

On the stability of consensus in language and opinion dynamics

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Language and communication systems are beautiful examples of how a population of individuals can bootstrap almost “perfectly” shared conventions at different degrees of complexity (names, categories, syntax structures). On the other hand, opinion systems display many routes through which consensus can be broken leading instead to temporary or permanent cluster segregation, e.g., the emergence of echo-chambers. In this talk I’ll briefly review how the underlying dynamics of languages and opinions can be mathematically captured, focusing in particular on the resilience and stability of linguistic and opinions structures, trying to answer to questions like: why do linguistics structures emerge and survive on evolutionary time-scales? or is it possible to destroy echo-chambers to restore a better information ecology?