

## **Merging information**

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### **Abstract**

After giving a brief survey of the existing literature on merging beliefs and information in multi-agent systems, where agents mostly occur implicitly (generally, as suffixes of belief/trust operators), we shall focus on logical languages that talk about agents explicitly. A logic of opinion is proposed, where agents' opinion about events as well as other agents are expressed. Complete axiomatization of this logic is given. We also propose a logic of opinion, belief and preferences, provide a straightforward complete axiomatization, and then discuss about the extreme poverty of this new language in terms of expressing real life communication situations. We end our talk by providing some expressions regarding those situations we intend to capture, and the corresponding conditions on the situation models.