

Social Aspects of Cognition and Computing Symposium 2016 Annual Convention of the Society for the Study of Artificial Intelligence and Simulation of Behaviour (SSAISB)

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The Symposium falls into the relatively new area of the intersection of computer science and social sciences. Known as social computing, this intersection has far reaching consequences for many fields including AI and philosophy. In order to have a fruitful discussion we intend social computing in a broad sense to explore different levels of social behavior in computational systems, both natural and artificial. It mostly focuses on the following topics:

I. Social media and discourse modelling. Interactions on social media such as Twitter or comment sections differ from "natural" dialogues in ways which present challenges for theories of discourse, dialogue and argumentation such as RST, SDRT or models influenced by Traum, Cohen & Levesque, Walton & Krabbe and others; as well as philosophical approaches (Brandom, Habermas).

On the one hand, participation in online dialogue is typically fluid; interlocutors can join or leave a conversation without formality, it is problematic to assign distinct roles such as "addressee" or "overhearer" or 2nd vs 3rd person, participants may be unknown to each other and have only sparse models of each others' backgrounds and beliefs. On the other, there may be direct access to participants' posting history from which can be extracted a (possibly partial and/or inconsistent) "commitment store" in the sense of Hamblin or Walton & Krabbe.

II. Strategies for analyzing the problem of the relationship between language, society and AI:

Searle presented an interesting theory of representation based on the mind's capacities to represent objects and to the linguistic capacities to extend the representation to social entities. Brandom introduces compelling notion of representation in social terms and explores the differences between human and artificial mind. Interesting ideas come from the relationship between computational social ontology and deontology; deontology, language and freedom or autonomy (Searle, Smith, Habermas, Brandom among others); social dimensions of autonomy and language learning (Murray et al) and issues related to social robotics (Fong et al.)

III. Social computing and online relationships:

Compared with personal computing, the concept of social computing attempts to capture the online relationships that

exist among users, or between users and—for instance—service providers and businesses. Yet this can engender apparent contradictions. For example, one current prerequisite of online social media is that individual users interact via a (more or less formal) platform, which requires participation by these discrete agents and includes (again, more or less) rigidity of structures. Systems and modes of social engagement can be prescriptive, limiting, or can even preclude or deter offline social engagement. Just how social is social media?

IV. The rise of social computing and ethical issues

The rise of social computing has compounded existing ethical issues as well as generating new ones, including (but not limited to): informed consent and willing participation; data sharing and privacy; copyright and ownership of ideas and thoughts; 'right to be forgotten' legislation; manipulation by advertisers, companies and political factions; crowdsourcing and the rise of online political movements; problem of the 'filter-bubble'; safety and identity fraud, etc..

The contributions provide very interesting arguments on these topics.

Basti considers the part of social robotics which refers to the theory of the so-called "social welfare function". He provides a deep analysis of the logic of the "informational basis of social choice" (Sen). Moreover he shows similarity with the contemporary QFT. Cavaliere and Ingrassia propose a logical device, namely the "distinctive syllogistic" which has important practical results for AI. Kibble establishes an interesting connection between "practice theory" in Sociology and recent strands in AI (Heideggerian and enactive). Cappuccio discusses the "frame problem" in social robotics and starts from Dreyfus and Dennet. He addresses to the solution given by Turing himself. Giovagnoli aims at weakening the classical view of the "autonomous knower" by discussing social conceptions of autonomy. She moves from the "Scorekeeping model" (Brandom) to sketch the structure of a plausible social role. Formanova focuses on the shift from individual epistemology to social epistemology about the problem of "justified true belief" (Hegel, Wittgenstein). Stancati and Gallo provide an original view on the notion of "extended mind". Starting from the mind/body problem, they highlight the connections and implications between mind and

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new technologies. Crocchiolo has a different view about the mind/body problem. He considers the mind and body units as euro-hormonal system-endowed “survival and reproduction machines” of underlying genes. Moffat analyses the “Ultimatum game” in AI to underscore the role of emotions in interactions. Moreover, he aims at overcoming the classical “rational-choice” model. Zipoli Caiani offers an analysis of the integrated process of pattern detection and action selection in natural cognitive systems.

D’Amodio offers an original analysis of the online talking. By referring to some ideas from Berruto, he introduces the dimensions of the “Community of Digital Talking”, which seems to be characterized by categories different from those of the classical analysis of ordinary language. Santoro faces the problem of rights in digital sphere by especially addressing to Big Data. Idaewor introduces some fundamental points on the constitution of social reality (Searle) and Orlando contrasts this view by referring to Ferraris notion of “documentality”.