

Towards a theory of contest played by humans rather than by economic agents

Dimitry Rtischev

Professor, Faculty of Economics, Gakushuin University, Tokyo, Japan

Contests involving humans are much more complex than contests considered in most economic models. First, unlike economic agents, contesting humans can inflict and suffer physical and emotional pain and injuries. Second, humans are heterogeneous and can choose certain contests and opponents while avoiding others. In contrast, most economic models require that agents play a particular type of contest against a particular type of opponent. Third, humans are a product of evolutionary selection which presumably favored traits helpful in strategic interactions with fellow humans. Such traits include not only rational thinking that economic agents rely on, but also feelings, emotions, and theory of mind. I discuss two attempts to model some of the above. Using the indirect evolutionary approach (Guth and Kliemt, 1998), I combine long-run population-level selection of traits and short-run individual-level rational choice. The first model considers vulnerability to pain, derives conditions under which vulnerable agents appear in evolutionarily stable populations, and shows that vulnerability can foster cooperation. (Rtischev 2011) In the second model, the traits subject to evolution are mindsight/blindness and transparency/opaqueness, in the sense that agents with mindsight can see the strategy sets of transparent agents, blind agents cannot see others' strategy sets, and opaque agents hide their strategy sets from others. (Rtischev 2015) The model shows that mindsight and transparency can evolve even if they carry a cost, and demonstrates how an evolved theory of mind can affect outcomes in strategic interactions.

References

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