

THE GAMES GAME THEORISTS PLAY

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Several years ago, I acquired a second-hand paperback copy of *Game Theory and Related Approaches to Social Behavior*, a 1964 collection of academic papers documenting the penetration of game-theoretical approaches into political science at the apogee of the Cold War. I was, at the time, on the trail of a mysterious think-tank enterprise of the era (known as "Project Michelson") that had links to the Naval Ordnance Testing Station in the Mojave Desert and also ties to brain scientists working in Washington, DC. The whole thing, I knew, had something to do with modeling tactics for nuclear brinksmanship, but all my leads had come up short—snipped in the archival bud, or frayed in fragmentary bibliographies. As did the thread that had led to my acquisition of the volume in question.

So I fanned through the book in a desultory way, feeling morose. But just as I was about to shelve it (doubtless for good), my eye alighted on the very improbable title of Chapter 24: "'So long sucker'—a four-person game."

Hmm. Odd. Flip flip. Less than two full pages of text, mostly consisting of the enumeration of twelve concise rules for playing a chip-based game of strategy. An italicized paragraph offered the following by way of introduction:

This parlor game has little structure and depends almost completely on the bargaining ability and the persuasiveness of the players. In order to win, it is necessary to enter into a series of temporary unenforceable conditions. This, however, is usually not sufficient; at some point it may be to the advantage of a player to renege on his agreement. The four authors still occasionally talk to each other.

Which was sufficiently tantalizing that it led the eye back up to the list of authors: M. Hausner, J. Nash, L. Shapley, and M. Shubik.

No ordinary late-1950s pinochle partners those gentlemen. The restlessly brilliant game-theorist-*cum*-mathematician Lloyd Shapley—winner of the John von Neumann Theory Prize, breaker of Soviet meteorological code during World War II—has half a dozen theories, lemmas, and solutions that wear his name, and he made fundamental contributions to utility theory over a forty-year career at RAND and UCLA. The articulate and imperious mathematical economist Martin Shubik would become notorious for the invention of one of the

truly exquisite perversities of non-cooperative rationality, the "dollar auction," a seemingly innocuous game that can trap unsuspecting players into spending thousands of dollars to buy a dollar bill (look it up, and be warned; do *not* play...). And "J. Nash" was none other than John Nash himself, that "Beautiful Mind" of legendary power and fragility, the ghost figure I had known as an undergraduate at Princeton, where he haunted the basement corridors of the mathematics building, muttering to himself about the numbers in his head. The Hollywood version (and the Nobel Prize) would come later. One might almost pity Mel Hausner—himself a noslouch professor of mathematics—being the fourth at such a table.

My curiosity piqued, I spent a little time with the rules, seeing if I could get a feel for the game that absorbed the agonistic attention of this set of intelligences. But it quickly became clear that the only way to understand So Long, Sucker was to try to play it. And so I rounded up a group of friends, gave them fair warning and a copy of the rules, and we met for an evening of Szechuan food and unstable alliances.

. . .

A game is a game before it is a text. Or, to put it another way, the full text of any game is the game itself—the played game, the experience of play in the game, the temporal and phenomenological totality of what game designers call "game dynamics." For this reason, my recommendation to readers at this point would be to stop reading this essay, and to go off and make arrangements for a little So Long, Sucker practicum. You will need seven poker chips (or paper slips or other markers) in each of four colors. You will need three other human beings. You will need, finally, cold blood and balm for what is breakable in your companions and in yourself. But I get ahead of myself. The rules are at the end of this article.

Let us now notice something about our situation: From this point forward, I do not know what you know about this game. I do not know if you have followed my advice or disregarded it; if you have played So Long, Sucker, or merely read the rules (or perhaps not even gone so far as that). So let me make a deal with you: I'll assume you've played the game, if you'll assume I've played it. Agreed? We will think of this as a "side deal"—between us. A coalition, if you like. We are therefore positioned in a very particular way with respect to those *other* readers who are hanging around the table. They don't know what we know. They cannot possibly understand what makes So Long, Sucker a genuinely



Strategic Air War Game being played at the RAND Corporation headquarters in Santa Monica, California, ca. 1954. In the image—used by the think-tank to promote their contributions to game theory—Phil Morse, an original RAND board member, is seen making his move. Courtesy RAND Corporation.

dangerous game. Scary. A game that is particularly hard to circumscribe. A game that *leaks*.

We are friends, though, the two of us. I am confident. We're on the same team, in a way. Our shared knowledge of the dark heart of the game binds and reassures us. Thankfully.

So let's compare notes, in plain view of our opponents (or whatever you want to call them). There is, at the outset, all the obvious stuff. So Long, Sucker (aka, significantly, Fuck Your Buddy) is, basically, a war game. The language alone tells you that: there are "kills" and "prisoners," there is victory and defeat. There is a cemetery. It is also, though—even primarily—a diplomacy game. No first-person shooter action here. This is a war game played from a position very distant from the battlefield. In this respect, it can be paired with that most ancient of games for the schooling of generals: chess. But the differences are telling (and ultimately so dramatic as to amount, I think, to a veritable inversion; So Long, Sucker is the anti-chess). The game does not, in fact, instantiate the subject position of a military commander, as you probably noticed. It is tuition for a prince (or a president), not his mercenaries. One is not surveying the field, giving ordnance coordinates, or commanding the horsemen. One is, spiritually speaking, in an undisclosed location, at a desk, talking on the telephone from time to time with others similarly positioned. These interlocutors are sometimes friends, and sometimes not. One has some control over this, but not as much as would be ideal.

Your sense that you were playing something like four-person freestyle poker-chess wrong-footed you at first, didn't it? For instance, it probably took you some time to realize that the game does not reward protecting/preserving your own chips. Bizarre, eh? Success demands a willingness to sacrifice any number of one's own pieces to capture the right prisoner. Chess players, seated at a So Long, Sucker table, shake their naturally defensive identification with their assigned color only after several embarrassing defeats.

Similarly, it is disconcerting to discover that actually putting another player out of the game is seldom a very good idea. Local "victories" of this sort tend, ultimately, to be costly to the ostensible winner. Counter-intuitive: impotent potential allies tend to be better company than dead enemies.

It is also the case, again in contradistinction to chess, that much of the play feels shambolic and arbitrary. Until it doesn't. But this moment generally comes without warning. It is nearly always a sudden inflection point in the quality of play—difficult, indeed possibly

impossible, to predict. There is, in So Long, Sucker, no systematic, unfolding "battle" moving inexorably to its endgame. Instead, small wars flare up, die down, are forgotten. Then remembered. Most of the time what one does seems to make no difference. Riding that turns out to be a pretty good strategy. Actually trying to win is, to the surprise of the able gamer, an excellent way to lose. You may have thought, as a neophyte with your seven chips in a stack on the baize, that you could pursue some sort of coherent "Deep Blue" super-strategy and think ahead of everybody enough moves to win, but (unless you are very smart, which can be a handicap here) you probably figured out relatively soon that this was totally hopeless, given the complexity of the game and the overwhelming number of possible plays. Legend has it John Nash (very smart) got caught by exactly that feature of the game early on: he and John McCarthy (a pioneering mathematician-programmer, and one of the progenitors of artificial intelligence) were playing in an alliance which Nash suddenly betrayed; responding to McCarthy's outrage, Nash coolly expressed bafflement: "I don't understand why you are so unhappy—anyone could do the backward induction and see that I had to turn on you at that point." Makes sense if you are a robot, or a computer. But McCarthy was, like all of us, a human being. So he spent the rest of the game making sure Nash did not win. Neither did McCarthy, naturally. It is not every day you can say, "So long, sucker" to John Nash, but he missed the forest of the game while attending with his big brain on the tree of a tricky reverse induction.

To sum up, then: a game, tedious until it is suddenly terrible, in which an appetite for hostages (perhaps only ever another word for unconsenting allies) proves more important than sentimental citizen solidarity; in which propping up moribund, pseudo-adversarial clients tends to pay crucial dividends; in which victory is generally punished, hapless extemporizing rewarded, and strategic hubris invariably fatal. In other words, So Long, Sucker should properly be understood as a playable allegory of Cold War geopolitics.

But that is only the half of it, as you probably came to notice by the third or fourth go. The game affords nothing less than patient, if sadistic, instruction in the cynical limits of cynical rationality. Which is to say, So Long, Sucker is ultimately something more than a liberal-pessimist Cold War mini-drama. It is also a gamified tutorial in the circumscribed utility of traditional game theory itself—a kind of penitential rite for those excessively enamored with calculating reason: call it game-penance for game theorists.

There were those at the RAND Corporation who believed that game theory afforded a powerful tool for theorizing real-world conflict. The twelve rules that set a game of So Long, Sucker in motion secret a robust rebuff to such ambitions, since a player skilled in such thinking ("I can calculate my opponents' advantage matrix deeper than anyone else at this table") here repeatedly bites the dust. Like the bull in the ring, he has repeatedly brought his strength to bear on a shimmering decoy: all appearances to the contrary notwithstanding (and there is plenty of hard thinking one can do about what is likely to happen next in any round of play), a game of So Long, Sucker cannot ultimately be assimilated to any calculable optimization function; it is, in fact, an exercise in social psychology, not strategic rationality. Like life, and unlike chess, So Long, Sucker is won by charisma, not computational power.

I assume we are still playing on the same side, reader—that you have played the game all the way down. Should we let the others in on the dark thing it holds close and deep? Tell them about how the charisma demanded by the game is ultimately a species of evil? No, probably not. If we do, they probably won't play! Maybe better, then, we just tell them how much fun we had? How we laughed together at the end of that last, long game.

The one you lost.
Shall we tell them that?

RULES FOR PLAYING SO LONG, SUCKER

- 1. A four-person game.
- 2. Each player starts with 7 chips, distinguishable by their color from the chips of any other player. As the game proceeds, players will gain possession of chips of other colors. The players must keep their holdings in view at all times.
- 3. The player to make the first move is decided by chance.
- 4. A move is made by playing a chip of any color out onto the playing area, or on top of any chip or pile of chips already in the playing area.
- 5. The *order of play*, except when a capture has just been made, or a player has been defeated (Rules 6 and 9) is decided by the last player to have moved. He may

- give the move to any player (including himself) whose color is not represented in the pile just played on. But if all players are represented in that pile, then he must give the move to the player whose most-recently-played chip is furthest down in the pile.
- 6. A *capture* is accomplished by playing two chips of the same color consecutively on one pile. The player designated by that color must kill one chip, of his choice, out of the pile, and then take in the rest. He then gets the next move.
- 7. A kill of a chip is effected by placing it in the "dead box."
- 8. A prisoner is a chip of a color other than that of the player who holds it. A player may at any time during the game kill any prisoner in his possession, or *transfer* it to another player. Such transfers are unconditional, and cannot be retracted. A player may not transfer chips of his own color, nor kill them, except out of a captured pile (Rule 6).
- 9. *Defeat* of a player takes place when he is given the move, and is unable to play through having no chips in his possession. However, his defeat is not final until every player holding prisoners has declared his refusal to come to the rescue by means of a transfer (Rule 8). Upon defeat, a player withdraws from the game, and the move *rebounds* to the player who gave him the move. (If the latter is thereby defeated, the move goes to the player who gave *him* the move, etc.)
- 10. The chips of a defeated player remain in play as prisoners, but are ignored in determining the order of play (Rule 5). If a pile is captured by the chips of a defeated player, the entire pile is killed, and the move rebounds as in Rule 9.
- 11. The *winner* is the player surviving after all the others have been defeated. Note that a player can win even if he holds no chips and even if all chips of his color have been killed.
- 12. Coalitions, or agreements to cooperate, are permitted, and may take any form. However, the rules provide no penalty for failure to live up to an agreement. Open discussion is not restricted, but players are not allowed to confer away from the table during the game, or make agreements before the start of the game.