

"A man is
great by
deeds, not by
birth"

-Chanakya

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The Interplay of Identity and Social Network from an Evolutionary Game Theoretic Perspective

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Abstract:

In this paper, we attempt to model the pattern of human social connection. We have observed that in the daily run of life, people always choose their fellow travelers in some way or other. We hypothesize that such a choice of connection is not random, rather it follows a well-defined dynamic process. As examples, in a public transport, when someone is choosing a seat among many available, or when an under-graduate student is deciding on the supervisor for her graduate studies, or when a child goes to school and instantly makes friend with a certain section of children and not all, it suggests a manifestation of a specific preference of connecting to some kind of people over the others. We, in this paper, model the preference structure that determines the pattern of human social connections. We also suggest an evolutionary mechanism that is likely to be operative behind the existing pattern of choice.

Keywords: Evolutionary Game, Social Network, Identity, Social Capital

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