Focus on Conditional and Quantificational Coordination

Culicover and Jackendoff (1997) (following Culicover 1970, 1972) discuss sentences that take the form of conjunctions but are interpreted as conditionals. I will adopt Russell's (2007) terminology and call this type of sentence a conditional coordination (CC). For instance, take the apparent conjunction in (1), which is interpreted like the conditional in (2).

Culicover and Jackendoff argue that sentences like (1) involve a word they term $_{LS}$ and. $_{LS}$ and is homophonous to standard conjunctive and, but creates structures that are syntactically coordinations and semantically subordinations. In this paper, I instead propose a completely compositional semantics for CCs and the related phenomenon of Quantification Coordination (QC), using the standard definition of and.

As a first step towards this analysis, notice that CCs support adverbs of quantification (AQ) in the Lewis (1975) sense, as shown in (3). In (3), rarely is the main quantifier, as it is in the conditional sentence (4). Taking the standard step in the Lewis/Kratzer/Heim story of conditionals, I will assume that a CC without an overt AQ has a silent one. For instance, the (silent) AQ in (1) is one that means roughly always or generally. I assume that this AQ, overt or covert, takes scope at the top of the sentence.

Second, notice that there is an obligatory intonation pattern to CCs: rising pitch on the first conjunct, an intonational break before the second conjunct, and falling pitch on the second conjunct, as notated in (5). Based on this classic topic-comment intonation pattern (cf. Krifka et al 1995), I assume that part or all of the second conjunct in a CC is obligatorily focused. In (5), the entire second conjunct is focussed, and therefore the focus semantic value (FSV, see Rooth 1985) is the set of propositions such that you drink too much at a bar and something happens. I assume a meaning for the AQ where the restrictor is entirely determined by the FSV (cf. Partee 1992). Thus, given the meaning in (6) for always, (7) has the meaning paraphrased in (8). The restrictor of the AQ ALWAYS is the trivialization of the FSV of its complement. The nuclear scope is the entire conjunction. The meaning in (8) is essentially the meaning of (7) and thus we have derived a compositional meaning for CCs.

I will next turn to another, related phenomenon, which I call Quantificational Coordination (QC). Consider the sentence in (9) and its paraphrase in (10). Here, instead of an AQ, we have a quantifier most, but the intonation pattern is the same. I assume that this quantifier also takes scope at the top of the sentence and gets its restrictor from the FSV of the rest of the sentence (cf. Herburger 1997, who proposes something similar, but only for weak quantifiers). Therefore, the meaning of the structure in (11) is paraphraseable as in (12). (The two properties student – ignoring the purely syntactic plural – and fail a midterm combine via Predicate Modification.)

An interesting consequence of this analysis is that donkey anaphora in CCs and QCs is no longer mysterious, if we allow indefinites to scope above the conjunction and below the quantifier as in (13). In future work, I plan to explore whether all quantifiers can be treated using definitions like those above. Such a move would have at least two benefits: it would help explain all donkey anaphora in a similar fashion and it would conveniently account for why most natural-language quantifiers are conservative, since the unfocussed portion of the sentence appears in both their restrictor and their nuclear scope.

- (1) You drink too much at a bar, and the bouncer kicks you out.
- (2) If you drink too much at a bar, the bouncer kicks you out.
- (3) Someone breaks the home run record and they are rarely as demonized as Barry Bonds was.
- (4) Rarely, if someone breaks the HR record, are they as demonized as Barry Bonds was.
- (5) You drink too much at a bar | and the bouncer kicks you out\.
- (6) Always $\phi \leftrightarrow$ Every minimal situation s such that $[\cup \llbracket \phi \rrbracket^f](s) = 1$ is part of a minimal situation s' such that $\llbracket \phi \rrbracket^o(s') = 1$.
- (7) [Always you drink too much at a bar and [the bouncer kicks you out]_F]
- (8) Every minimal situation s such that [you drink too much at a bar and something happens] in s is part of a minimal situation s' such that [you drink too much at a bar and the bouncer kicks you out] in s'.
- (9) /Most students fail a midterm | and they want to retake it\.
- (10) \approx Most students who fail a midterm want to retake it.
- (11) Most [$_$ students fail a midterm and [they want to retake it]_F]
- (12) Most x such that x is a student and x fails a midterm and x has another property are such that x is a student and x fails a midterm and x wants to retake it.
- (13) a. [Most x] [\exists midterm y] [x fails y and x wants to retake y]
 - b. Usually $[\exists \text{ student } x]$ $[\exists \text{ midterm } y]$ [x fails y and x wants to retake y]