future unpredictability before turning to some that do. That one's opponent cannot, at least for long stretches, directly perceive one's resources (akin to one's hole cards) has as a consequence that he may be persuaded to quit the fight early through a show of force. For example, consider the awesome military success of Genghis Khan and the Mongols in the 12th and 13th centuries. Almost every army that they faced in their sweeping advance across Asia and the Middle East was larger than their own (Weatherford 2004). Knowing this, the Mongols would enter enemy territory and start to threaten small towns located on the outskirts of empires, so as to assail easy targets whose defeat would spread fear into the interior. While attacking these towns, the Mongols would employ various stratagems to confuse and frighten opponents while at the same time giving the illusion that they were powerful beyond their actual numbers. These included visual tricks like tying branches to the tails of their horses in order to whip up dust, and auditory tricks like banging drums and screaming. As a result, enemy towns would often surrender (fold) without a fight. And then, after defeating a small town, the Mongols would allow a large number of those captured to flee, thereby passing stories of their strength, through the mouths of refugees, to towns further along their path of attack.¹⁰ In this way, the Mongols dominated the rhythm of warfare, deterring opponents from attempting a defense even when that would have been effective.

These tactics are akin to aggressive and loose play, exaggerating one's strength and collecting wins from opponents too cautious to fight or put everything on the line. But one cannot always place oneself so brazenly in the way of possible defeat nor keep up a charade forever. Like a smart aggressive player, the Mongols knew that when their threat was met by a large enemy army they needed to start playing a tighter style and fold weaker hands. To do this, the Mongols employed a tactic that was rare for their time and place, especially by Western standards. First, they would engage in battle, but then quickly retreat. Then, once the enemy army had pursued

¹⁰Napoleon was also a master of battlefield deception (Englund 2004).

them to a location that favored their resources and tactics, they would turn around in force and reattack their confused and tired opponents (Weatherford 2004). This tactic resembles one used by professional players shortly before the “money” phase of a tournament—when all those remaining stand to receive a share of the winnings, and most are wary of taking any risks—whereby they readily bet in the hope of winning blinds, but quickly fold when someone reraises, unless they have a strong enough starting hand to take the risk of staying in until a showdown.

In life, as in poker, one can sometimes force weak hands to fold with a big enough bet, effectively lowering their pot odds, which is a useful thing when unforeseen events might turn the tide in someone else’s favor were the game allowed to continue. A country girding for military conflict against a weaker adversary can do this through a massive mobilization of reserves and other resources; an example is the “iron wall” of military might assembled by Israel in the effort to deter aggression by its neighbors (though this has proven far less successful in deterring nonstate actors). Similarly, a market leader can do this through a publicized infusion of resources into research and development, or a genuinely well-heeled suitor can do this by sparing no expense on a first date in order to intimidate competitors. In each case, the hope is that an adversary will reason that while a small gamble from a position of disadvantage is worth the risk, a big gamble is not.

The problem in many circumstances is that the future is uncertain, and decisions that seem rational given present conditions may turn out to be grievous errors as more cards are dealt. This is true for military adventures, which are beguiled by weather and equipment failures to this day. But chance—understood as reliance upon future conditions that can change unexpectedly and that are beyond anyone’s control—is even more central to the world of investing. There, at least for a time, an aggressive and loose strategy paid high dividends. When Michael Milken, creator of the junk bond, began work at the firm of Drexel Burnham Young in the 1970s, he brought with him his belief in a novel idea, that it pays more to invest in a lot of bad (cheap and risky) debt than to invest in little good (expensive and safer) debt (Bruck 1988). The reason is that payoffs, when they come, are big, compensating (in theory) for the money lost on the companies that default. Such a strategy resembles that of a loose and aggressive player who readily plays a wide range of hands, including those that are perceived to be of lesser value. Moreover, while the prestigious firms of that day would never lower themselves by investing in sub-investment-grade bonds, Milken was not afraid to strike out and try a new and disapproved strategy. This is because Milken intuitively understood a common rule of thumb in poker: if everyone is playing one way it often pays to play another way (Harrington and Robertie 2007).¹¹

That said, an important part of loose play, and market wisdom, is having the ability to quickly fold when things start to go wrong. In poker, that means folding on the flop and beyond even when it means losing chips (Hellmuth 2003), and in the stock market, selling a stock that is not performing well whatever the initial investment. This is a clear nod to economics’ insight into the pitfalls of being swayed by sunk costs (Frank and Bernake 2008:10–11). Knowing when to fold also translates well to the world of romance, especially in this day of Internet dating, where one can “play the field” in search of a true soul mate so long as one is willing to throw away hands that look less appealing as more information becomes available.

¹¹For a more recent example, consider John Paulson, who made \$15 billion by betting *against* subprime mortgages when everyone else was sopping them up (Zuckerman 2009).

Of course, whether buying junk bonds or staging military incursions, gambles are much more likely to pay off if based on reliable intelligence. Before going to battle, the Mongols sent out small contingents of men to collect as much information about their opponents as possible (Weatherford 2004), and Milken's appetite for information—gleaned equally from stock prospectuses and his friends—is well-documented (Bruck 1988). The challenge is always to penetrate the public facade to discern what lies beneath; Milken and the Mongols illustrate the discipline required.

Milken could, at least for a time, “win” because he played many weak hands at once (and because in the main even weak companies can be expected to turn a profit so long as the economy is healthy), and the Mongols' success often hinged on their ability to choose their battles. But sometimes you only have one hand to play, and then there is no choice but to gamble. Political races provide a vivid illustration of how the value of a single hand can turn on events beyond anyone's control. John McCain arguably lost the 2008 presidential race because of the increasing importance of the economy and the decreasing importance of the Iraq War—both beyond the candidates' control or ability to predict. This also illustrates another emergent feature of poker-like situations: when the future is uncertain, the biggest threat comes from people most *unlike* you—such as a young, former community organizer when you are a senior politician blameworthy for an unexpected financial calamity.

DISCUSSION

In the last section, we laid out the basics of three games and then asked what the world looks like through the lens of each. In a sense, this meant taking each analogy as a prototheory that provides organizing concepts, makes previously unperceived (or only hazily discerned) connections, and (at least implicitly) suggests predictions about the operation of analogous regions of the social world.

On one level, the preceding section was successful inasmuch as it catalyzed a new way (or, rather, three new ways) of seeing the world in minds habituated to the well-worn grooves of conventional sociological theory. It also illustrates how an analogy should arguably be developed and explicated, through a systematic exploration of its source and, in writing, the transparent presentation of its assumptions. However, for a more conventional payoff we can ask how the study of games contributes to existing theoretical discourse, specifically about strategic thinking and behavior and the social systems that encourage and hinge on the same. Jasper observes that “[s]ociologists have specialized in the effects of political, economic, and other structures [but lack] a vocabulary for describing the strategic action that brings them into being and regularly reshapes them” (Jasper 2006:166). Games offer exactly such a vocabulary, and more than that, they offer models for the consequences of particular system parameters for what counts as intelligent play and for emergent structural features of various sorts.

On the surface, game theory might seem to have a similar objective, and has the further benefits of formalization and decades of extensive development at the hands of economists, political scientists, and mathematicians. But even putting aside its predictive failures (Basu 2007), game theory has proved only sporadically useful to sociologists (Peterson 1994; Swedberg 2001). One reason is that it is most readily applicable to well-defined singular (even if iterated) decisions—to cooperate or not (Axelrod 1984), to back down or stand firm in a conflict (Bennett 1995), to cheat or not (Shermer 2008), to enter a market or not (Pakes et al. 2007)—abstracted from the complexity of the historical moment and wrenched from the welter of changing

circumstances. More complicated models—for instance, incorporating uncertainty and “linked” games (Bennett 1995)—are possible, but quickly become self-contained exercises in model building with only suggestive relevance to empirical situations. Moreover, while one can subject a game like checkers or chess to formal (extended form) analysis (e.g., Schaeffer et al. 2007), this is a brute-force exploration of combinatorial possibility that neither maps onto the social world (and is not purported to) nor provides the kind of concepts that sociologists need in order to grapple with complex, real-world historical phenomena, such as the Constitutional Convention (Slez and Martin 2007), Vatican II (Wilde 2007), the field of youth politics in postdictatorship Brazil (Mische 2007), or Florentine politics (Padgett and Ansell 1993).

Here we briefly consider the implications of chess, *go*, and poker for the “sociology of strategy,” focusing in particular on three ideas already familiar to its students: skill, position, and strategic dilemma. There have been a number of attempts to theorize skill in sociology (setting aside work on occupational skill). These can be arrayed on a continuum from those applicable to purely adversarial settings to those applicable to settings in which cooperation is possible but not assured. At the first end of the continuum, we find Schelling’s idea that skill in negotiation amounts to the ability to formulate a problem in such a way that, when it comes time to actually negotiate, one reaps the benefits of the “natural” solution (for instance, to defer to a particular precedent). Also at home in adversarial settings is Leifer’s (1988a) idea (based loosely on chess) that skill is the ability to act ambiguously so that one’s true interests and plans cannot be identified and countered (see also Gibson 2000; Padgett and Ansell 1993). At the other extreme is Fligstein’s (2001) argument that skill is the ability to mediate between divergent interests and perspectives and to build coalitions across such divides (see also Mische 2007). In between is Goffman’s (1959, 1967) idea that interactional competence (he does not use the word “skill”) amounts to the ability to present oneself in a positive light and then “keep up the act,” even in the face of discrediting information (e.g., accidental slips and embarrassing revelations from others).

The three games offer distinct, if somewhat overlapping, notions of skill, and together push the envelope of this important concept. A crucial component of chess skill is the ability to act in such a way that your opponent acts in such a way that, thinking that it is advantageous to him, is actually advantageous to you. This, in turn, depends on peering further into the future, something that is facilitated if the opponent’s range of prudent (or legal) moves is reduced at each step (i.e., his moves are “forced”). *Go* requires a similar form of foresight but something distinct as well, namely, the ability to envision the way that seemingly small moves in the present lay the foundation for global patterns far in the future, and to act accordingly. (We might say that skill at *go* is the ability to manipulate the micro-macro divide.) Finally, in poker, skill refers not only to the ability to calculate odds, but also to the ability to cultivate an identity through claims that can be, and sometimes are, verified and to exploit that identity through misrepresentation at carefully selected moments.

Another important concept is position. This is central to Bourdieu’s theory of social fields, where one’s position is determined by the quantities of different types of “capital” (e.g., cultural, economic) one possesses, and is consequential for one’s status, tastes, and capacity to manipulate the “rules of the game” (Bourdieu 1991). A different idea of position is the basis of social network analysis, where position means one’s location in a web of relationships, and affords, or denies, one opportunities for strategic action and the advantages that come from that (Burt 1992, 2005).

A more game-like idea of position was articulated by Goffman (1969), who explained that a person's position in a strategic situation is "created by the past opportunities he did and did not avail himself of, and consists in the framework of possible moves (with their probability of success) that are now open to him" (1969:100). But Goffman was unable to go further in the analysis of position, and indeed spent most of the next (and last) 45 pages of his essay talking about how one can make a binding and enforceable move, so that the idea of position is never developed.

The study of games allows us to build upon Goffman's useful starting point. Position, in the chess sense, refers to the current configuration of resources, which presents each player with specific opportunities and risks. Positions can be more or less entwined and thus more or less volatile, in the sense that a single move can result in a cascade of captures and the rapid reconfiguration of the game world. In *go*, position denotes something similar, but here a position is judged by the strength of its connections and its vulnerability to invasion more than by whether a player dominates the board's center (to this day, a main criterion for judging a chess position). And in poker, one's position is defined simultaneously by one's personal resources, the resources available to everyone else, the order in which players are permitted to act ("position" in the strict poker sense), and the impressions others have about a player based on past play—in particular, as aggressive or timid and as loose or tight.

Finally, the three games add to our understanding of the strategic dilemmas that actors face in contentious settings. Jasper (2006) identifies 37 such dilemmas. One example is the "home-turf dilemma," the quandary of conducting a battle on one's home territory, where one has both the advantage of familiarity and the disadvantage of wanting to keep that familiar world safe. Another, the "survival versus success" dilemma, is the predicament encountered in some competitive settings where to win one has to put oneself at risk of losing altogether, so that victory and survival are at odds.

A careful study of chess, *go*, and poker offers additional dilemmas, as well as a better sense of the conditions under which Jasper's dilemmas apply. In chess we find the dilemma of moving with an eye to bolstering defenses versus moving in preparation for an attack, though the latter may mean placing a piece in an exposed position. We also find the dilemma of responding to immediate tactical opportunities and threats versus favoring moves that contribute to a long-term strategy. In *go* we find the dilemma of aggressive growth that spreads one's resources dangerously thin versus slower growth that is more secure but that leaves one with too little "market share" to hold out for long against larger competitors. And in poker, we find the dilemma of acting so as to win in the present versus acting with an eye to cultivating an identity that can be useful, and useful repeatedly, down the road. (This is similar to the strategy versus tactics dilemma in chess, except that the rapid turnover of hands in poker means an even sharper distinction between short-term and long-term thinking.)

CONCLUSION

Theoretical progress in sociology benefits both from the extension and refinement of old ideas (e.g., Turner 2002) and periodic efforts to scan the intellectual horizon for new ones (Abbott 2004). This is an article of the latter sort, based on ideas culled from the literatures on chess, *go*, and poker. Of course, sociologists are already familiar with such games (particularly chess and poker) and frequently allude to

them (e.g., Goffman 1967; Jasper 2006). But it is uncommon for anyone to back such allusions with the serious study of games, and indeed, the more common practice is to allude to games in the abstract, as if there was a generic game from which named games are unmentionable derivations.

We have sought to demonstrate that the careful study of particular games yields analytical insights that supplement, and indeed transcend, those associated with allusions to unspecified games, such as are common in the work of Bourdieu, Burawoy, Goffman, and Elias, among others. The three games we featured are very different. Chess is a game of intricate maneuver, mounting tension, and sometimes rapid simplification to a sparse endgame. Further, it is a game in which nothing is hidden from one's opponent except one's designs for the future. *Go* is a game of careful placement and patient building—also in full view of one's opponent—but also skirmishes that hinge on individual stones, bold incursions, and, at times, sudden races to make or thwart connections on a board that starts empty and gradually fills out. Finally, Texas hold 'em poker is a game of uncertainty about the present and anxiety about the future, educated guesses, and balance between mathematically advisable play and the manipulation (and interpretation) of impressions. Because they are different, the games offer insights into different social settings, or into distinct aspects of particular social settings, like warfare, politics, and romance, that have elements in common with two or even three games.

Sociological insights may be sought in other games as well. A game such as bridge, for instance, introduces the element of team play, and may shed light on how coalitions function in competitive contexts, particularly when they are prevented from communicating privately. Also, while we focused here on “intellectual” games, largely because they have generated bodies of written theory, physical contests like boxing (Wacquant 2006) and football may have something distinctive to offer as potential analogies. In particular, unlike intellectual contests, physical contests allow players to act simultaneously, and thus a sports analogy might have something important to tell us about simultaneous action in other social settings.

The exact procedure for applying any such game analogy (or several such analogies in combination) to a particular empirical case, and evaluating its usefulness, is something that will have to be worked out elsewhere. Also, for lack of space, we did not directly address the criticisms that can reasonably be leveled against game analogies, including those based on specific games. These include that social rules are frequently implicit or vague, and may be challenged (Bourdieu 1991; Jasper 2006); that people may understand the rules differently (Garfinkel 1967); that they may not know who their true adversaries are (Goffman 1969); that rewards and penalties for good and bad play may not be realized until long after the responsible move has been played (Goffman 1969); that people play multiple games at once (Jasper 2006) and a given action may be a move in more than one of them (Padgett and Ansell 1993); that many outcomes follow from initial inequalities (e.g., in economic capital, social connections) more than from skill and the rules of play; and that game metaphors may negatively alter the way we think about things like marriage and politics (Hacking 1999), making a game out of something that should not be.

Taken together, these concerns amount to a warning against taking game analogies *too* seriously. But such a risk is a long way off, for it is exactly the opposite problem that we currently need to overcome. Game developer and scholar David Parlett recently lamented that “it is an observable but anomalous fact that games are, by and large, accorded little serious attention or respect in the Western world, where everyday turns of phrase testify to an outmoded view of games not just as trivial

in themselves but as models or metaphors for triviality itself” (Parlett 2004). This is certainly true in sociology, in spite of sociologists’ fondness for game analogies. Ultimately, if we are to make the most of our analogies it helps to know what there is to be known about their sources; otherwise our analogies are mere literary devices, evocative but not particularly illuminating.

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