Rethinking 'overinformativeness' as rationally redundant reference

Abstract: Referring is one of the most basic and prevalent uses of language. How do speakers choose from the wealth of referring expressions at their disposal? Rational theories of language use have come under attack for decades for not being able to account for the seemingly irrational overinformativeness ubiquitous in referring expressions. I present a novel production model of referring expressions within the Rational Speech Act framework that treats speakers as agents that soft-optimally trade off cost and informativeness of utterances. Crucially, the assumption of deterministic meanings is relaxed. This allows for capturing a large number of seemingly disparate phenomena within one unified framework: the basic asymmetry in speakers’ propensity to overmodify with color rather than size; the increase in overmodification in complex scenes; the increase in overmodification with atypical features; and the preference for basic level reference in nominal reference. The findings cast a new light on the production of referring expressions: rather than being wastefully overinformative, reference is rationally redundant. This implicates a production system geared towards communicative efficiency.