# Games with incomplete information

## Author: John C. Harsanyi

Source: The American Economic Review , Jun., 1995, Vol. 85, No. 3 (Jun., 1995), pp. 291-303 [https://www.jstor.org/stable/2118175](https://www.jstor.org/stable/2118175?Search=yes&resultItemClick=true&searchText=apply+incomplete+information+game+theory&searchUri=%2Faction%2FdoBasicSearch%3FQuery%3Dapply%2Bincomplete%2Binformation%2Bgame%2Btheory%2B&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&refreqid=fastly-default%3Ad3235b1f72dfdf9697024383c091c351&seq=1#metadata_info_tab_contents)

We follow the approach of Harsanyi (1995) in applying a game theoretic model of incomplete information, where players have less than full information about each other’s payoff functions. Based on the Bayesian methodology, the two players have expectations in the form of subjective probability distributions. We use a lottery to assign types to players, before any moves are made in the game (this justifies how we are choosing types – we can also change the probability distributions). The two players then try to estimate the probability of each others’ types, subject to the information that is commonly available. In order to solve the model, the game of incomplete information will be reinterpreted as a game with complete and imperfect information, by transforming the basic mathematical structure. (This is just substantiating why we are drawing the game the way we are).

# Too cool for school? Signalling and countersignalling

## Authors: Nick Feltovich, Richmond Harbaugh and Ted To

Source: RAND Journal of Economics Vol. 33, No. 4, Winter 2002 pp. 630–649

It could be interesting to structure the payoffs in such a way that an organized student doesn’t need to signal she is organized, because she is organized. Feltovich, Harbaugh and To show that it can be beneficial to not send a signal of a “good” type (to differentiate them from the “bad” type). It can be beneficial to save the cost of signaling if there is a high chance the high types will be separated in any case. In our case, say the lecturer has access to test scores and assumes a student with a high test score is more organized.

# Refinement Criteria

* Rationalization in Signaling Games: Theory and Applications - Pierpaolo Battigalli
* Equilibrium Selection in Signaling Games - Jeffrey S. Banks and Joel Sobel

Text, letter

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