Towards an explanatory account of conditional perfection

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Geis and Zwicky (1971) argue for the existence of a class of pragmatic inferential phenomena in which there is a "quasi-regular association" between the logical form of a sentence its associated. The best-known of their "invited inferences" is *conditional perfection*, illustrated in (1):

- (1) a. If you mow the lawn, I'll give you five dollars.
 - b. If you don't mow the lawn, I won't give you five dollars.
 - c. If and only if you mow the lawn, I will give you five dollars.

The utterance of a conditional like (1)a is claimed to imply the truth of (1)b, and thus to give rise to the "perfected" biconditional (1)c, when the utterance and inference are taken together.

The tendency towards biconditional interpretation has been robustly observed, and the consensus that emerges from an extensive literature on perfection (see van der Auwera 1997) is that the phenomenon represents a (Levinsonian) generalized conversational implicature (GCI). In particular, perfection is seen as a "default" inference, which goes through when certain information and/or contextual conditions are met. A fully explanatory account that goes beyond this point is lacking, however, due in part to the absence of any real agreement over what the empirical conditions eliciting perfection are.

From a more theoretical perspective, perfection as a GCI sits in the crux of the conflict between Levinson's (2000) Q- and I-heuristics ("make your contribution as informative as required," and "don't communicate unnecessary information," respectively), and this complicates a formal description of the mechanism deriving biconditionality. Some accounts (Atlas and Levinson 1981, Levinson 2000) regard the biconditional as surfacing due to its status as the "most informative" of the available readings for a conditional, whereas others (Cornulier 1983, van der Auwera 1997, Horn 2000, von Fintel 2001) regard it as belonging to the class of scalar implicature, arising from the negation of the stronger element on a proposed Horn scale such as $\langle if p, q; q no matter what \rangle$. Neither approach is fully satisfactory: the former, I-based explanation does not attempt to capture the origin of the biconditional interpretation; the Q-based account, on the other hand, only derives the implication that there are conditions on q, but fails to account for the jump from not q no matter what to if not p, not q.

In working towards an explanatory account of conditional perfection, I attempt to address both the absence of an empirical generalization as well as the theoretical (Q-I) conflict. Based on an examination of the types and (illocutionary) uses of conditionals that are typically perfected, I argue that the capturing generalization is that conditionals receive biconditional meaning when they are understood as being asserted as complete responses to polar questions on their consequents. Thus, if the discourse context develops the informational need for yes/no q?, the unqualified conditional response *if* p, q will be understood as communicating that q is biconditionally (or completely) dependent on p. This generalization, put together with the insight from von Fintel (2001) that the mechanism of *exhaustive interpretation* (Groenendijk and Stokhof 1984) can "strengthen" scalar inferences, allows a resolution of the theoretical clash between Q-and I-based accounts. In particular, the biconditional interpretation is a direct result of (the contextual need for) complete information, and the formal operation of exhaustive interpretation (cf. also *predicate circumscription*, McCarthy 1980, 1986), applied in this case, derives not only biconditionality, but also a number of the scalar implicatures to which perfection has been likened.

This approach goes against the original notion of a class of "invited inferences" distinct from implicature. However, it offers in place of this a view of GCIs as inferences that are derived on the basis of "common sense" reasoning patterns (of which predicate circumscription/exhaustive interpretation is an instance). This opens up a particularly interesting avenue from which to develop GCI theory: it maintains the central notion of "default" inference, but aims at representing the somewhat *ad hoc* (and often conflicting) heuristics of cooperative communication instead as generalizations over formal reasoning strategies that operate at the level of discourse and/or information structure.

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