Pragmatics of Rhetorical Questions: Characterizing & Quantifying Uninformativity

Rhetorical questions (RQs) typically have the structure of a question but the force of an assertion and are generally defined as questions that neither seek information nor elicit an answer.

(1) a. Did John lift a finger to help? → no b. What has John ever done to help?→ ∅

Most existing accounts posit that RQs assert either a negative answer (1a) or a null answer (1b) selected from the answer set of the original non-rhetorical question (Banuazizi & Creswell, 1999; Borkin, 1971; Han, 1998; Krifka, 1995; Ladusaw, 1980; Lee, 1994; Sadock, 1971). Since adjunct questions presuppose the truth of the proposition contained in the question, RQs are assumed to be restricted to yes/no and argument questions (Gutierrez-Rexach, 1996). An alternative information-theoretic approach set forth by van Rooy (2003) posits that RQs are indeed information-seeking, but that the positions of the equi-probable answers along a relevant scale are both so unfavorable as to render the question rhetorical: For (1a), the answers *Yes, he lifted a finger* and *No, he didn't lift a finger* are both low on a scale of possible contributions of help.

The work presented here shows that the possible types of RQs extend beyond those modeled under previous accounts. I use RQs extracted from a discourse-annotated version of the Switchboard corpus of conversational English (Jurafsky et al., 1998). As I will argue, this extended dataset shows that a sufficient RQ account must consider the common-ground properties of the contexts in which RQs are uttered. I introduce three felicity conditions that, when met, license the use of an RQ: The first ensures that speaker and listener commitments are preserved (as in a regular question, Gunlogson, 2001); the second two rely on measures of answer expectedness (building on van Rooy's use of probabilities within the set of possible answers) and answer similarity (across two conversation participants) in order to formalize the nature of the obvious and similar answers that RQs evoke. I then return to the Switchboard conversations in which the RQ data appear to show how speakers signal and listeners respond to these conditions.

The corpus not only contains RQs like those previously attested—RQs that assert a negative statement (*Can you force somebody to be a good productive citizen?*) or an empty-set answer (*Who would steal a newspaper?*)—but also ones with non-negative answers (*Has the educational system been so watered down that anybody who's above average is now gifted?* → yes), non-null answers (*What's going to happen to these* [*delinquent*] *kids when they grow up?* → something bad), and non-argument answers (*How soon are we going to start to get our money's worth?* → not soon). Most notably for the argument that the meaning of RQs is not inherently derivable from the utterance itself but rather depends on context, RQs appear whose answer relies entirely on context (*Where do you think* [*the police*] *target their efforts?* → law-abiding citizens). These questions all pass proposed tests for distinguishing RQs from regular questions, but remain unaccounted for by existing models.

The analysis I propose builds on Gunlogson's model of common ground and an assignment of probabilities to answers in a question's answer set (following van Rooy). The first felicity condition states that RQs do not update either participant's public commitments. The second quantifies the skewed probability distribution over the set of possible answers, assigning a sufficient proportion of the probability mass to a single obvious answer. The third ensures that the obvious answer is the same across speaker and listener belief sets. In support of the proposed account, I report on the rate at which speakers use language in RQs that signals a shared and obvious answer (use of *you know*) and the rate at which listeners respond to RQs with an affirmation of their matching belief (use of agreements/backchannels). The results suggest that the role of RQs in discourse is to highlight shared beliefs, despite their structural similarity to regular questions and their non-information-seeking status which resembles assertions.

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