Exhaustivity and the presupposition of questions

Danny Fox
Massachusetts Institute of Technology

In this talk I will adopt the assumption, common in much current literature, that the denotation of a question is not always directly a partition (of logical space or of the common ground). Instead, a question denotes a simple set of propositions (not necessarily mutually exclusive), which can nonetheless induce a partition, and thus retrieve notions useful for pragmatics:

\[ \text{Partition}(Q) \text{ is the set of equivalence classes under the relation } w \sim w' \text{ iff } \forall p \in Q [p(w) = p(w')] \]

I will propose that the partition induced by a question is also needed for the specification of the question’s presupposition: a question, \( Q \), presupposes that every cell in the partition it induces can be identified by a member of \( Q \), via Exhaustification \( (\forall C \in \text{Partition}(Q) [\exists p \in Q [\text{Exh}(Q,p) = C]]) \), and conversely, that every member of \( Q \) identifies a cell in the partition \( (\forall p \in Q [\exists C \in \text{Partition}(Q) [\text{Exh}(Q,p) = C]]) \). I will argue that this presupposition (together with an appropriate definition of \( \text{exh} \)) provides a characterization of the conditions under which a question can receive a “mention some” interpretation and at the same time allows for an improvement on previous accounts of negative islands.

Time permitting, I will try to explain how my proposal, if right, reinforces a conception of the interface between grammar and pragmatics for which I have argued elsewhere, one in which conversational principles can be defended an a-priori grounds, and Exhaustification is a formal device allowing speakers to convey all of the information they have relevant to a given question (thereby satisfying a non-stipulative maxim of quantity).