Isolate if-clauses in dialogue

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1 Introduction

It hardly needs to be said that conditionals are an active area of semantic research. In dialogue, in addition to *if*-clause adjuncts forming conditional constructions or as embedded indirect questions, we can also find speakers using the *if*-clause alone as in (1):

(1) If I hear that bloody one more time. (BNC KP4 605)

To address conditionals from a wider dialogue-based perspective, examples such as (1) cannot be reasonably ignored. Isolate conditional clauses are not an especially well-studied phenomenon, but have still attracted a small (and growing) body of non-formalised work as a cross-linguistic phenomenon, including English (Stirling, 1999), Italian (Vallauri, 2004), Finnish and Swedish (Lindström et al., 2016) and other Germanic languages (D'Hertefelt, 2015). There is a distinct lack of work on isolate *if*-clauses from a formal perspective, though the work on conditionals in Elder (2015) is dialogue-directed and includes a focus on the function of the *if*-clause itself. In doing so it makes space for the consequentless *if*-clause, in particular their use as directives.

We provide a pilot corpus study noting the presence of isolate *if*-clauses in spoken English data, plus an initial general analysis of the relations between lone *if*-clauses at different degrees of 'isolation', and *if*-clauses as part of explicit conditionals.

2 Pilot corpus study

A pilot corpus study was carried out on 300 *if*-clauses found in the spoken section of the BNC. Samples were drawn from a total of 35 files, with 200 taken from informal conversation, and 20 each from meetings, one-to-one tutoring sessions, medical consultations, media discussions, and interviews. The first ten instances of non-embedded *if*-clauses were selected from each¹, skipping those which were immediately interrupted or otherwise too unclear to understand. The annotation can be grouped into two groups, categories for content provision (*precond*, *bkgd*, *poss*), and those related to communication management (*frame*, *hedge*). Not all instances were annotated for a feature in both groups.

Almost four fifths (78.33%) were found to hold only a content-provision function. A large overall minority were of type bkgd, where in context the removal of the if-clause would not degrade the content to the point of misinformation (1.67% were repetition of a preceding if-clause). A non-content use as frame was also found for a large minority, where the if-clause was judged to provide a topic or case relative to which other content was relevant, while a small number performed other communicative functions, hedging speaker certainty, utterance appropriateness or the correctness/acceptability of a lexical item.

About 5% of the *if*-clauses presented a possibility without any explicit verbal consequent, only one case of which was a polar question answer. This was slightly more than the number found with either imperative or interrogative clause consequents. Although the raw numbers at this point become very low, it can be noted that the other 'consequentless' *if*-clauses were roughly evenly split between those which did and did not function as a directive.

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¹the exception being the data from medical consultations, which had too few instances per file to take two sets of ten

3 General analysis

In our initial formalisation we use the framework Type Theory with Records (TTR) (Cooper, 2005; Cooper, 2012; Cooper and Ginzburg, 2015) in a similar vein to the grammatical framework found in Ginzburg (2012), and in regards to syntax follow a HPSG approach. The dialogue state is considered as a gameboard, with fields tracking conversation history, questions under discussion, and accepted information. Each construction is characterised according to two fields: required contextual parameters for the gameboard and the content encoded in the entry.

The content of *if* is taken as a function accepting two arguments, the first of which is to be supposed. Unless overridden by recognition of a subtype, satisfying the consequent argument will perform the same type of

Table 1: *If*-clause functions among 300 non-embedded *if*-clauses

Type	Total	%
precond	212	70.67
bkgd	53	17.67
poss	17	5.67
frame	45	15.00
hedge	8	2.67

move as the consequent alone. We treat supposition as the addition of a new maximal QUD. We assume that we can 'break out' the interim output at any point, leaving underspecified fields unresolved. In this way a singular "If" should evoke a suppositional conversational move without having the content necessary to actually perform one, and a completed *if*-clause should still be able to perform a suppositional conversational move before (or without) a consequent.

There is variation in the level of 'isolation' in *if*-clauses, ranging from those explicitly forming a conditional to those which intuitively resist 'completion'. The notion of isolation used in the non-formal literature should be understood as the extent to which some semantic consequent for the *if*-clause is explicit, derivable from context, implicit, or fully absent.

The *if*-clause with a derivable consequent has a specific consequent, which is not recognised simpliciter as another utterance, but derived from it, as per the *if*-clause which is sufficient answer to a polar question. *If*-clause polar question responses have their consequent fully specified through the same general mechanism that provides content to other affirmative polar question responses, and follow from a general polar question response construction.

At the other end of the scale, isolate *if*-clauses can form constructions conventionalised to the point where they no longer include any implicit consequent, such as in an exclamatory "Well if it isn't the very man!". Isolate *if*-clauses are the (semi-)conventionalisation of a specific point in the incrementation of a conditional. These only 'accept' addition of a consequent through re-interpretation as a standard *if*-clause and in reinterpretation, the generation continues from that point in incrementation, which has to be re-established.

Those with neither a directly derivable consequent nor strong resistance to addition of an explicit consequent, include an implicit underspecified consequent. There is a degree of fluidity between these and *if*-clauses performing the same or similar functions in full conditionals. Uninstantiated parameters can of course be queried, and there is flexibility in whether to accept underspecification as left by the *if*-clause, or gain specificity by explicitly completing it or requesting completion from another speaker. The most general case is simply use of the *if*-clause to update QUD with a supposition. By introducing the *if*-case to QUD, it is made available for discussion without requiring its truth to be determined.

In a more specific case, declarative conditionals can be used to direct an addressee to realise the *if*-case. When the speaker does not feel it necessary to make any particular assertion about what will follow, or to 'sell' the directive by clarifying that following it is beneficial, a consequent can be superfluous. Recognition of a directive *if*-clause rests with the context and the content of the *if*-clause itself, as its content must be relevant to achieving some contextual goal. The semantic content of a directive *if*-clause (in our framework, an *Outcome* as distinct from a *Proposition*) can be derived from the propositional content of the antecedent, so no serious disconnect is created between an isolate *if*-directive and one with an explicit, specified consequent which has an additional declarative function.

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