Conditionals, Monotonicity, and Definite Descriptions

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Overview

Schlenker (2004) argues that if-clauses ought to be analysed as definite descriptions of pluralities of worlds, based on a number of parallels between them and plural definite descriptions. Upholding, and further supporting, this general point, we argue that, while the parallels exist, they are not quite in the same place where Schlenker saw them, and show that bringing into the picture recent insights about the exception-tolerance of plural definites can shed new light on some well-known behaviours of conditionals.

Non-Maximality with Plural Definites

Plural definites can be used to describe situations that contain exceptions to the predication in question as long as those are somehow irrelevant. This possibility disappears in the presence of adnominal or adverbial *all*. (Brisson 1998, Lasersohn 1999, Malamud 2012, Križ 2014)

- (1) All the professors smiled to express their approval of a talk, except for Smith, who is known to virtually never smile anyway.
 - a. The professors smiled.
 - b. #(All) the professors (all) smiled.

If is possible to bring these exceptions up as an afterthought introduced with an adverbial like *of course*, most naturally with an explanation for why they were at first ommitted, but once they are mentioned, the simple plural predication is no longer assertible.

- (2) a. The professors smiled. Of course, Smith didn't, but you know, he almost never does.
 - b. #Smith didn't smile, because he never does, but/although the professors smiled.

Non-Maximality Is Not Reference Restriction

- The reference of anaphoric pronouns includes the exceptions. Even if Smith was an exception to smiling, it's implausible that he would solely remain behind, because that would be a very relevant way of being an exceptions.
 - (3) The professors smiled. Then *they* (all) stood up and left the room.
- In conjunctions, it is possible to interpret the plurality non-maximally with respect to the first predicate, but at the same time read it maximally with respect to the second. It is even possible to strictly enforce this by having adverbial *all* in the second conjunct.
- (4) All the professors except Smith smiled and then left, leaving Smith behind.

 #The professors smiled and then (all) left the room.
- Exceptions due to non-maximality can always felicitously be brought up by an interlocutor, putting the speaker under pressure to justify the ommission. Bringing up individuals outside of the reference, on the other hand, is a complete *non sequitur*.
 - (5) A: The professors smiled.
 - B: Well, actually, Smith didn't.
 - A': Well, yeah, but you know, he NEVER does.
- (6) Uttered at the ENS in Paris.
 - A: The students are happy.
 - B: #Well, actually, the students at the Sorbonne aren't.
 - A': What? I wasn't talking about THOSE!

Salience-Based Reference

Definite descriptions can have their reference restricted by salience. Such cases also behave differently with respect to the above diagnostics. In (7), the pronoun would seem to refer only to those girls who have raised their hands, while *the rest of us* includes those girls who haven't.

- (7) A group of ten boys and ten girls are on an excursion with their teacher B. Three of the girls raised their hand to indicate that they need to go to the bathroom.
 - A: Wait, the girls need to go to the bathroom.
 - B: Okay, but *they*'ll have to catch up with the rest of us.

Imagine further one of the girls who have not raised their hand bringing up herself as a supposed exception. This seems like a complete *non sequitur*, further setting apart this case of actual restricted reference from non-maximality.

- (8) A: Wait, the girls need to go to the bathroom.
 - G: #Well, actually, some of us don't...

Note that such salience-based reference restrictions require a special context and do not easily occur in a narrative environment, unlike ordinary non-maximality. The indefinite *some* would appear to be much more natural in a description of the above situation.

(9) ??The group had to stop because *the* girls needed to go to the bathroom.

Non-Maximality with Conditionals

Conditionals, too, have been known since Lewis (1973) for allowing some sort of exceptions, and adverbials like *necessarily* play a role analogous to that of *all* in the nominal domain (Schlenker 2004).

- (10) Peter and Mary hate each other, so if they meet, they always quarrel and spoil the party. But for the same reason, it is really unlikely that Peter comes if Mary does.
 - a. If Mary comes, Sue will be pleased.
 - b. #If Mary comes, Sue will necessarily be pleased. (No, because in the unlikely event that Peter does come, too, ...)

These exceptions can be mentioned by the speaker in the same non-reversible way. (von Fintel 1999, Gillies 2007)

- (11) a. If Mary comes, Sue will be happy. Of course, not if Peter comes, too, but that's really unlikely.
 - b. #If Mary and Peter come, Sue will be annoyed, but/although if Mary comes, Sue will be happy.
- It is difficult to find clear analogues of (3) and (4). What makes Smith unremarkable and irrelevant as an exception to smiling is that he hardly ever smiles anyway, but that doesn't make him irrelevant as an exception to any other predicate, such as leaving.

What makes a world an irrelevant exception to a conditional, however, is presumably its far-fetchedness and improbability, which has little to do with the consequent proposition. This can, to some extent, be circumvented by adding *necessarily* in one of the two consequent propositions, which, acting as the analogue of *all*, forces it to be exception-intolerant. This yields (12-a) (with modal subordination as the most natural analogue to the pronominal anaphor) and (12-b).

- (12) a. ?If Mary comes, Sue will be pleased. However, John will necessarily be annoyed.
 - b. ?If Mary comes, Sue will be pleased, but John will necessarily be annoyed.

If would seem, however, that these sentences are still slightly odd. Why would a speaker allow some improbable exceptions to Sue's being pleased (such as Peter's coming in addition to Mary), but then emphasise that John will necessarily be annoyed, no exceptions allowed?

- But conditionals pattern exactly like plural definites when it comes to bringing up exceptions.
 - (13) A: If Mary comes, Sue will be pleased.
 - B: Well, actually, if Peter comes, too, Sue won't be pleased.
 - A': Well, yeah, but come on, how likely is that.

Only when a world is clearly not contained in the reference of the if-clause because it has been established as impossible is bringing it up a $non\ sequitur$:

- (14) It is clear that Peter will only come if Mary doesn't.
 - A: If Mary comes, Sue will be pleased.
 - B: #Well, actually, if Peter comes, too, Sue won't be pleased.

If the exceptions in (13) were just outside the reference of the *if*-clause, as they are in all accounts hitherto, bringing them up should be similarly strange as in (14).

Conclusions and Directions

- If-clauses behave in a manner parallel to plural definite descriptions.
- Examples that have been used to support the non-monotonicity of conditionals are actually the analogue of non-maximality in plurals, which is distinct from salience-based reference restriction.
- This does not preclude that *counterfactual* conditionals may be non-monotonic for independent reasons, but then they may not be. This requires further investigation.
- Extending a concrete analysis of non-maximality (Malamud 2012, Križ 2014) to conditionals is likewise a project for the future.

References

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