COST ACTION CLOSING CONFERENCE

Universidade NOVA de Lisboa
Campus de Campolide – Reitoria
1099-032 Lisbon, Portugal

SESSION 1   MAIN ACHIEVEMENTS: PROJECTS

10:30 – 11:00

MARCIN LEWIŃSKI (NOVA University Lisbon, PT)

Basic numbers, books, papers, and reports

11:00 – 11:30

ANNA DE LIDDO (Open University, UK)
& SARA GRECO (Università della Svizzera italiana, Lugano, CH)

Presentation of the Project
Augmenting Participation, Co-Creation, Trust and Transparency in Deliberative Democracy at All Scales (ORBIS)

1) Funding Agency: Horizon Europe programme of the European Commission, the call HORIZON-CL2-2022-DEMOCRACY-01 on "Reshaping democracies"
2) Total funding: € 2.8 Milion
3) Period: 2023-2026
4) Scientific Coordinator: Prof. Anna De Liddo, Open University, UK
5) Project Coordinator: Prof. Francesca Rizzo, Polytechnic Of Milan, IT

ORBIS addresses the disconnects between ambitious ideas and collective actions at a large socio-technical scale. It responds to the profound lack of dialogue between citizenship and policy making institutions by providing a theoretically sound and highly pragmatic socio-technical solution to enable the transition to a more inclusive, transparent and trustful Deliberative Democracy in Europe. The project shapes and supports new democratic models that are developed through deliberative democracy processes; it follows a socio-constructive approach in which deliberative democracy is not a theory which prescribes new democratic practices and models, but rather the process through which we can collectively imagine and realize them.

ORBIS provides new ways to understand and facilitate the emergence of new participatory democracy models, together with the mechanisms to scale them up and consolidate them at institutional level. It delivers: (i) a sound methodology for deliberative participation and co-creation at scale; (ii) novel AI-enhanced tools for deliberative participation across diverse settings; (iii) a novel socio-technical approach that augments the articulation between deliberative processes and representative institutions in liberal democracies; (iv) new evidence-based democratic models that emerge from the application of citizen deliberation processes; (v) demonstrated measurable impact of such innovations in real-world settings.

The project builds on cutting-edge AI tools and technologies to develop a sustainable digital solution, and bridges theories and technological solutions from the fields of political and social science, social innovation, Artificial Intelligence, argumentation and digital democracy. The achievement of the project's goal is validated through six use cases addressing contemporary issues at different scales and settings, experimenting with different civic participation and deliberation models, and involving diverse types of stakeholders.

11:30 – 12:00

ELENA CABRIO (Université Côte d'Azur, FR)
& MARCIN LEWIŃSKI (NOVA University Lisbon, PT)

Presentation of the Project
ArgumeNtaTIon-Driven explainable artificial intelligence fOr digiTal mEdicine (ANTIDOTE)

1) Funding Agency: CHIST-ERA, Horizon Europe ERA-NET CoFund
2) Total funding: € 957.478
3) Period: 2021-2024
4) PIs: Elena Cabrio & Serena Villata, Université Côte d'Azur, FR;
   PI of the Portuguese team: Marcin Lewiński, NOVA University Lisbon, PT

Providing high quality explanations for AI predictions based on machine learning requires combining several interrelated aspects, including, among the others: selecting a proper level of generality/specificity of the explanation, considering assumptions about the familiarity of the explanation beneficiary with the AI task under consideration, referring to specific elements that have contributed to the decision, making use of additional knowledge (e.g. metadata) which might not be part of the prediction process, selecting appropriate examples, providing evidences supporting negative hypothesis, and the capacity to formulate the explanation in a clearly interpretable, and possibly convincing, way. According to the above considerations, ANTIDOTE fosters an integrated vision of explainable AI, where low level characteristics of the deep learning process are combined with higher level schemas proper of the human argumentation capacity. The ANTIDOTE integrated vision is supported by three considerations: (i) there is a consensus that neural architectures exhibit a weak correlation between internal states of the network (e.g. weights assumed by single nodes) and the network classification outcome; (ii) high quality explanations are crucially based on

argumentation mechanisms (e.g. provide supporting examples and rejected alternatives), that are, to a large extent, task independent; (iii) in real settings, providing explanations is inherently an interactive process, where an explanatory dialogue takes place between the system and the user. Accordingly, ANTIDOTE will exploit cross-disciplinary competences in three areas, i.e. deep learning, argumentation and interactivity, to support a broader and innovative view of explainable AI. Although we envision a general integrated approach to explainable AI, we will focus on a number of deep learning tasks in the medical domain, where the need for high quality explanations, both to clinicians and to patients, is perhaps more critical than in other domains.

12:00 – 12:30

STEVE OSWALD & DANIEL DE OLIVEIRA FERNANDES (University of Fribourg, CH)

Presentation of the Project
Implicit Meaning in Argumentation: Functions, Uses and Norms (IMAFUN)

1) Funding Agency: SNSF, COST SNF project
2) Total funding: € 190.000
3) Period: 2021-2023
4) PI: Steve Oswald, University of Fribourg, CH

Goal: The project seeks to (i) map types and functions of implicit meaning in argumentative discourse, and (ii) characterise types of rhetorical effects from a pragmatic vantage point. Through experimental designs, the project will furthermore investigate (iii) how different types of implicit meaning are conducive to different types of rhetorical effects and (iv) provide insights on how implicit meaning – and its problematic uses – can affect norms of public argument.

STEVE OSWALD & RAMY YOUNIS (University of Fribourg, CH)

Presentation of the Project
AMoRe - An Argumentative Model of Rephrase: A Pragmatic and Rhetorical Approach

1) Funding Agency: SNSF, Lead Agency Scheme
2) Total funding: € 700.000
3) Period: 2022-2025
4) PIs: Steve Oswald, University of Fribourg, CH & Marcin Koszowy, Warsaw University of Technology, PL

Goal: In terms of fundamental research, the project's interdisciplinary nature (i) provides the first empirically-driven, theoretically-informed and experimentally-validated account of the speech act of rephrase and (ii) constitutes the first interdisciplinary study to combine corpus and experimental methodologies in speech act theoretic pragmatics.

We expect to provide an exhaustive cartography of the nature, structures and effects of rephrase in argumentative discourse. We anticipate that our model of rephrase (and its misuse) will yield new rephrase corpora building guidelines ready for implementation in AI argument technologies (argument mining and argument analytics) and that (mis)uses of rephrase will be shown to be rhetorically effective by virtue of their various cognitive advantages. In terms of scientific impact, AMoRe will demonstrate the relevance of interdisciplinary research to (i) deepen our understanding of the speech act of rephrase, and, more broadly, (ii) investigate argumentative phenomena at the interface of language and cognition, with clear benefits for all scientific communities AMoRe brings together (linguists, philosophers, argumentation theorists, psychologists). In terms of societal impact, the project promises to make accessible novel resources for digital literacy and critical analysis of public discourse, which are invaluable in the exercise of citizenship and public deliberation.