

What's in a game? | openDemocracy

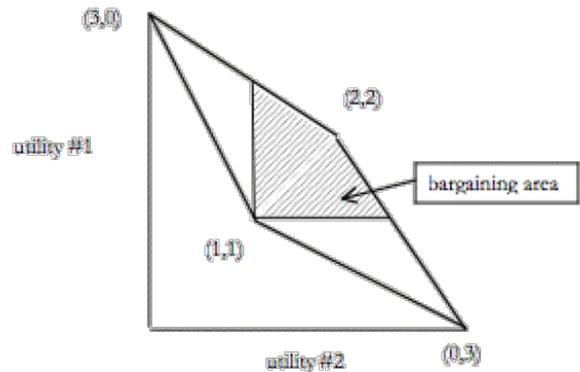
 [opendemocracy.net/can-europe-make-it/david-harbord/what-s-in-game](https://www.opendemocracy.net/can-europe-make-it/david-harbord/what-s-in-game)

David Harbord

After Tony Curzon Price [argued](#) that Greece was not playing chicken and James Galbraith [retorted](#) that it's not even playing a game, an applied game theorist reminds us of the logic, in Greece's game, of claiming you're not playing one.

A game theoretic representation of bargaining between two parties, from "[Game Theory and Ethics](#)", The Stanford Dictionary of Philosophy

The new Greek finance minister, Yanis Varoufakis, on the cusp of crucial negotiation with Greece's European creditors, recently declared in the New York Times that he was not "playing games" and did not view the current deliberations between Greece and its creditors as a bargaining contest "to be won or lost via bluffs and tactical subterfuge" ("[No Time for Games in Europe](#)", [New York Times, Feb 16, 2015](#)). Unsurprisingly, many commentators (the current author included) immediately interpreted this as a classic - and potentially brilliant - tactical move in the bargaining game Varoufakis was actually engaged in at the time. After all, the purpose of Varoufakis' article was to convince the reader that the new Greek government's "red lines" in its negotiations with Europe were indeed red lines, and would not be crossed under any circumstances.



Although described as a "retreat from game theory" (and motivated instead by a mysterious appeal to the work of German philosopher Immanuel Kant), Varoufakis was in fact following a bargaining strategy laid down by economics Nobel Laureate Thomas Schelling in his classic "[An Essay on Bargaining](#)" published in the *American Economic Review* in 1956. In this article (and in his subsequent book [The Strategy of Conflict](#) published in 1960) Schelling explained the value of making credible commitments in bargaining games and negotiations, which make it impossible, or at least very costly, to back down from an initial offer. "A potent means of commitment," Schelling observed, "is the pledge of one's reputation." If politicians or national representatives "can arrange to be charged with appeasement for every small concession, they place concession visibly beyond their own reach." What better way for Varoufakis to pledge his own reputation than to publicly declare in the New York Times that he was not "bluffing" and would reject, whatever the consequences, deals that were not perceived to be in Greece's best interests?

While Varoufakis annoyed some commentators by claiming ("[Game Theory and Greek Default](#)") that "game theorists analyze negotiations as if they were split-a-pie games involving selfish players" (modern bargaining theory is much richer than that), others insisted that by publicly placing concessions out of reach he was showing himself to be a very skilled game theorist indeed. (See "[What Greek finance minister Yanis Varoufakis used to believe about 'game theory' and the 'incredible threat' to Europe](#)"). Still, the meme of "this is not a game" appears to be one that Varoufakis and his allies remain keen to disseminate. Economist James Galbraith, a friend, co-author and former colleague of the Greek finance minister, similarly disputes the relevance of game theory to the current negotiations. Writing in OpenDemocracy ("[A Great German Greek Grexit Game?](#)") he asserts that "in game theory the exact motivations of the players and structure of the payoffs are known. In the real world of Greece, Germany

and Europe they are not." This is not an entirely accurate description of modern game theory, to put it mildly. Games of incomplete information have been intensively studied since the work of another Nobel Laureate in economics, John Harsanyi, in the late 1960s, including games in which players do not have common knowledge of the payoffs, who the other players are, what moves are possible, how the game's outcomes depend on the players' actions, and what information is shared between the opponents.

Despite Galbraith's pessimism on the applicability of formal game theory, his article treats us to a brief but fascinating description of a process of negotiation that could have been taken straight out of Schelling's classic essays. He tells us for instance that:

"The new Greek government had to become both known and credible. It had to demonstrate that it was (a) serious and reasonable, (b) unbending on certain points, and (c) unlikely to collapse whatever happened. The first could be satisfied by presenting a clear program that met necessary conditions, stated essential limits, and refrained from all insincere threats. The second was met, in part, by forming a coalition with the right-wing populist Independent Greeks -- a bit like burning the boats before Troy. In this way, Greece made clear that it had no "Plan B"

Burning one's boats (or bridges) is of course a classic military and bargaining commitment strategy already mentioned in Schelling's 1956 essay and developed further in his 1966 book, [Arms and Influence](#). Another instance is Galbraith's reference to the use of "constructive ambiguity" to make "the question of loss of face unimportant," a tactic which Schelling described as the "use of casuistry to release an opponent from a commitment." As a final example, Galbraith notes that Greece and Germany "changed the structure of their relationship" so that it was no longer a "one-time, non-cooperating bargaining game" but more like a "cooperative and repeating process," another classic Schelling strategy central to the concept of "co-opetition" proposed in 1996 by game theorists Adam Brandenburger and Barry Nalebuff as a game-theoretic approach to business strategy.

The new Greek government is engaged in deadly serious negotiations upon which the immediate economic fate of millions of Greek citizens depends. Describing these negotiations as a "game" does not diminish their seriousness. Game theory, after all, has been used extensively in (and was partly developed for) the analysis of war and nuclear deterrence strategies, hardly light-hearted topics. Whatever his views on the modern theory of bargaining, one can only hope that Yanis Varoufakis will continue to use his finely-honed negotiating skills in the furtherance of a deal which will finally allow Greece to emerge from the economic quagmire which past Greek governments and European policy have left it in.

*If you enjoyed this article then please consider liking **Can Europe Make it?** on [Facebook](#) and following us on Twitter [@oD_Europe](#)*