Intervention effects as diagnosing interrogative LFs
Hadas Kotek, MIT

Intervention effects have been used in recent literature as a diagnosis for covert *wh*-movement in multiple questions. It is known that English allows both superiority-obeying questions and superiority-violating questions with D-linked *wh*-phrases (1a-b). When an intervener such as *only* is introduced into the questions, we observe that the superiority-obeying (2a) remains grammatical, but the superiority-violating (2b) becomes ungrammatical (Pesetsky 2000).

(1) a. Which student did John introduce to which professor?   Superiority-obeying
    b. Which professor did John introduce which student to?   Superiority-violating
(2) a. Which student did John <u>only</u> introduce to which professor?
    b. *Which professor did John <u>only</u> introduce which student to?

Intervention effects as in (2b) have been analyzed as resulting from an illicit interaction between in-situ *wh*-words and c-commanding focus-sensitive operators (Beck 2006). Consequently, the difference in grammaticality between (2a) and (2b) has been argued to show that superiority-obeying questions involve covert movement of the (seemingly) in-situ *wh*-phrase to the question head C. Superiority-violating questions, on the other hand, involve a single overt movement operation, with the other *wh*-phrase remaining in-situ at LF. This analysis correctly predicts that any focus-sensitive item occurring between the in-situ *wh*-phrase and C will cause ungrammaticality.

In this talk, I will present ideas for an experimental investigation of the syntax and semantics of multiple *wh*-questions, using intervention effects as a diagnosis for their LFs. In particular, I will pay attention to real-time processing of the (apparently) in-situ *wh*-phrase in superiority-obeying questions that contain Antecedent Contained Deletion (Hackl et al. 2011). The paradigm I develop can help distinguish between a Hamblin view of question-semantics in which *wh*-words can in principle be interpreted in-situ and only move to C if other factors force them to, and a Karttunen view of question-semantics in which *wh*-phrases must always move to C for interpretation. I will present results from a pilot experiment which are compatible with a Hamblin view but pose a serious problem for a strict Karttunen view.