Conditional questions as matrix questions

We offer and argue for a new analysis of so-called 'conditional questions', exemplified by (1).

(1) a. If it's raining, who will we go to?
b. If Alfonso comes to the party, will Joanna leave? (Isaacs and Rawlins 2008)

The 'context update' approach – Existing analyses of questions in conditionals share the following basic idea: the proposition in the antecedent specifies the 'local context' for the question in the consequent (Isaacs and Rawlins 2008, Krifka 2019, Bledin and Rawlins 2019). In (1a), the context is first updated to the set of worlds in which it's raining, and then an issue is raised with respect to this new context by, say, partitioning it into cells which represent answers to the embedded question. Such analyses basically assume that at the level of compositional semantics, *if* connects a proposition with a question.

Problem – The context update approach is too strong: while *if* seems to be able to connect a propsition and a question, connectives like *and* and *or* cannot do this, as shown in (2a) and (5c).

(2) a. #It's (both) raining and who will we go to?
b. #It's (either) not raining or who will we go to?

both *and* and *or* have update semantics; in conjunction, the first conjunct is generally the local context of the second, and in disjunction, the negation of the first disjunct is the local context of the second (Karttunen 1974, Heim 1982). But (2) are both deviant. On the context update approach to (1) it is mysterious why (2) can't have the same meaning as (1a). If grammar allows *if* to compose a proposition with a question, why doesn't it allow the same for *and* and *or*?

Contribution – In this work we deny the context update approach, with its problematic assumption that *if* connects a proposition and a question, and propose a minimal theory of conditional questions on which they are in fact run-of-the-mill matrix questions—questions about conditional statements. On our view, *if* always connects two propositions, and conditional questions are cases in which a question operator scopes over a conditional. Our theory is called 'minimal' in the sense that it combines ingredients all of which have been independently argued for in the syntactic, semantic and pragmatic literature on conditionals and on questions, while maintaining all the advantages of the context-update approach and making some better predictions.

Analysis – For the syntax, the main ingredient in our proposal is that the *if*-clause adverbial originates inside the question nucleus (and undergoes movement). We illustrate below for (1a).

(3) a. Base structure: $[_{vP}$ we will go to who $[_{AdvP}$ if it's raining]]
b. WH-movement: who λ_1 $[_{vP}$ we will go to t_1 $[_{AdvP}$ if it's raining]]
c. Adverb fronting: $[_{AdvP}$ if it's raining] who λ_1 $[_{vP}$ we will go to t_1]

We assume that adverb fronting in (3c), which results in the final stage for linearization (and PF), is an operation that at least optionally doesn't feed the semantics, i.e. the *if*-clause reconstructs into the question nucleus. For independent arguments that *if*-clauses can undergo reconstruction see Iatridou (1991: 26–33). The semantics thus reads off the schematic structure in (3b). Adopting standard assumptions about question interpretation (Karttunen 1977 et seq.; this means there is also a proto-question operator which we omitted in (3b)), the meaning of (3b) is schematically given in (4) (the analysis is easily extendable to polar questions as in (1b).)

(4) a. $\lambda p.\ \exists x[p = [\text{it's raining } \boxdot\!\!\rightarrow \text{ we will go to } x]]$
b. {If it's raining we will go to Ana, if it's raining we will go to Fred, ... }

As for the semantics of conditionals, we adopt the Stalnaker-Lewis-Schlenker (SLS) approach, according to which *if*-clauses denote definite descriptions of worlds (Stalnaker 1968, Lewis 1973), Schlenker 2004). The question nucleus in (4a) is therefore interpreted as *we will go*

to x in the closest rain world(s). This approach is crucial for understanding two properties of conditional questions: the partition induced by them, and the presuppositions they trigger.

Presuppositions. The presupposition generated here is merely that in each world in the context set, there are closest worlds to it (given some relevant domain) in which it rains; this is a fairly trivial presupposition. Moreover, in the case of indicative conditionals, which come with the additional presupposition that the antecedent is contextually possible (Von Fintel 1998, Gillies 2017), (1) have the further presupposition that the conditional antecedent is contextually possible. This accords with the intuition (Isaacs and Rawlins 2008) that answering an indicative-conditional question with a denial of the antecedent amounts to denying the presupposition that the conditional antecedent is possible.

Partition. A question forms a partition of the context set, perhaps by exhaustifying the members of the question denotation (Fox 2018). The partition induced by (4b) includes no cell corresponding to the negation of the conditional antecedent. Given the SLS semantics, each cell in the partition induced by (4b) groups together both *coming* worlds and *non-coming* worlds in the context set; the only distinction between cells has to do with the value for the conditional consequent in worlds accessible to the worlds in the context set: who we go to in those latter worlds. This matches the intuition (Isaacs and Rawlins 2008) that the denial of the conditional antecedent is not a real (partial or complete) answer to the question.

Further advantage: force of a matrix question. von Fintel and Iatridou (2023) observe that conditional questions have the speech act force of a plain matrix question: they demand an answer right away, and are not interpreted as conveying a conditional request for answer. In other words, (1a) is not understood to mean "In the case it's raining, then give me an answer to the question of who we will go to (but you don't have to answer if it's not raining)". This pragmatic effect is unremarkably predicted on our minimal theory of conditional questions as matrix questions; by contrast, it is not so easily expected on the context-update approach, which essentially treats the question as embedded under a conditional.

Reverse order.

(5) a. Who should we go to if it's raining?
b. #Who should we go to and it's raining?
c. #It's (either) not raining or who will we go to?

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