

Anonymity, Immediacy and Electoral Delegation in Socio-Technical Networked Computer Systems

Jean Botev

Faculty of Science, Technology and Communication
Computer Science and Communications Research Unit
University of Luxembourg
jean.botev@uni.lu

Abstract: Political decision-making is a key concern for any social group; the clarity, effectiveness and participatory characteristics of the process are central to democratic societies.

Networked computer systems in general and the increasing attention to social aspects in their purpose and design offer novel means for participation to the individual, but also entail specific systemic problems. These can be either variations of existing general sociological and political issues, or arising also from the system's specific technical design and structure. This talk shall provide an overview of IT systems for collective dynamic decision-making and their peculiarities, focusing on the three core interacting aspects: anonymity, immediacy and electoral delegation.

While the idea of delegated voting dates back to the 19th century, today's networked computer technology enables its realization without logistic restrictions, thus increasingly blurring the concepts of direct, participatory democracy and indirect, representative democracy, as well as implicit and explicit voting.

An important aspect for the dynamic bottom-up formation of efficient hierarchical structures is the combination of meritocratic characteristics and immediacy of the delegation, i.e., the amount of time between granting and withdrawing deciding votes both for the agenda setting and the actual decision-making, which allows for the fine-grained transition between participatory and representative modes.

In current socially aware systems, the role of anonymity and/or pseudonymity is highly controversial. Traditionally, electoral anonymity implies freedom from persecution and freedom of speech while legitimization is taken care of by an external authority which is cut out from the decision-making process as such. However, in engineered networked systems that explicitly involve social structure, also the authorization or legitimization becomes critical as it is a part of or at least directly connected to the system itself, causing potential for misuse both internally and externally – a dilemma that needs to be resolved in order to establish the necessary level of acceptance with regards to the perception and use of such systems and the credibility of the obtained results.

Starting from these considerations, by discussing examples of recently deployed systems from the German political landscape, community management and organizational sector, this talk intends to contribute to the interdisciplinary understanding of crucial aspects in how socio-technical networked computer systems and their users interact with each other.