Who Are We Trusting? A Category-Based Formalisation of Trust

Sergio Lo Iacono, Martina Testori January 2022 <u>Cooperation</u>, <u>Trust</u>, <u>Category-Based Formalisation</u>



Abstract

In the last thirty years, trust has gained momentum across fields, from economics, psychology and sociology to philosophy and political science. The complexity of the notion has greatly grown, and various conceptualisations of trust have been at the centre of heated academic debates. On the other hand, the three-part formalisation of the trust relation, i.e., "A trusts B to do X", has remained mostly unchanged over the years. This "classic formalisation" relies on a case-by-case approach whereby we trust one individual at the time in regard to one specific action. As a result, trust towards groups of people can be established only by evaluating the expected trustworthiness of the vast majority of the individuals in the group, which is often unfeasible. Nevertheless, empirical evidence shows that trust towards large groups (e.g., our fellow citizens, the government, etc.) frequently occurs and it meaningfully correlates with other theoretically pertinent concepts. To overcome this ambiguity, we extend the classical formalisation of trust assuming that people adopt a deductive, top-down approach to relate with their social surroundings. We propose a category-based formalisation of the trust relation, whereby people classify others on the basis of a set of properties and formulate expectations about their reliability. As such, our formalisation encapsulates and expands the classic formalisation, proposing an annotation of the trust relation that encompasses both particular and general forms of trust.