The Nash Program: a broader interpretation

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The Nash program is an important research agenda initiated in Nash (1953) in order to bridge the gap between the noncooperative and cooperative branches of game theory. Many results can be found in it, and the reader is referred to Serrano (2005, 2008) for two complementary surveys. With this brief piece, I would like to make a few points that summarize my views in terms of how the program should move forward.

1. The Nash program should be understood in broad terms, i.e., as a framework to keep the dialogue between the two counterparts of game theory always open. In the end, what the two branches of game theory offer is a useful set of tools and approaches (axiomatic, strategic, evolutionary, experimental) with the aim of shedding light on social and economic problems. An approach that emphasizes connections among different areas can only enhance our understanding of the solutions we propose. See Aumann (1987) for a similar perspective. See Nash *et al.* (2012) for a recent interesting application of the Nash program in the experimental laboratory.

2. In domains in which other approaches (e.g., the axiomatic route) find difficulties identifying solutions, the analysis of strategic-form or extensiveform bargaining games, as proposed in the Nash program, may be a way to make headway in finding predictions, which can then orient researchers in the axiomatic arena. This has happened, for example, in the extension of certain solutions from the transferable-utility domain to the nontransferableutility domain (Hart and Mas-Colell, 1996), or in the analysis of games in partition function form, which model coalitional externalities (Maskin, 2003).

3. One additional nice feature of many mechanisms in the Nash program is simplicity, which should always be a desideratum in terms of increasing their

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applicability in real-world situations. Here, the perspective provided by Roth (2002) on market design also comes to mind.

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