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Why use *or*?

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Abstract: *Or* constructions introduce a set of alternatives into the discourse. But alternativity does not exhaust speakers' intended messages. Speakers use the profiled *or* alternatives as a starting point for expressing a variety of readings. Ever since (Grice, H. Paul. 1989. *Studies in the way of words*. Cambridge, MA: Harvard University Press) and (Horn. 1972. *On the semantic properties of the logical operators in English*. Los Angeles, CA: University of California Los Angeles dissertation), the standard approach has assumed that *or* has an inclusive lexical meaning and a predominantly exclusive use, thus focusing on two readings. While another, "free choice", reading has been added to the repertoire, accounting for the exclusive reading remains a goal all *or* theorists must meet. We here propose that both "inclusive" and "exclusive" interpretations, as currently defined, do not capture speakers' *intended readings*, which we equate with the relevance-theoretic explicature. Adopting a usage-based approach to language, we examined all the *or* occurrences in the Santa Barbara Corpus of spoken American English (1053 tokens), and found that speakers use *or* utterances for a far richer variety of readings than has been recognized. In line with Cognitive Linguistics, we propose that speakers' communicated intentions are better analyzed in terms of subjective construals, rather than the objective conditions obtaining when the *or* proposition is true. We argue that in two of these readings speakers are not necessarily committed to even one of the alternatives being the case. In the most frequent reading, the overt disjuncts only serve as pointers to a higher-level concept, and it is that concept that the speaker intends to refer to.

Keywords: disjunction, inclusive, exclusive, higher-level category, implicature, explicature, truth-compatible inference

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1 Introduction

Or constructions profile a set of alternatives, but why do speakers find it useful to introduce alternatives into the discourse? Why do they use *or* constructions? Following Grice (1989) and Horn (1972), the standard semantic analysis of a number of natural language connectives, *or* among them, is as truth-functional connectives. Linguistically, *or* is assumed to encode inclusivity, namely that at least one, but possibly all disjuncts are true. As Grice and Horn recognized, however, this analysis is at odds with how *or* is used in natural discourse. The assumption is that *or* is only rarely used to convey an inclusive disjunction. It is most often used to convey an exclusive reading, whereby not only at least, but also at most one disjunct is true, although the speaker doesn't know which one it is.¹ An enormous body of research has been devoted to accounting for this gap between the inclusive meaning and the exclusive use of *or*. While the inclusive lexical starting point has been challenged (Alonso-Ovalle 2006; Dik 1968; Harder 1996; Simons 2005a; Zimmermann 2000), the dominance of the exclusive reading endpoint in actual use, has hardly been challenged in the last 40 years. We believe it's time we took a fresh look at the question of what it is that speakers do with their *ors*.

The work presented below is part of a large-scale project on *or*, based mostly on the Santa Barbara Corpus of Spoken American English (SBC) (Du Bois et al. 2000–2005).² We adopt a bottom-up usage-based approach to language, which entails mapping all the readings *or* gives rise to in context. In fact, we believe that this is also necessary for determining *or*'s linguistic meaning, but we cannot pursue this question here.³ Our fine-grained empirical examination has revealed that *or* constructions serve no less than 20 types of recurrent readings in natural discourse. We will not, however, discuss the readings listed in Appendix A, which include repair and idiomatic constructions (those will be dealt with in a future publication). We note that such cases are often excluded from general discussions of *or* in the literature. We restrict ourselves to 6 readings, which

1 Philosophers, however, do not see the exclusive reading as central (e.g., Jennings 1994; Quine 1972:11).

2 Statistical claims are based on the 1053 *or* tokens from the SBC corpus, but we cite additional examples, some of them from other languages, to exemplify our points in this paper.

3 In Ariel and Mauri (in prep. b) we argue against the classical analysis which assumes that *or* propositions are existential claims (the inclusive core, see briefly Section 3). Instead, our findings offer discourse support for a minimalist core meaning for *or*, as introducing a set of alternatives (which are not necessarily propositional) (Alonso-Ovalle 2006; Dik 1968; Harder 1996; Simons 2005a; Zimmermann 2000).

cover cases that could in theory be analyzed in terms of inclusivity, exclusivity or free choice. We will redefine free choice readings, and we will show how the significance of inclusive and exclusive interpretations, as *discourse-relevant readings*, has been overrated, in that they have been elevated to speaker-intended messages, when in fact, they are merely assumptions *compatible* with speakers' messages. Interestingly, similar conclusions have been independently reached in typological studies (Mauri 2008a, 2008b), so crosslinguistic evidence will be cited when relevant.

Briefly, why do speakers use *or*? Because the profiled alternativity relation associated with *or* constructions serves as a starting point for a variety of readings. Speakers may wish to raise alternative options for discussion even if they cannot commit to even one of them being the case (*raised options*, Section 3.1). They may mobilize the alternatives for the construction of a *higher-level category* (HLC, Section 3.2). They may wish to offer a single predication over entities they construe as separate alternatives (*conjunctive*, Section 4). When they cannot zero in on a single alternative, speakers may only narrow the options to a tight set (*narrowed*, Section 5.1). Speakers may wish to profile an unresolved choice between alternatives, typically in order to elicit such a choice (*choice*, Section 5.2). And in some cases, the speaker's goal is to profile some alternatives as the *only* alternatives on the table, thus ruling out any others not explicitly mentioned (*exhaustive*, Section 6). Section 7 argues that although mutual (in)compatibility inferences (the bases for exclusive and inclusive readings), may very well be legitimate inferences, they do not define speaker-intended *or* readings. We conclude with Section 8, but we start off with theoretical and methodological considerations (Section 2).

2 Theoretical assumptions and methodology

We briefly describe our failure to classify *or* constructions by reference to a single top-down question of “exclusive or inclusive reading?” in Section 2.1. It is this failure that prompted us to adopt a bottom-up, usage-based approach instead. Section 2.2 motivates our choice of the Relevance-theoretic explication as the appropriate meaning level with which to characterize *or* readings.

2.1 Why a usage-based approach?

The standard literature on *or* takes it for granted that *or* is typically restricted to one of two interpretations: inclusive and exclusive. “*Or* in English generally

expresses logical disjunction. The question arises: does it express inclusive or exclusive disjunction, or sometimes one and sometimes the other?” (Hurford 1974). And more recently, “As is well known, the interpretation of *or* oscillates between an exclusive and an inclusive one” (Chierchia 2013: 11). Griceans divided up the two readings between a lexical meaning (inclusive) and a pragmatically implicated use (exclusive) (Horn 1989: 258), but more recent approaches have assigned grammatical status to the exclusive reading as well. Still, the priority of precisely these two readings (Chierchia 2004), and the preference for exclusive over inclusive use has hardly been challenged.⁴

Given the expectation that *or* utterances are predominantly interpreted as exclusive disjunctions, Ariel’s (2002) first attempt was to analyze the *or*-occurrences in SBC as divided between inclusive and exclusive readings, expecting to find mostly exclusive cases. This initial study examined the *or* occurrences in the 29 transcripts of the SBC available then, and revealed that inclusive and exclusive interpretations could not in fact be considered the only readings. Ariel could impose an exclusive versus inclusive classification on 280 of the examples, which indeed revealed a majority of exclusive cases. But the large gap predicted in the literature did not actually show up. There were only 1.4 exclusive cases per 1 inclusive case (163 versus 117). But problems ran much deeper. First, these 280 occurrences constituted less than half of the *or* occurrences in those transcripts (591). Second, Ariel had to base her decision on world knowledge regarding compatible and incompatible states of affairs, in effect forcing on the data a distinction that was rather artificial in terms of speakers’ *intentions*. A wish to *express* either an inclusive or an exclusive reading was not in fact a speakers’ goal in using natural *or* constructions in discourse. While this point will later be argued for each of the readings, a few preliminary examples might help the reader.

Consider the following:

- (1) REBECCA: *when you’re talking you need to=,*
..uh,
*.. always say yes **or** no,*
 (SBC: 008)⁵

⁴ A free choice reading has been added to the repertoire, which we too incorporate into our analysis (see Section 4).

⁵ Transcriptions of the SBC (Bois et al. 2000–2005) are only slightly simplified. Each line represents an intonation unit. The following symbols are used: []: Overlap; (H): Inhale; =: lengthening; @: a pulse of laughter; :: short pause; ...: long pause.

The alternatives in (1) seem quite incompatible with each other. When instructing her court witness to respond with *yes or no*, Rebecca, a prosecuting attorney, couldn't intend her addressee to possibly use both *yes* and *no* on some occasion. So, this seems to be an "exclusive" example. However, Rebecca's *always* may also enable an "inclusive" (or free choice) reading, whereby the addressee is advised to use both alternatives, but in alternation, as responses to different questions.⁶

So, is the exclusive reading the speaker-intended message here, or is it the inclusive, or the free choice reading? Once we examine (1) in its natural context, we see that it's none of the above, in fact:

- (2) REBECCA: *when you're talking you need to=,*
 .. *uh,*
 .. *always say yes or no,*
 .. *as opposed to unhunh or unh-unh, ((1 LINE OMITTED))*
 .. *or nodding your head,*
 .. *okay,*
 .. *because she takes everything down.*
 (SBC: 008)

Rebecca's subsequent talk clarifies that it's not the specific alternatives *yes* and *no* that she has a communicative intention about, nor is the issue of whether the two are or are not compatible with each other profiled (although of course, *yes* and *no* are mutually incompatible on any single occasion, but mutually compatible across different occasions). Her goal is to distinguish between verbal responses (exemplified by both *yes* and *no*) on the one hand, and nonverbal responses (exemplified by *unhunh* and *unh-unh* and *nodding your head*) on the other hand. The reason is that the court stenographer only writes down verbal responses. Nonverbal responses will therefore not appear on the transcript, which worries Rebecca. Note that compliance with Rebecca's instruction is not restricted to using or not using just the explicitly mentioned alternatives, but rather, applies to any realization of verbal material (e.g., *I agree, I don't know*). So, while either an exclusive or an inclusive inference is here in principle reasonably inferable (given world knowledge), this inference has *no discourse role*. We suggest it is not in fact *speaker-intended* (see Section 2.2 and 7 for a Truth-Compatible Inference analysis).

⁶ However, that *always* does not rule out a 'one but not both of X and Y' interpretation – see ((68)).

Next, consider a much more clearly would-be inclusive case:

- (3) GILBERT: *She got sick and tired of,*
... you know,
turning on the news,
and seeing another ... corrupt man,
or another,
.. you know.
.. another scandal breaking out.
... She knew friends that were dying in Viet- --
 ([6 LINES OMITTED])
she didn't believe in the system and,
... she just didn't care anymore.
 (SBC: 012)

Objectively speaking, the alternatives in (3) are certainly compatible with each other. The person talked about may have very well gotten sick and tired of both *another corrupt man* and *another scandal breaking out*. So (3) would seem to be a clear inclusive case, which is how (3) was initially classified by Ariel. But, once again, we must ask, is the inclusive reading a speaker-intended message here? We can test this by looking at what follows the *or* utterance.⁷ In (3) too it looks like the speaker is contrasting the set of alternatives he mentions not with each other, but rather, with something else. Here it is the friends going to war and some of them dying. The two explicit alternatives exemplify a single unified higher-level concept (“annoying pieces of news about what is later referred to as “the system”). And this is what the speaker intends to refer to. As in (2), here too there is no mention of the individual alternatives later in the discourse.

In an attempt to receive confirmation for her interpretation of examples such as (3) Ariel presented mini discourses such as (4) to a group of subjects⁸:

- (4) Which of B's responses (B₁ or B₂) sounds **more natural or plausible** as a response to A (circle your answer)?

⁷ Readers who wish to examine the SBC examples we cite in their natural context can do so at <http://www.linguistics.ucsb.edu/research/santa-barbara-corpus>.

⁸ Questionnaire participants were 60 native speakers of English (mostly American English), enrolled in a Hebrew language course at Tel Aviv University (2009). Preference for just one response was overwhelming. Chi square and Chi square with Yates Correction analyses were applied to all the *or* questions cited in this paper, showing highly significant results, at $p < 0.01$. We thank Gila Batori for the statistical analyses.

- A: She got sick and tired of turning on the news, and seeing a corrupt man, or a scandal breaking out.
 B₁: I can understand her. It's depressing to watch the news these days.
 B₂: I can understand her. Both of those things are awful.

The rationale behind the B responses was that if participants interpreted 4(A) as an inclusive *or* utterance, B₂ should have been preferred, since it addresses the two alternatives introduced by A. But participants opted for B₁ (89.1%), finding the annoyance with “the system” a more natural basis for a continuation than reference to the specific alternatives.

Examples (2) and (3) exemplify some of the problems encountered by Ariel when she attempted to impose a top-down analysis of a single research question (inclusive versus exclusive reading) on the data. The difficulty to decide between an exclusive, an inclusive and a free choice interpretation for (2), the recognition, based on subsequent discourse, that neither reading actually captured the speakers' intentions in both (2) and (3), and subjects' confirmation of this point in (4) prompted us to adopt a bottom-up, Usage-Based approach instead. On this approach one cannot presuppose a “one interpretative question fits all” analysis (such as, is it inclusive or is it exclusive?). Rather, the relevant interpretative parameters may vary from case to case, depending on the specific reading intended by the speaker. As we've seen above, speakers may very well construe the same objective reality (e.g., the relation between saying *yes* and *no*) in various, subjective ways in order to serve their ad hoc communicative goals (see Goldberg 1995; Langacker 1987; onwards; Verhagen 2005). This is what we were after in our classification (see also Dancygier and Sweetser 2005; Sweetser 1990). Nonetheless, the bottom-up analysis did not end up with hundreds of distinct readings, but, setting aside examples such as those listed in Appendix A, the examples yielded 6 readings, namely six distinct but recurrent ways speakers find alternativeness pertinent to their message. We discuss the criteria we adopted for identifying a speaker-intended reading in Section 2.2.

2.2 Defining an *or* reading

Language is underdetermined, which is why interpreting utterances more often than not combines the compositional meaning with pragmatic inferences (Carston 2002). Pragmatic inferences play a crucial role in deriving speakers' intended messages. They may enrich linguistic meanings with conceptual material left implicit, as in Rebecca's *when you're talking* in (2), which must

be narrowed into ‘when you’re *testifying in court*’. Second, given that most utterances are amenable to more than one compositional semantic analysis, pragmatics is called on to determine which semantic interpretation is appropriate for the specific case. Pragmatics always has the last word, and *or* utterances are no exception.

But what is the nature of the pragmatic inferences involved, and what is the relevant level of meaning that defines a speaker’s (*or*) *reading*? Are implicatures part of it? The original (neo-) Gricean analysis attributed a generalized conversational implicature (GCI) status to the scalar inferences involved, which meant that the total reading was a Conveyed meaning (a combination of the compositional meaning with the implicature). Many recent analyses no longer see scalar implicatures as conversational implicatures per se, i.e., as external to the truth-conditional meaning of the utterance. Relevance theoreticians see GCIs as part of the truth-bearing explicature (Carston 1988), and according to Chierchia (2004 and onwards) they count as part of the compositional meaning. For convenience, however, the term “implicature” was kept.

This terminological convenience creates the illusion that the concept of “interpretation” operated with here is self-evident, “‘Interpretation’ is used here rather loosely as referring to the basic compositional meaning enriched by whatever (possibly pragmatic) inference/implicature may be tacked onto that” (Chierchia 2013:15). But pragmatic inferences come in a great variety, and not all of them actually form part of the speaker-intended message (Ariel 2016b). Moreover, even if speaker-intended, we must not count special, ad-hoc interpretations as readings. As shown below, in order to count as a bona fide *or* reading an interpretation must be (i) a speaker-intended *explicature* (Sperber and Wilson 1986 [1995]), where (ii) *or* directly contributes to the explicature.

Explicatures comprise of compositional meanings, enriched by speaker-intended pragmatic inferences, which means that the explicit content of the utterance combines encoded and inferred interpretations. But just like the Gricean “what is said” excludes particularized conversational implicatures (PCIs), the richer explicature representations too only include inferences that contribute to the construction of a *complete proposition*. Now, it’s not always easy to distinguish between implicatures and explicated inferences.⁹ But for an explicature, the integration of the pragmatic with the linguistic must abide by Recanati’s (1989) “Availability Principle”. This means that the two combine into a *single* layer of meaning, not easily available as separable linguistic and

⁹ Explicated inferences are the pragmatic inferences that are integrated into the explicature.

pragmatic components. Indeed, explicatures stand for messages directly expressed by the speaker (hence the choice of the term explicature). It is this constructed whole that serves as the basis on which the speaker is judged, not only as truthful or not, but also as directly relevant or not. PCIs, special non-literal uses and truth-compatible inferences (TCIs, see below) are not part of explicatures, because they are independent of the proposition expressed, and, unlike explicated inferences, carry their own truth conditions.

The prominent discourse status of the explicature (as compared with that of PCIs) has recently received experimental support (Sternau 2014; Sternau et al. 2015): despite the fact that explicatures contain pragmatic material (hence cancelable, in principle), subjects overwhelmingly confirmed that it is the explicature that the speaker meant, and that it is in fact quite impossible for her to deny having said it. This is why we feel confident that it is this interpretation level that best defines the relevant reading for the analysis of *or* utterances. An *or* reading is therefore here taken to be *any distinct type of explicature recurrently developed out of an utterance containing or*. We then see it as our duty to prove that ‘not both’ (“exclusive”) as well as ‘possibly both’ (“inclusive”) interpretations are not *explicated* inferences. We do not deny that such inferences may be legitimately derived, but we argue that for the most part, such inferences are not part of the speaker’s intended message. Rather, they constitute either background assumptions (Searle 1980) or truth-compatible inferences (Ariel 2004; see Section 7.2).

Mostly, we need to remove a legitimate worry about our analysis, namely that the readings we propose are merely “special, nonliteral” uses of *or* constructions, whose explicated meanings are in fact either inclusive or exclusive (Gregory Carlson p.c., Kent Bach p.c.). Should they be special uses, our findings present no challenge to received claims about *or* constructions. After all, as Grice taught us, speakers use all kinds of utterances in order to indirectly convey meanings (PCIs) that significantly diverge from the meaning of the explicit utterance (e.g., ironies).

We will apply Ariel’s (2016b) “faithful report tests”, inspired by Kent Bach’s (1994) IQ test (see Table 1 for a summary), in order to identify the speaker’s intended reading (the explicature). Crucially, the various tests distinguish explicated readings from inferences that we do not consider part of the reading (conversational implicatures and others). The first test is the “That is (to say)” test, which, due to the *that is (to say)* formulation, restricts the reporter’s faithful paraphrase to the speaker’s *directly* communicated message.¹⁰ We provide each

¹⁰ Note that the faithful reporter on our test must be different from the speaker herself, for the speaker may use *that is (to say)* more liberally, prefacing implicatures as well. Another speaker is held to a higher degree of faithfulness.

Table 1: Distinguishing pragmatic inferences.

	Explicated Inference	Particularized Conversational Implicature	Truth-compatible Inference	Background Assumption	Special use
Bears on propositional content	+	-	-	+	-
Speaker-intended	+	+	-	-	+
Directly communicated	+	-	-	-	-
Diagnostic test	That is (to say)	Indirectly Conveyed	Compatibility	Circumstantial ¹¹ Assumption	Two-tier

reading with its own fixed paraphrase, composed of linguistic expressions which explicitly encode that reading. Once we apply the test to a given utterance using the specific reading paraphrase we get a report which is judged either faithful or not faithful.¹² If it is faithful, the test confirms the reading under discussion. If it is judged unfaithful the test demonstrates that the reading paraphrase does not capture the intended reading in the specific case.

But explicated readings must not only pass the That is (to say) test. They must at the same time fail nonexplicature tests, which will attest that they cannot be analyzed as implicatures or as other types of inferences.¹³ The second test we use here is the “Two-tier test” (see (6a)), which identifies both first-tier *explicated* interpretations (i.e., readings) and second-tier indirectly conveyed messages (strong implicatures) replacing the literal meanings. We do not consider second-tier playful or ironical effects (special uses, see Table 1) readings. A third, “Indirect addition” test identifies PCIs as additional content that falls under the speaker’s communicative intention, but is only *indirectly* conveyed. Interpretations that fail these three tests do not fall under the speaker’s communicative intention even. They may be truth-compatible inferences, namely, potentially legitimate inferences that are nonetheless not speaker-intended, or they may be background assumptions (Searle 1980), i.e., implicit aspects that the speaker need not and does not assume responsibility for communicating,

¹¹ See Ariel (2016b) for the Compatibility and the Circumstantial assumption tests, which we do not exemplify here.

¹² While the Faithful report tests here used have been put to test (Ariel 2016b) the judgments here reported were only informally confirmed by students and colleagues.

¹³ Note that the application of these tests does not always produce an elegant English sentence. Given that we avoid *or*, the most natural way of expressing the reading, it is only to be expected that the paraphrase would not be as natural.

even though she does assume them, for they form part of our world knowledge about how things must be for the states of affairs depicted by the speaker's utterance. Such assumptions are not part of the reading, then.

Consider (5) in this connection:

- (5) *Do you want to bring the list?
Or leave it.*
(17 December 2012).

The speaker in (5) pretended to ask a genuine alternative question (a choice *or* in our analysis), when in fact he knew full well that the addressee wanted to bring the shopping list along, but simply forgot to take it with her. (5) actually serves as a humorous reminder to the addressee to bring the list. Indeed, we absolutely do not think that 'reminding' should constitute a reading here (let alone of *or*). The speaker intended the addressee to initially process (5) as a choice-eliciting explicature, in order to have her arrive at the 'reminder' interpretation only indirectly (with an added humorous effect). Ariel (2016b) has defined cases of irony, rhetorical questions and playful talk such as (5) as Two-Tier uses, where the first tier is provisionally explicatured (akin to Grice's 'making as if to say'), while the second tier is a strong PCI. Crucially, second-tier implicatures are quite ad hoc in that they depend on a mismatch between the explicatured content and given contextual assumptions. In other words, they are not specifically dependent on some form (*or*, in our case).

An appropriate test which helped us exclude special, nonliteral use interpretations is the Two-Tier IQ test (Ariel 2016b). Applied to (5), we see that a two-tier reporting (a literal tier, replaced by an indirectly conveyed tier) constitutes a faithful report of the reminder interpretation as a special, nonliteral secondary meaning layer (6a). An explicatured report for the reminder interpretation, using the 'That is (to say)' test, on the other hand, fails here (6b), because the reminder is not explicatured:

- (6) a. The speaker **literally** asked whether the addressee wanted to bring the list or leave it, **but actually he indirectly conveyed** a reminder to the addressee to bring the list.
b. ??The speaker asked whether the addressee wanted to bring the list or leave it, **that is (to say)** he reminded the addressee to bring the list.

We intend to demonstrate that each of the readings we propose for *or* constructions fails the Two-Tier diagnostic test (that is, it is not a second-tier nonliteral use), but passes the explicature test, because it is directly communicated by the speaker.

Another set of pragmatic inferences excluded from explicatures are background assumptions, namely contextually relevant practices and assumptions without which we cannot properly represent to ourselves the content (nor judge the truthfulness) of the utterance (Searle 1978). For example, in order to understand what the verb *open* means in various contexts, background assumptions must be drawn upon. The way we open our mouths differs from the way we open windows, restaurants, presents and computer documents. We must mobilize these different backgrounds in order to derive the very literal meaning of sentences containing *open*, as these are not constituents of an infinitely ambiguous verb *open*. But despite their crucial role, background assumptions remain in the background. They are manifest to interlocutors (Carston 2002: 1–6), but they do not constitute part of the speaker's explicated representation. As we shall see below, some *or* utterances rely on such manifest assumptions, but that does not mean that these assumptions constitute part of their reading.

A final set of pragmatic inferences we maintain as separate from explicatures are what Ariel (2004, 2012; and, 2016b) defined as truth-compatible inferences (TCIs). These inferences (which may even be entailments, in fact) are assumptions which can be plausibly attributed to the speaker based on her utterance. But crucially, these assumptions are not only not directly communicated, they are not even indirectly conveyed. Consider the following:

- (7) REBECCA: . . . *do you guys have the cash to pay for it right now?*
 ... *When you- to get out?*
 RICKIE: .. *Yeah [I] think so,*
 ARNOLD: [*Yeah*].
 RICKIE: *Yeah.*
 (SBC: 008)

Rebecca is here addressing a witness and her husband, who drove some distance to meet with her. She wants to make sure they are able pay the parking fee. Now, it's quite plausible to infer that 'Rebecca thinks that her addressees are rather poor, to the point that they may not be able to afford the parking fee'. But, crucially, this would-be insulting assumption is not an inference that Rebecca has a communicative intention about. In fact, this is why she chooses *cash*, rather than *money*. So, there are conclusions which are perfectly plausible given the speaker's utterance, but which are nonetheless not intended to play any discourse role.

Our point will be that background assumptions and Truth-compatible inferences potentially associated with specific *or* examples must absolutely be distinguished from speaker-intended inferences which constitute part of the

specific *or* reading. Surprisingly perhaps, we will analyze both ‘inclusive’ and ‘exclusive’ interpretations (as currently defined) as such inferences, rather than as bona-fide *or* readings (see especially Section 7).¹⁴

Table 1 summarizes the differences between the pragmatic interpretations discussed above. It is these differences that motivated our choice to only include explicated inferences (here highlighted) as part of a relevant *or* reading. As can be seen, only these inferences bear on the propositional content, are speaker-intended, and moreover are directly communicated (in fact, they are hardly deniable).

Based on the criteria above we will propose the following 6 readings for *X or Y* constructions, as summarized in Table 2:

Table 2: *Or* readings.

Reading	Meaning
Raised Options	Possibly X, possibly Y
Higher-Level Category	Higher-level category Z (comprising members such as X and Y)
Conjunctive	Both/any of X and Y
Narrowed	One of X and Y
Choice	Unresolved choice between X and Y
Exhaustive	Only X and Y (other options ruled out)

One final clarification is called for, regarding semantic compositionality. By defining an *or* reading as the semantic/pragmatic hybrid “explicature” we do not thereby claim that any aspect of the reading that goes beyond *or*’s linguistic core is necessarily a pragmatic enrichment. Quite the contrary. Compositional interactions of *or*, for example with modals, certainly contribute to developing the relevant speaker-intended explicature (see Simons 2005a; Zimmermann 2000). Even so, pragmatics is always at work, because linguistic forms do not invariably impose a single reading, and conversely, the very same explicature may be developed either compositionally or noncompositionally. Consider the second *or* construction in (8), for example, where Eliza offers Turner a choice between calling her ‘Eliza’ and ‘Liza’:

¹⁴ Of course, all Gricean inferences are defined as having been intended by the speaker, but in practice what we analyze below as unintended inferences were included (as conversational implicatures) if they were required to mesh the utterance with the reality behind it.

- (8) TURNER: *Eliza?*
 Or Liza.
 ELIZA: *Eliza.*
 Or Liza. (Movie: “Mr. Turner”)¹⁵

Clearly, the absence of an explicit modal (such as ‘you can call me’) is no obstacle for deriving a free choice *or* reading in (8) (Free alternative for us, see 4.2), nor does the presence of modals or other expressions always force a free choice reading.

In fact, in addition to compositional meanings and pragmatic inferences speakers provide addressees with linguistic cues, which create *biases* towards certain readings over others. Intonation contours are such cues for the most part (Couper-Kuhlen and Selting 1996), as is the spanning (if any) of the disjuncts across multiple Intonation Units. But biasing cues must not be confused for absolute codes.

Thus, we’re not disputing the need to account for the derivation of each and every explicated *or* reading, but must leave this for future research. We here chose to present an overview of the six prominent explicature types, regardless of whether, or rather how much, of their construction depends on compositional versus on pragmatic components. This reflects our interest in exploring the types of messages speakers express based on a linguistic core of profiled alternatives. Indeed, while the SBC *or* constructions manifest many more than the handful readings usually discussed, it is noteworthy that its 1053 tokens can be accounted for by reference to mere 20 readings.

The classical analysis of *or* constructions assumes a speaker’s commitment to at least one of the alternatives being the case. We find that speakers may commit to only one alternative (Section 4), to all alternatives (Section 5), and even to none of them (Section 3). For ease of comparison with the classical approach we organized our proposed readings according to the commitment criterion.

3 Not committing to even a single disjunct

Section 3 introduces two readings where the speaker is not necessarily committed to even one of the disjuncts. We start with raised options (3.1), followed by higher-level category (3.2). Note that we see no reason to exclude nondeclarative *or* constructions. But if so, what does commitment mean in nondeclarative sentences?

¹⁵ We thank Israela Becker for providing us with this example.

Especially relevant to our analysis is the fact that on the one hand, *or* questions do not necessarily lack speaker commitment to one or more of the alternatives, and that on the other hand, assertions do not necessarily so commit the speaker. Green's (2014) definition of commitment, also applicable to illocutionary forces other than assertions, supports this point. Applying his definition to *or* constructions, we take a speaker uttering *X or Y* to be committing to 'at least one of X or Y' if she is liable to error should neither one of X and Y be the case. A speaker uttering *X or Y* does not, however, commit to even a single alternative if she is not liable to error should neither X nor Y be the case. Green suggests that speakers' (non)commitment can be brought out by embedding the *or* construction (in our case) in a challenge scenario, where the interlocutor challenges with, "how do you know that?", followed by an assertion that in fact none of the alternatives hold (see (10i) below). A speaker committing to 'at least one of X and Y' is obliged to retract her 'X or Y' if she's unable to respond to that challenge adequately. A speaker who does not commit to 'at least one of X and Y' does not need to. Indeed, in the two readings discussed in this section the speaker doesn't need to retract her utterance should neither X nor Y hold.

An additional, more compact way to identify the speaker's commitment in *or* constructions, nonassertions included, involves the insertion of dubitative expressions such as *maybe*, scoping over what the speaker is (not) committing to (see (10ii)). Adding *maybe* to noncommitting readings may have consequences for the reading itself, but not for what the speaker commits to (the speaker remains uncommitted). But in committing readings, we expect the addition of *maybe* to have consequences not only for the reading, but also for the speaker's commitment, which turns into noncommitment to 'at least one of X and Y'.

Here's an application of the (non)commitment tests to a nonassertion (9) and to an assertion (10)¹⁶:

- (9) PATTY: *Was that World War Two,
or World War One.*
(SBC: 023)
- i. ~B: How do you know that it was one of the two? It was actually the Hundred Years' War.
PATTY₂: Oh, really? Then I'm wrong and I take my question back.
- ii. ~Was that **maybe** World War Two? or **maybe** World War one?

Note that Patty is liable to error here (i), which is why she has to retract her question once not even one of the alternatives she introduced turned out to be

¹⁶ ~ denotes an unattested utterance.

true. Indeed, despite the interrogative illocutionary force, Patty did commit to the true answer being one of the two wars. (ii) shows that this commitment is removed once we add *maybes* scoping over each of the alternatives. Patty's original question, then, counts as committing to 'one of the alternatives'.

Now, contrast (9) with (10), which we analyze as a noncommitting (raised options) *or* reading. Using an assertion, Brad is illustrating the features of a tape recorder he's trying to sell. He mentions that with this recorder one can listen to the radio at the same time that one is recording:

(10) BRAD: ... *one can listen to ... (TSK) (H) the tuner, ([1 LINE OMITTED])*
 ... *so you could put on KDB, ([4 LINES OMITTED])*
Or there's one ~Matt likes,
 (SBC: 016)

- i. ~B: How do you know that? You can't put on either one in our area.
 BRAD₂: Those were just examples! My point was that you can listen to the radio.
- ii. ~ So you could put on **maybe** KDB (or) there's **maybe** the one Matt likes.

Note that Brad is not here liable to error, and does not have to retract his assertion once both alternatives turn out to be wrong. Because indeed, what he asserts, namely that one can simultaneously record and listen to the radio, is independent of the specific radio stations he mentions, for which he undertakes no commitment. (ii) shows that adding *maybe*, or even substituting *or* with *maybe*, does not affect the speaker's noncommitment to "at least one of the alternatives." This is quite different from the pattern observed in (9), where commitment was lost once *maybe* was added. The *or* construction used by Brad counts as noncommitting, then.

3.1 Raised options *or*: 'possibly X, possibly Y'

The standard linguistic meaning assumed for disjunctions is inclusive, which means that the speaker must be committed to at least one of the alternatives being true. But as we've seen in (10), speakers sometimes raise a few alternatives, while guaranteeing none. Consider (11) in addition:

(11) S: *At a certain stage part of the shares were transferred to the children before going out on the stock exchange or they were returned and divided up or partly returned I don't remember... you have our prospectus here.* (Originally Hebrew, Lotan 1990).

Note that S's *I don't remember* in (11) does not mean 'I don't remember which of the three alternatives I mentioned is the correct one'. Rather, he means he doesn't remember what happened exactly. The (non-exhaustive) options he raises are certainly possible, but it's also possible that none of the alternatives is true. This is why the speaker suggests that the addressees consult the prospectus, which presumably presents the facts.

The reading (explicature) associated with a raised options *X or Y* construction is 'possibly X, possibly Y', which is therefore the linguistic formula we use in the 'That is (to say)' test (see 14 below). Such uses are not very frequent in the corpus (57 = 5.4%, 91 = 8.6% if we add "Biased raised options" and "Repair into raised options" cases, not here discussed), but they nevertheless constitute a distinct set of occurrences. Raised-Options *ors* are used by speakers to articulate options they are entertaining, often while searching for the right one.¹⁷ Note (12):

- (12) JILL: ...*(TSK)* *Hey cutie pie,*
 are you there?
 ...*(H)* **Or** *are you sleeping.*
 (John Du Bois p.c.: Cutiepie)¹⁸

In her voicemail message in (12) Jill does not expect the addressee to necessarily confirm as true at least one (or both) of the alternatives she explicitly asks about ('are you there, but not picking up the phone'; 'are you sleeping'). She is well aware that there may be another reason for why the addressee did not pick up his phone. The thrust of raised options *or* constructions is then to raise options, where the speaker's communicative intention guarantees neither exhaustivity nor commitment to any one of the alternatives explicitly expressed. Not surprisingly, a disproportionate number of raised options constructions come in multitudes, and form part of three or more disjunct constructions (19.8% vs. 4.9% on average for the other *or* constructions).

The most obvious feature of *or* constructions used to raise options is lack of exhaustivity. This is why in a majority of these cases the construction does not end with a falling intonation contour (marked by a period in SBC), but rather with a nonfinal intonation (a comma in SBC) or an appeal intonation (a question mark in SBC) (see 10). Indeed, Zimmermann (2000) and Geurts (2005) proposed that exhaustivity is not a necessary part of natural language

¹⁷ Jennings (1994) attributes this function to what he terms "proto-disjunctive *or*" uses, however, his examples (p. 295) are what we would classify as "repaired into raised options."

¹⁸ This recording is from a voicemail message that precedes the conversation known as Cutiepie (SBC: 028).

or-constructions and must be indicated by final intonation. But while final intonation is indeed an excellent cue for exhaustivity, it's not an absolute convention (see 12). We should emphasize, however, that raised options are noncommittal in a deeper sense, in fact. It's not only the case that the explicit alternatives do not exhaust all possibilities. It may very well be that the speaker commits to none of the alternatives she mentions even though she doesn't envision other alternatives.¹⁹

Now, assuming we're right about the characterization of these raised options *or* constructions, then they are quite parallel to a series of dubitative constructions, such as *perhaps X, perhaps Y*. Here's a case where the speaker alternates between *or* and *maybe*, using the two quite interchangeably. In fact, in line with the *maybe* diagnostic above, s/he could have used a series of *maybes* instead of an *or*²⁰:

- (13) a. *He's like twenty five **or** twenty six, **maybe** twenty seven but married to this lady who could be his mother.*
(LSAC)²¹
- b. ~... He's **maybe** twenty five **maybe** twenty six, **maybe** twenty seven...

Interestingly, recent typological data point in the same direction. Mauri (2008a, 2008b; cf. also Mauri and van der Auwera 2012) has argued that languages lacking a connective equivalent to *or* typically express situations like the ones in (11) through the juxtaposition of clauses marked as 'potential', e.g., by dubitative adverbs ('perhaps X, perhaps Y'). As pointed out by Giacalone Ramat and Mauri (2011), dubitative markers are also among the most frequent diachronic sources for disjunction.

Applying our diagnostic tests to (11), we can see that raised options should indeed count as an explicated *or* reading:

- (14) a. S said that... the shares were transferred to the children before going out on the stock exchange or they were returned and divided up or partly returned, **that is (to say)**, possibly they were transferred to the children before going out on the stock exchange, possibly they were returned and divided up, possibly partly returned.

¹⁹ Of course, in principle, something is always the case. But our point is that Raised options do not commit the speaker to any of the explicit options, just like *Possibly X, possibly Y* doesn't.

²⁰ Of course, *or* constructions have to meet further conditions that *maybe* utterances do not.

²¹ LSAC is the Longman Corpus of Spoken American English, which we used while Mira Ariel was on sabbatical at UC Santa Barbara.

- b. ?? S **literally** said that... the shares were transferred to the children before going out on the stock exchange or they were returned and divided up or partly returned, but not all of the above, **but actually he indirectly conveyed that** possibly they were transferred to the children before going out on the stock exchange, possibly they were returned and divided up, possibly partly returned.²²

(14a) shows that the raised options reading we propose passes the ‘That is (to say)’ explicature test, and (b) complements (a) in showing that it fails the second-tier test, which means it’s not an implicature.

To sum up, we include under raised options *or* constructions cases where:

- (15) a. The speaker’s goal is to make hypotheses about the right alternative(s).
 b. The speaker *puts on the table* multiple alternatives she entertains.
 c. The speaker undertakes no commitment to the set of the alternatives she raises.
 d. The explicit alternatives do not necessarily exhaust the set of possibilities.

3.2 Higher-level category (HLC) or ‘higher-level category Z, such as x and Y’

Many of our cognitive categories are stable, others are ad hoc (Barsalou 1983 and onwards). Stable categories can typically be expressed by fairly short conventional linguistic means (e.g., ‘queen’, ‘eagle’, etc.). Ad hoc categories, however, do not come with ready-made linguistic expressions (e.g., ‘places with a low rate of HIV positive males’ – see (17) below). Since categories cannot be defined by reference to a set of common features (Wittgenstein 1978), a useful speaker strategy is to provide the addressee with exemplars of the category she has in mind. The addressee can then construct the category based on the exemplars provided to him. Moreover, Barsalou (1991) finds that subjects show a high degree of agreement regarding typical exemplars, even for rather unusual ad hoc categories, which means that exemplars (embedded

²² We took the exclusive, rather than the inclusive interpretation here to be the plausible candidate for an explicature on the classical view.

in supporting contexts) may serve as useful pointers for conjuring up higher-level categories. We propose below that *or* constructions are often used for this purpose precisely, speakers introducing exemplars as disjuncts, with the intention of referring to the higher-level category that the exemplars are members of. As we see below (in Example (16)), this strategy is not necessarily limited to the expression of ad hoc or innovative categories where natural language is wanting.

3.2.1 Disjuncts as pointers to a higher-level category

Higher-level category *or* constructions (HLCs) introduce alternatives which should be taken by the addressee mainly as pointers to a higher-level category. Each disjunct must be construed as a member of a higher-level category which has as co-members the other alternative(s) the speaker mentioned (and possibly others). The disjuncts then serve as a means for achieving another end, constructing the higher-level category intended by the speaker. For example, when Diane asks her question in (16) she does not care about the male/female distinction, despite the fact that she uses it:

- (16) NORA: *Wonder who was the ruler.*
 LINDA: (H)
 NORA: *in nineteen ten.*
 DIANE: *Who was the king **or** queen?*
 NORA: *Mhm.*
 LORI: *I don't know.*
 (SBC: 023)

Rather, her intention is to refer to a single entity, 'the nonpolitical ruler, the monarch'. Her interlocutors should construct this higher-level category by considering both the exemplars supplied by the speaker and the discourse context.

The reading (explicature) associated with an HLC *X or Y* construction is 'Z [= higher-level category] such as X and Y', which is therefore the linguistic formula we use in testing for the reading in the 'That is (to say)' test (see (27b) below).

Just like raised options, HLC uses do not necessarily commit the speaker to at least one of the options being the case, and a series of *maybes* can be added to the utterance (17b). Consider:

- (17) a. HAROLD: *And then like,*
 .. r- rural areas,
 or,
 like,
 you know,
 central Iowa and stuff,
 .. had like ... ten percent or less,
 ... of the males,
 .. had been infected.
 (SBC: 002)
- b. ~And then like, **maybe** rural areas (or) **maybe** central Iowa and stuff had like ten percent or less of the males had been infected.

Harold had been talking about the alarmingly high rate of HIV positive males in the Bay area in California. He then contrasts this rate with that of “rural areas, or, central Iowa and stuff”. What he has in mind is most likely something like ‘places remote from the major urban population centers’, which include rural areas, but also small cities. Now, ‘places remote from the major urban population centers’ is not only a mouthful. It’s hard to come up with this abstract definition. So, while the speaker’s intention is definitely the higher-level category here (Harold is not trying to zero in on the precise member of the category), he gets to it by providing the addressee with concrete members of the category, namely, rural areas in general and places, including cities, in Central Iowa, presumably assumed to not have major urban population centers.

Here’s a very clear case where the speaker is finding it hard to formulate her abstract concept, which motivates her use of an HLC. This is why once her addressee offers the missing higher-level category (*position*) she immediately adopts it:

- (18) SUE: (*H*) *.. they strongly felt that you had to have a certain amount of money,*
 or,
 ...or a certain future in order to –
 ... [end up] –
 LORI: [*position*].
 SUE: *Yeah.*
 Position in order to have a wife.
 (SBC: 023)

In the following example most likely the speaker has a vague concept of ‘canonical poet’, but not being highly educated, she uses an HLC instead of the term she seems unaware of:

- (19) *Is Naomi Shemer ((a very popular Israeli song writer)) considered a poet like Bialik or Alterman or Rachel ((three very prominent, canonical Israeli poets))?*
(Originally Hebrew, tips.co.il/singleask.asp?stupid, 24 October 2012).

Note, however, that while seemingly roundabout in getting their job done, HLC formulations may at least at times have an advantage over the abstractions they stand for. First, to appreciate the relevant issue consider the following *or-less* example:

- (20) CAM: *she said something like, ([2 LINES OMITTED])
he was sort of weird,
I didn't like you hanging around him.
... And I said what do you mean he was weird.
.. And she said he was sort of effeminate.*
(SBC: 044)

As Barsalou (1991) notes, categories are invariably contextualized in everyday use. How can we express a context-specific category when linguistic expressions are typically tailored to the normative concepts? Relevance theoreticians (Wilson and Carston 2007) have emphasized the need to narrow linguistic concepts in order to get to the speaker's context-specific intended concept, more often than not some ad hoc concept somehow associated with the linguistic term. For example, it's not that Cam is not familiar with the meaning of *weird*. The reason he asked his mother about what she meant is that *weird* can be contextually adapted differently in different contexts. Indeed, once Cam pins his mother down he learns that the concept of weirdness she had in mind was that the guy was effeminate (gay, in fact), and not, for example, that the guy was socially awkward.

Using an HLC, we propose, has a double function, at least sometimes. On the one hand it points to the higher-level category intended by the speaker, but at the same time, it helps the addressee narrow this highly abstract concept and tailor it to the specific context. For example, *position* is a rather general concept. Sue's HLC in (18) helps us not just arrive at the higher-level category, it also narrows it to something like ‘social prominence, crucially accompanied by substantial money’. Now, contrast this with the following reference to a higher-level category of *position*:

- (21) MONTOYO: ...s *If I am*,
 ... *for example*,
 ... *the president (H) .. of .. a major labor union*,
 .. **or** *a major corporation*.
 ... *the position*,
 .. *(H) as president of that entity*,
 ... *gives me so much power*.
 (SBC: 012)

In the context of (21), Montoyo's *position* is differently adjusted. Here 'power and authority over people' is the salient content of the adjusted concept, money and social prestige not necessarily highlighted. In other words, HLCs may not only solve a speaker or a hearer's difficulty in articulating or interpreting some abstract category, they may actually help in the ever-necessary process of adjusting the linguistically expressed concept to the specific context. The specific exemplars chosen by the speaker have a discourse standing, then, which is why we include them in the explicated representation.

Context too plays a major role in determining what the higher-level category intended by the HLC speaker is. Consider the following identical disjunctions (*a table or a bench*), all originally Hebrew HLCs:

- (22) a. **A table or a bench** placed in the yard are also more vulnerable to insects and pests
 (www.yossisadan.com/home/artdetails.aspx?mCatID=60&artID)
 b. When an antique painting or a fragile sculpture is concerned the prohibition ((against touching them)) is understandable, but when the display is a chair, **table or bench** one feels much more frustration. (www.haaretz.co.il/gallery/design/1)
 c. One mustn't place the appliance on the edge of **a table or a bench**
 (www.newpan.co.il/sites/newpan.lxst.../2534BDM1200Ssmall)

The stable superordinate category that researchers normally envision upon hearing *a table or a bench* is most probably 'furniture'. But this is not what any of the HLCs in (22) denote. (22a) points to wooden things, nonfurniture included, (22b) to 'objects in an exhibition one could not possibly damage' (nonwooden objects included), and (22c) to 'surfaces with unprotected edges' (so a table or bench, protected by walls, for example, is not included).

Speakers find HLCs extremely useful as far as *or* constructions are concerned. HLC is the most frequent reading conveyed by the *or* constructions in SBC: 254/1053 (24.1%). And like raised options *or* constructions, HLC speakers are not committed to even one of the disjuncts they explicitly specify, although they are definitely committed to the higher-level category being the case.

3.2.2 Single-alternative tests

In order to verify that HLCs denote a single alternative, we first look at responses to HLCs. We expect responses to HLC questions to accommodate *yes*, to preferably not discuss the specific disjuncts, but rather, the higher-level category, and to even be coherent when the addressee agrees with the speaker's HLC yet proceeds to confirm a member of the higher-level category not mentioned in the original HLC construction. A subsequent singular anaphoric reference also attests that speakers are treating HLCs as denoting single entities.

Consider the different responses (marked bold), overwhelmingly preferred by the questionnaire participants to the following two, seemingly similar questions (see again Note 9):

(23) A: *Would you like apple pie or cheese cake?*

B₁: Apple pie, please.

B₂: *Yes, please.*

(24) A: *Would you like the two of us to go away for three **or** four days?*

B₁: *Four. That's a good idea.*

B₂: Yes. That's a good idea.

The (23) *or* construction is an alternative question, a choice *or* in our terminology (see 5.2). B₁ then appropriately makes a choice. But the (24) *or* construction is taken as an HLC, which is why it receives a *yes* response. And here's a garden-pathing example, where we initially tend to assume that an alternative question is alluded to, but it turns out to be an HLC question about Obama's race affecting his chances to get elected:

(25) *Asked whether Obama's race will hurt him **or** help him, 22 percent said "yes" in response to a Pew question. Black respondents were more likely than whites to say his race would hurt; whites more likely to say it would help. Half of everyone polled said it would make no difference."*

(<http://www.mcclatchydc.com/226/story/53486.html>)

The next example shows that the addressee can confirm the speaker's HLC, yet go on to assert a different alternative, provided the alternative is a member of the relevant higher-level category intended by the speaker:

- (26) ROY: *saving the whale,*
 or saving uh ... the .. polar bea[r,
 PETE: [*Right... Pandas*],
 ROY: *or making sure there's enough] grizzly bears,*
 that's fine.
 (SBC: 003)

Note that Pete agrees with Roy (saying *right*), but he can still assert a different alternative, just because he takes Roy's *or* construction to be an HLC referring to 'saving endangered animals'. Preliminary experimental results confirm this discourse pattern (Ariel et al. in prep.). In addition, note Roy's treatment of the saving of all these animals as a single concept, using *that*, rather than *those* or *all those*. The same is true for the singular anaphoric reference *that entity* in (21), where two entities were mentioned, 'a major labor union' and 'a major corporation'. *That entity* refers to a 'position of power', constructed from the two exemplars explicitly mentioned. Examples (24) and (26) point to the same phenomenon: an HLC counts as a single, rather than as a multiple-alternative *or* construction.²³

To see that indeed, the HLC interpretation is an explicated reading of these *or* constructions, consider (27) as faithful reports of (21):

- (27) a. ?? *Montoyo literally said that if he is the president of a major labor union or a major corporation, or possibly of both, the position as president of that entity..., but actually he indirectly conveyed that if he is the president of a powerful organization such as a major labor union and a major corporation, the position as president of that entity ...*
 b. *Montoyo said that if he is the president of a major labor union or a major corporation, that is (to say) if he is the president of a powerful organization such as a major labor union and a major corporation, the position as president of that entity...*

(27a) shows that the higher-level category (*president of a powerful organization*) is not a second-tier indirectly conveyed implicature, and (b) shows that it behaves as the explicated meaning.

²³ Additional tests and arguments for the reality of the single-alternative Higher-level category are presented in Ariel (2016a).

Summing up, we include under HLC *or* constructions cases where:

- (28) a. The speaker introduces multiple alternatives as exemplars of a single, higher-level category.
 b. The speaker most prominently *puts on the table* one alternative, namely the higher-level category.
 c. The speaker undertakes no commitment to the set of the alternatives she raises, although she does commit to the higher-level category.
 d. The explicit alternatives do not necessarily exhaust the set of possibilities.
 e. The specific exemplars are crucial not only for pointing to the higher-level category, but also for contextually adjusting it.

4 Would-be inclusive constructions: conjunctive *or*

Searching for inclusive *or* constructions, we collected cases where (i) the speaker intended to actually convey multiple alternatives (thus ruling out HLCs) (ii) the speaker was taken to commit to at least one of the alternatives (thus ruling out raised options) (iii) the speaker could not have intended to convey a mutually exclusive ‘not both’ interpretation. We found 80 such cases in SBC (7.6%).

On our analysis, an inclusive reading is expected to explicate that ‘possibly X, possibly Y (and) possibly X and Y’. Indeed, when we apply the That is (to say) test using this formula to (29a)), an unequivocally inclusive *or* construction (one containing *and/or*), the result is a faithful report (29b):

- (29) a. *All the sections are kind of self-sufficient, having kitchen units **and/or** bathrooms (LSAC).*
 b. *The speaker **said** that all the sections are kind of self-sufficient, having kitchen units *and/or* bathrooms, **that is (to say)** possibly kitchen units, possibly bathrooms and possibly both kitchen units and bathrooms.*

Or constructions giving rise to inclusive *explicatures* should then be faithfully so reportable. This is not what we found, however. We propose that bare *or* (as opposed to *and/or*) does not give rise to an inclusive *explicature*.²⁴

²⁴ We should remind the reader, however, that this claim does not mean that inferences re the compatibility of ‘both X and Y’ with *X or Y* are illegitimate or nonexistent. What we are claiming is that ‘inclusivity’ is not a speaker-intended *explicature* when a bare (*either*) *or* is used (see Section 7).

Consider some examples:

- (30) a. JIM: *But for mathematics **or** for science, ([1 LINE OMITTED])
it's an opportunity for them ([3 LINES OMITTED])
to get closer to,
(H) to the chaos,
(SBC: 017)*
- b. FRANK: *it's,
..easier to do naked eye. ([4 LINES OMITTED])
Or **or** binoculars. (SBC: 019)*
- c. DARLENE: *I didn't even wear it to Jennifer **or** Ann's wedding.
(SBC: 052).*
- d. ALICE: *You know if you ... put a situation like that to ~Tim **or**
~Mandy,
([4 LINES OMITTED])
... They ... hem and haw around,
(SBC: 007).*

As expected, we found a significant correlation between “inclusivity” and Downward Entailing (DE) contexts (as in (30c) and (30d)). But not all “inclusive” readings occurred in such contexts (e.g., (30a) and (30b)), and not all *or*-constructions occurring in a DE context received an inclusive interpretation (e.g., (21)). More interestingly, however, while compatible with ‘possibly both’, the examples in (30) actually express a stronger reading than ‘inclusivity’. Indeed, two diagnostic tests show them to differ from truly inclusive cases.

First, note that the examples fail the That is (to say) test for inclusivity that (29a) does pass:

- (31) a. ?? *The speaker said that it's easier to do naked eye or binoculars, that is (to say) it's easier
to do possibly naked eye, possibly binoculars and possibly both naked eye and binoculars.*
- b. ?? *Alice said that if you put a situation like that to Tim or Mandy, that is (to say) possibly to Tim, possibly to Mandy, (and) possibly to both Tim and Mandy, they hem and haw around.*

The paraphrases in (31) are not faithful, because they are too weak (a), both too weak and too strong (b, see below). This is why we classified the examples in (30) as conjunctive instead. For an *or* construction to count as conjunctive it must show a speaker's commitment to both/all alternatives in some sense. This is the source

of the second difference between ‘inclusive’ and the examples under discussion. Conjunctives (but not true ‘inclusives’) can form a coherent first-part of an exchange where the second-part introduces an interlocutor’s denial of any one of the alternatives, which then justifies his declaring the first utterance false. The rationale is that since the speaker uttering a conjunctive *or* construction commits to both alternatives, another interlocutor can legitimately declare her utterance false by denying *one* of the alternatives. Consider first nonconjunctive *or* constructions (Raised options in (32a), Inclusive in (32b)), in order to see that these cannot be so declared false:

- (32) a. S: *At a certain stage part of the shares were transferred to the children before going out on the stock exchange **or** they were returned and divided up...*
 B: *~?? That’s not true. The shares were never transferred to the children before going out on the stock exchange.*
- b. A: *All the sections are kind of self-sufficient, having kitchen units **and/or** bathrooms.*
 B: *~ ?? That’s not true. My section doesn’t have a kitchen.*

Since S (in a) did not commit to the truth of ‘the shares were transferred... before going out...’ B cannot declare his utterance false even if this alternative is false. And since A (in b) did not commit to every section having a kitchen, it too cannot be declared false. But unlike (32), the exchanges in (33) are coherent:

- (33) a. A: *It’s easier to do naked eye or binoculars.*
 B: *~That’s not true. It’s not easier to do naked eye.*
- b. A: *if you put a situation like that to Tim **or** Mandy they hem and haw around.*
 B: *~That’s not true. Mandy won’t do that.*

Since the *or* constructions here are conjunctive, the falsity of one of the alternatives is sufficient to render the utterance false. Once again, truly inclusive cases (33b) pattern differently from conjunctive cases. Conditional antecedents (33b), considered prime inclusive cases, are no exception. Indeed, our data support Dik’s (1968) claim that only *and/or* constructions are truly ‘inclusive’.

Conjunctive *or* constructions are puzzling. They seem to neutralize the difference between *and* and *or*. In Ariel and Mauri (in prep. a) we propose that they actually do not, because only in *or* constructions each of the disjuncts must introduce an *alternative* considered on its own. At the same time, conjunctive

cases are not all of one stripe. The nature of the speaker's commitment, as well as her stance towards the alternatives, differ for different conjunctive cases. We distinguish between two conjunctive cases: separative conjunctions (4.1) and Free alternatives (4.2).²⁵

4.1 Separative conjunction: 'Both X and Y'

Jennings (1994) observes that the use of *or* in what seem to be conjunctive uses is motivated by an intention to emphasize the "distinctness rather than the cumulateness of the possibilities mooted". In fact, "the role of 'or' is that of a separative conjunction" (Jennings 1994: 299). We then define a separative conjunction reading as one where the speaker necessarily commits to both alternatives, in addition foregrounding the independence of each from the other. In most cases separate states of affairs are involved. The linguistic formula we use in the 'That is (to say)' test for identifying this reading is *both X and Y* (34a). Example (34b) shows that the separative conjunction reading is not implicated as a second-tier "special" use²⁶:

- (34) a. *Jim **said that** for mathematics or for science, **that is (to say)** for both of mathematics and science it's an opportunity to get closer to the chaos.*
 b. *?? Jim **literally said that** for mathematics or for science or possibly for both of them it's an opportunity for them..., **but actually he indirectly conveyed that** for both mathematics and science...*

separative conjunction *or* constructions are bona fide conjunctions, so the *or* can be replaced by *and* (35a), and each alternative is entailed (35b):

- (35) a. *For mathematics **and** for science, it's an opportunity for them to get closer to the chaos.*
 b. *For mathematics it's an opportunity to get closer to the chaos.*

The difference between the *and* version in (35a) and the original *or* version in (30a) is that the latter also profiles an alternativity relation (Ariel and Mauri in prep. a).

²⁵ We here take a different position from Klinedinst (2007), who does not make this distinction.

²⁶ See Simons (2005a) for a similar defense of a nonimplicated status for the 'both' interpretation.

Summing up, using a separative conjunction *or* construction:

- (36) a. The speaker *puts on the table* multiple alternatives.
 b. The speaker commits to all the alternatives being the case.
 c. The independence of each of the alternatives is highlighted.

4.2 Free alternative: ‘Any one of X and Y’

Following Kamp (1973), free choice disjunctions have attracted quite a bit of attention (e.g., Chierchia 2013; Geurts 2005; Simons 2005b; Zimmermann 2000). Just like separative conjunction cases, the classical free choice *or* constructions (as in (37)), are conjunctive in that they allow falsification on the basis of one false alternative (38a), they manifest *and* substitution (38b), and a legitimate inference to only one of the alternatives (38c).²⁷ Consider:

- (37) RANDY: ... *But you can wrap em around,
 to one-thirty **or** one-sixty,*
 (SBC: 022)
- (38) a. *~That’s not true. I can’t wrap ’em around to one-thirty.*
 b. *You can wrap ’em around to one-thirty **and** you can wrap ’em around to one-sixty.*
 c. *You can wrap ’em around to one-thirty.*

But we distinguish such cases from separative conjunctions, because they carry an additional free choice, “no matter” flavor, where the speaker projects herself as *open to any of the alternatives*. This is true for the modal-containing (38), as it is for the modal-less (8), where Eliza allows Mr Turner a free choice between calling her Eliza or Liza.

While many Free Alternative cases pattern as above, constructions containing strong modals, such as *be required* in (39a), do not pass the ‘and’ substitution and the single-disjunct entailment tests. But their conjunctive nature is evident from the fact that an interlocutor can coherently deny their truth based on a denial of any one of the disjuncts (39b):

²⁷ But see the discussion around ((39) for the weaker criterion for cases containing strong modals.

- (39) a. *The cellular companies are required by law to send a message following **or** just prior to use of 75%, 90% and 100% of the package deal* (Originally Hebrew, Ynet).
 b. ~B: *That's not true. They must notify customers just prior to use of 75%, 90% and 100% of the package deal.*

Now, we have opted for the term Free Alternative rather than the conventional free choice for a reason. In addition to classical free choice constructions, we classify as Free Alternative constructions not normally analyzed as free choice. (30d), here repeated, is such a case:

- (40) ALICE: *You know if you ... put a situation like that to ~Tim **or** ~Mandy,*
 ([4 LINES OMITTED])
... They ... hem and haw around,
 (SBC: 007).

Note that the interpretations of *or* in (37) (a classical free choice case) and (40) (a classical inclusive case) are quite similar. Both are conjunctive (as defined above), and both involve a speaker's impartiality stance towards the realization of the alternatives she enumerates. What is special about Free Alternative readings, we propose, is that (a) the alternatives must be interpreted as nonfactual (b) the speaker commits to the possible realization of each of the alternatives, but (c) she only expects one of the alternatives (*any one* of them) to actually be realized, and (d) she profiles an impartiality towards the different alternatives.

The faithful paraphrase we propose for Free alternative cases is 'any one of X and Y'. Indeed, (41) show that this paraphrase passes the That is (to say) explicature test (for (37) and (40) respectively):

- (41) a. Randy said that you can wrap em around to one-thirty or one-sixty, **that is (to say)** to any one of one-thirty and one-sixty.
 b. Alice said that if you put a situation like that to Tim **or** Mandy, **that is (to say)** to any one of Tim and Mandy, they hem and haw around.

And (42) show that this interpretation is not a second-tier implicature:

- (42) a. ?? Randy **literally** said that you can wrap em around to one-thirty or one-sixty or both one-thirty and one-sixty, **but actually, he indirectly conveyed that** you can wrap them around to any one of one-thirty and

one-sixty.

- b. ?? Alice **literally** said that if you put a situation like that possibly to Tim, possibly to Mandy, possibly to both Tim and Mandy, they hem and haw around, **but actually, she indirectly conveyed that** if you put a situation like that to any one of Tim and Mandy, they hem and haw around.

The ‘any one of X and Y’ is then an explicated reading in Free alternative cases. To sum up, using a Free Alternative *or* construction:

- (43) a. The speaker *puts on the table* multiple nonfactual alternatives.
 b. The speaker commits to the possibility of each of the alternatives to be realized.
 c. The speaker expects only one alternative to actually be realized.
 d. The speaker is impartial as to which alternative is realized (‘any one’).

5 Would-be exclusive *ors*

Mutual incompatibility between the profiled alternatives is the hallmark of exclusive *or* constructions. However, one of the clearest findings from our data is that *or* constructions which manifest mutual incompatibility between the explicit alternatives (thereby licensing an “exclusive” inference) do not actually serve a single semantic or pragmatic function which would justify classifying them together under a single *reading*. More importantly, we claim that exclusivity per se is not here explicated. We discuss two *or* readings which would be considered exclusive under the traditional analysis, because they necessarily manifest mutual incompatibility between the alternatives: narrowed *or* (5.1) and choice *or* (5.2). But we prefer to analyze them as explicating ‘one out of the explicit alternatives’ readings. Since the speaker here does commit to one of the alternatives being the case a *maybe* substitution should weaken the reading into a raised options case.

5.1 Narrowed *or*: ‘One of X and Y’

Examples such as (44) are very popular in the literature on *or*, because they supposedly represent the “standard” *or* construction, where the speaker would have liked to, but cannot zero in on a single alternative (Grice 1989):

- (44) ~*Wilma is dating Albinoni or Boccherini* (Geurts 2010: 59).

While analyses vary in detail, researchers are in agreement that in interpreting (44) the addressee must enrich the linguistic “inclusive” meaning into an “exclusive” derived meaning via a scalar ‘not both X and Y’ added assumption. The first point we wish to make about such *or* constructions, which we term “narrowed” *or* constructions, is that contrary to expectations, they are not at all common. In fact, there were only 5 such examples in the Santa Barbara Corpus (0.5%). Here are two such examples:

- (45) a. ALINA: *Right next door is !Ted !Rich,*
who’s uh = ,
.. (H) one of the biggies at MTM,
.. (TSK) or,
Lorimar or MGM,
.. oh I forgot which one. (SBC: 006).
- b. *When people come to SAC, Jan or another P A will be there to explain the system (LSAC).*

Of course, a rare reading is a reading all the same. We propose that the explicature associated with a *narrowed X or Y* construction is ‘one of X and Y’, which is therefore the linguistic formula we use in testing for the reading in the ‘That is (to say)’ test (see (48) below).

Note that unlike raised options cases, the speaker here does commit to one of the alternatives being the case, so adding *maybes* removes the speaker’s commitment to ‘at least one of X and Y’, thus turning the example into a raised options one:

- (46) ~Right next door is Ted Rich who’s one of the biggies at **maybe** MTM, **maybe** Lorimar, (or) **maybe** MGM.

The alternatives in narrowed *or* constructions are strikingly similar to each other. While referentially distinct, the alternatives in narrowed constructions belong to a rather tight set, and are similar enough to each other for the differences between them to most likely not carry any contextual implications *in the current discourse*. Note the continuation of (45a) above, where the speakers themselves paraphrase the disjunction between MTM, Lorimar and MGM with “one of them”/“one of those places”, Alina also confirming the lack of significance assigned to the difference between the set members with her final utterance²⁸:

²⁸ As can be seen from the interlocutors’ laughter (the @ symbols), the Narrowed use turns out to be playful here, precisely because it indicates that the difference between these very distinguished Hollywood studios doesn’t matter.

- (47) LENORE: @@@[@@]
 ALINA: [@]@[2@]
 LENORE: [2*One of them*].
 ALINA: (H)2] *One of those places.*
 (H) *It all means the same to me.*
 (SBC: 006).

While the speakers no doubt take it for granted that only one alternative can reasonably be the case here, they don't name it, because they are not sure (45a), or it is their intention to actually leave the (restricted) options open (45b).

We note that, out of the 172 occurrences of *one of X* in SBC, not even one lists individuals in the X slot. What we found were examples such as *one of 'em*, *one of his shows*. While expressions such as *one of John and Mary* seem perfectly grammatical, they are at the very least quite rare. It's then possible that the relevant set for *one of Xs* is usually not individuated, just because *X or Y* is available for reference to a non-identified alternative ('one of') out of a restricted set of individuated alternatives. In other words, we're proposing that *one of Xs* is reserved for expressing 'a non-identified alternative out of a non-individuated set of entities', whereas narrowed *X or Y* is reserved for 'a non-identified alternative out of an individuated set of entities'.

Now, if narrowed *or* cases receive a 'one of a restricted set' reading, how is this different from the exclusive reading? Let's apply the explicature diagnostic test to the reading we're proposing, 'one of X and Y' (48a), and to the exclusive reading 'possibly X, 'possibly Y, but not X and Y' (48b). (48c) shows that the narrowed reading is not a special, second-tier use:

- (48) a. Alina **said that** right next door is Ted Rich, who's one of the biggies at MTM or Lorimar or MGM, **that is (to say)** one of MTM, Lorimar and MGM.
 b. ?? Alina **said that** right next door is Ted Rich, who's one of the biggies at MTM or Lorimar or MGM, **that is (to say)** possibly at MTM, possibly at Lorimar, possibly at MGM, but not at all three.
 c. ??Alina **literally said that** right next door is Ted Rich, who's one of the biggies at MTM or Lorimar or MGM, **but actually she indirectly conveyed that** he is at one of MTM, Lorimar and MGM.

The reason why (48b) is not as faithful as (48a), although the two are truth-conditionally identical (but see below), is that (48b) attributes to Alina an

intention to convey that ‘not all the alternatives’ are true of Ted Rich. We maintain that this is not a speaker-intended message. Because we see the speaker’s direct interactional goal here as specifying that the referent is one of a narrowed set of options (where the speaker cannot zero in on a single one) we do not find the characterization as exclusive as relevant here (see also Section 7). The ‘That is (to say)’ test supports our position.

Note that (45a) contains three alternatives. Constructions containing more than two disjuncts run into a problem long noted under a ‘not all alternatives’ Exclusive analysis: The ‘not all alternatives’ route to “exclusivity” does not eliminate the possibility that the speaker is allowing for more than one, albeit not all of the alternatives, to be the case (e.g., ‘MTM and Lorimar, to the exclusion of MGM’ for (45a)). Our account does not run into this problem.²⁹

In sum, we include under narrowed *or* constructions cases where:

- (49) a. The speaker *puts on the table* multiple alternatives she entertains.
 b. Since the speaker is not in a position to zero in on a single option, her goal is to narrow the referent to one of a tight set of similar alternatives.
 c. The speaker undertakes a commitment to an unidentified alternative (‘one of’) out of the (individuated) set of alternatives she articulates.
 d. The explicit alternatives exhaust the set of possibilities.

5.2 Choice *or*: ‘Unresolved choice between X and Y’

Choice *or* constructions (120, 11.4%) profile an unresolved choice between the alternatives introduced. The syntactic/semantic frame they occur in determines the status of this unresolved choice. Consider:

- (50) a. PHIL: *I don’t know if she put it together,
 or if !Nancy put it together.*
 (SBC: 010).

²⁹ Standard theories must incorporate a ‘both alternatives exclusion’ assumption, because the linguistic meaning they assume does not rule out a ‘both’ option. We, on the other hand, assume that the core linguistic meaning of *or* is silent (underspecified) about how many alternatives the speaker commits to (Alonso-Ovalle 2006). We further claim that the actual number explicated by the speaker (0, 1, all) is a function of the nature of the alternativity relation construed between the disjuncts (Ariel and Mauri in prep. b).

- b. PHIL: *we need to find out .. what it is we're doing.*
 BRAD: *.. [Yeah].*
 PHIL: *Whe[ther] we're doing .. something right **or** not.*
 (SBC: 002).
- c. ROY: *Shall I do something civilized, ((1 LINE OMITTED))*
like clear the table, ((1 LINE OMITTED))
***or** are we just gonna barbarian it out.*
 (SBC: 003)

We found three frameworks for choice constructions. Phil's subordinate question in (50a) simply asserts that choice (between 'she' and 'Nancy') is currently not resolved. Phil's subordinate question in (50b) asserts the need to resolve a choice (between 'right' or 'not right') at some later point. Not surprisingly, the most frequent frame for choice constructions (88/120, 73.3%) is a direct question as in (50c), where Roy is eliciting an addressee's immediate resolution of a choice (between two courses of action). The latter constructions typically (but not invariably) carry a distinct prosody.

The reading(s) associated with choice *X or Y* constructions must be phrased as higher-level explicatures, because reference must be made to the speaker's intended illocutionary force. For the most frequent case, this would be 'the speaker asked the addressee to choose between X and Y'. This is therefore the linguistic formula we use in testing for the reading in the 'That is (to say)' test (see (54a) below).

Note that despite the question framing, we are able to distinguish between choice and raised options constructions, because, as we've already seen in (9), adding *maybes* changes choice questions into raised options questions. Using a choice question, the speaker does expect that one of the alternatives holds, which is why (50c) is not identical to (51):

- (51) ~Shall I clear the table **maybe**, (or) are we just gonna barbarian it out **maybe**?

Like narrowed constructions, choice *or* constructions too offer a restricted set of alternatives. But, unlike narrowed cases, the set of options here is not necessarily as tight a set of *similar* alternatives. In fact, the difference between the alternatives is highlighted, because it carries contextual implications (Ariel 2015). This is why the choice variant (B₂) constitutes a different response from the original, narrowed response (here abbreviated as B₁):

- (52) ~ A: Where was Marc?
 B₁: Steph's baseball **or** volleyball game (Adapted from an LSAC example).
 B₂: I'm not sure if it was Steph's baseball **or** volleyball game.

While in both cases the speaker commits to one of two options that s/he's not sure about, B₁ construes this partial response as sufficient for the discourse purposes ("narrowed"). B₂, on the other hand, construes the same information as an unresolved issue ("choice").

Consider the following example, which seems to support the classical exclusive analysis, since M.T equates between *or* and 'not both':

- (53) Mom: *Did you eat the orange cake?*
 Or the chocolate cake.
 M.T: **Why or?**
 Both.

Nonetheless, applying the explicature 'That is (to say)' test to (53) shows that 'choice' is part of the intended meaning (54a), although ruling out 'both' is not (54b). (54c) shows that 'choice' is not a special, second-tier implicature:

- (54) a. Mom asked M.T whether she ate the orange cake or the chocolate cake, **that is (to say)** she asked M.T to choose between alternative answers: the orange cake and the chocolate cake.
 b. ?? Mom asked M.T whether she ate the orange cake or the chocolate cake, **that is (to say)** she asked whether M.T ate possibly the orange cake, possibly the chocolate cake, but not both cakes.
 c. ?? Mom **literally** asked M.T whether she ate possibly the orange cake, possibly the chocolate cake, possibly both, **but actually, she indirectly asked that** M.T choose between alternative answers: the orange cake and the chocolate cake.

The tests show that the unresolved choice interpretation is not arrived at by ruling out 'both/all alternatives'. We maintain that the choice reading is directly responsible for the 'one of' aspect. 'Not both', on our analysis falls out of the choice involved, which calls for excluding all but one of the alternatives on the table.

Choice *or* constructions are restricted to (in)direct questions. We could perhaps then propose that choice is reducible to narrow + Question. However,

in addition to the different relation between the alternatives in the two cases (similarity focus for narrowed, difference focus for choice), we argue that there is an inherent connection specifically between choice and questions. Indeed, typological claims recently offered by Mauri (2008a, 2008b; Mauri and van der Auwera 2012) show that it's not just the case that no language has a dedicated "exclusive" *or*, but also that some languages have a dedicated connective which may be used solely for the reading here identified as choice (e.g., Polish *czy*, Finnish *vai*, and Georgian *tu*). These connectives occur in interrogative sentences, and cannot be used when the speaker's purpose is simply to present a set of alternatives, even if she knows full well that at most one of the alternatives is the case. This is exemplified in (55), where the specialized disjunctive connective *tu* must be used when the speaker's aim is to elicit an immediate choice (as in (55a)), but the nonspecialized *an* must be used when the addressee needs to simply confirm (or deny) a proposed set of possibilities (as in (55b)). Needless to say, both examples are equally "exclusive" cases within questions:

(55) Georgian, Kartvelian

a. *Xval sk'olaši c'avidet tu saxlši davrčet?*
 Tomorrow school:LOC go:1pl:OPT C-or home:LOC stay:1pl:OPT
 'Tomorrow are we going to school or are we staying home?'

b. *Ginda gaviseimot ertad, an čai davliot, an k'inos*
 want:2sg walk:1pl together S-or tea drink:1pl S-or movie
vuq'urot, an ... rac ginda?
 watch:1pl S-or what want:2sg
 'Would you go for a walk with me, or have a cup of tea, or watch a movie, or ... whatever?' (Possible answer: YES/NO)
 (Mauri 2008a: 71 Abbreviations: C=choice; LOC=locative; OPT=optative; pl=plural; S=simple; sg=singular.)

There are two noteworthy points about (55b). First, the use of the specialized 'choice' *or* is not syntactically conditioned (by the presence of an interrogative) or it would have been used here as well. Second, while a choice between the explicit alternatives (as well as others not listed) may be inferred in (55b), choice is not the explicature of the construction. It is then the explicated 'choice' reading that governs the use of the dedicated 'choice' *or* expression.

Based on our analysis, we therefore characterize as choice *or* constructions cases where:

- (56) a. The speaker *puts on the table* multiple alternatives.
 b. The explicit alternatives carry different contextual implications.

- c. The speaker's aim is to profile some unresolved choice of a single alternative from among the enumerated alternatives, in order to assert this nonresolution, or assert the need to resolve it, or request a choice right there and then.

6 Would-be either exclusive or inclusive – Exhaustive *or*: 'Only X and Y'

The last reading we propose is “exhaustive”, which asserts that the explicit alternatives are the only alternatives on the table. Surprisingly perhaps, exhaustive cases include cases that would be classified either as exclusive or as inclusive under the traditional analysis. While mostly profiling alternatives incompatible with each other, the speaker committing to only one alternative being the case (“exclusive” in (57c)), some exhaustive cases show a speaker's commitment to both alternatives (conjunctive in (57a) and (57b))³⁰:

- (57) a. JULIE:.. *It's a it's sport for either the brave **or** the stupid.*
(SBC: 056).
- b. *Your phone is EITHER busy,*
OR *on voice message*
(Originally Hebrew phone message, 22 May 2008).
- c. FRANK:*But apparently it was either a heart attack **or** an aneurysm,*
(SBC: 019)

Julie's point in (a) is that *only* two types of people (brave ones and stupid ones), would dare engage in this sport. Now, brave people and stupid people are markedly distinct from each other. Still, one goal of a speaker using an exhaustive *or* construction is that the real enough difference between the alternatives does not carry discourse significance. The speaker focuses on restricting the options to those specified explicitly, in order to thereby rule out other alternatives not explicitly specified (say, smart, adventurous, or athletic people in (57a)). The speaker's goal in exhaustive cases is to show how restricted the number of alternatives is.³¹ This is even clearer in (b), where the person leaving the message has repeatedly tried to speak with the addressee, but always failed

³⁰ We here leave it to the reader to verify that adding *maybes* to the exhaustive cases below removes the speaker's commitment, in effect changing the reading to that of raised options.

³¹ Indeed, no exhaustive *or* construction introduces more than 2 disjuncts in SBC, whereas 6.4% of the rest of the constructions introduce 3 or more disjuncts.

to achieve this desired (implicit) alternative. Crucially, while ‘a busy phone’ and ‘a voice message setting on the phone’ constitute two distinct states of affairs, the speaker’s point is that in the specific context they amount to the same thing (‘I can’t talk to you’).

Note that whereas (57a) and (57b) are conjunctive (the speaker committing to both stupid and brave people... and to the phone being both busy and on phone message – on different occasions), (57c) is not. The reason why we classified these examples together is that the speaker’s main point in *all* of them is that ‘the explicit X and Y alternatives are the only ones relevant or worthy of discussion, to the exclusion of any others’. The explicature associated with an exhaustive X or Y construction is ‘the only alternatives are X and Y’, which is therefore the linguistic formula we use in testing for the reading in the ‘That is (to say)’ test. Indeed, when we apply the explicature ‘That is (to say)’ test to these examples, they share the same faithful paraphrase which limits the alternatives to the ones explicitly mentioned, at the same time also ruling out other options left implicit.

Consider the application of the ‘That is (to say)’ test to (57a) and (57c). (58a) and (59a) show that the reading we propose passes the test, but neither the “inclusive” (58b) nor the “exclusive” (59b) interpretations do. The test applied in (58c) and (59c) shows that the reading is not a special, second-tier implicature:

- (58) a. Julie said that it’s sport for either the brave or the stupid, **that is (to say)** that the only alternatives are that it’s a sport for the brave and for the stupid (other options ruled out).
 b. ??Julie said that it’s sport for either the brave or the stupid, **that is (to say)** that it’s possibly a sport for the brave, possibly a sport for the stupid, and possibly for both the brave and the stupid.
 c. ?? Julie **literally** said that it’s sport for either the brave or the stupid, **but actually she indirectly conveyed that** that the only alternatives are that it’s a sport for the brave and the stupid (other options ruled out).
- (59) a. Frank said that apparently it was either a heart attack **or** an aneurysm, **that is (to say) that the only alternatives are a heart attack and an aneurysm (other options ruled out)**.
 b. ?? Frank said that apparently it was either a heart attack **or** an aneurysm, **that is (to say)** that it was possibly a heart attack, possibly an aneurysm but not both a heart attack and an aneurysm.
 c. ?? Frank **literally** said that apparently it was either a heart attack **or** an aneurysm, **but actually he indirectly conveyed** that the only alternatives are a heart attack and an aneurysm (other options ruled out).

While (58b) and (59b) are quite likely compatible with what the speakers believe, they do not constitute faithful explications of the speakers' intended messages (see Section 7.2 about Truth Compatible Inferences).

There were only 38 exhaustive cases in SBC (3.7%). As predicted by Zimmermann (2000), many of these *or* constructions (19, 50%) are expressed with the specialized *either... or...* construction.³² Now, as we saw in Section 5.2, choice constructions are exhaustive too. However, while choice *ors* assume that the explicit disjuncts present an exhaustive list of alternatives, they prominently profile a discourse-relevant difference between these alternatives, to the point that a choice between them is invoked. We classified *or* examples as exhaustive *or* constructions if the speaker's main point is that the alternatives presented are *profiled* as exhausting all options, so that *other, implicit options are ruled out as part of the message*. In addition, while the objective difference between the alternatives here is not at all suppressed, this difference is denied discourse relevance (certainly, no choice is involved).³³ Note that the fact that the alternatives may at the same time be mutually (in)compatible is actually discursively irrelevant for exhaustive cases. It is the absence of alternatives *other* than the ones specified that is essential to the speaker's point.

Now, a silent "exhaustification" procedure has recently been proposed for scalar "implicatures" in general, and for disjunctions in particular, as a way to derive the classical Exclusivity, i.e., 'not both X and Y' interpretation (Chierchia 2013, *inter alia*). The explicature tests above showed that this is not the right way to explain narrowed and choice constructions, because 'not both' is not speaker-intended (even if compatible with her beliefs). Exhaustive readings do, however, involve exhaustification, with 'only' taking as focus 'X' and 'Y' each on its own. But the alternative(s) *routinely* ruled out are actually not 'both X and Y', as is commonly assumed. To see that these implicit alternatives ('available to talk' in (60)) are the ones to be ruled out, rather than an 'X and Y' alternative, consider the following two constructed responses to (57b), here repeated:

- (60) A: Your phone is EITHER busy **OR** on voice message.
 ~B₁: Yeah, I'm not available on the phone/you can't get through to me.
 ~B₂: ??Yeah, both of these things are true.
 ~B₃: Yeah, you're right.

³² But contra Zimmerman, not all *either... or...* cases were so interpreted.

³³ While Geurts (2005: 396) includes an exhaustivity interpretation whenever the utterance ends with a falling intonation contour, he admits that exhaustivity may hold to different degrees. We find that such differences affect the reading.

B₁ shows a felicitous confirmation of the rejection of the implicit desirable alternative, namely, ‘talking with B on the phone’. Now, both B₂ and B₃ confirm the conjunctive interpretation for A, but B₂ is not as natural. Indeed, the distinction between the two alternatives is not an issue here, so referring to each of them separately is not felicitous. Next, confirming the truth of ‘not both’ for nonconjunctive exhaustives is not felicitous either:

- (61) FRANK: But apparently it was either a heart attack **or** an aneurysm.
 ~RON₁: Yeah, they ruled out all other causes.
 ~RON₂: ?? Yeah, they ruled out the possibility that it was both.

What Ron can agree with must have been conveyed by Frank. This is why Ron₁ is coherent. What Ron cannot coherently agree with must have not been conveyed by Frank (it’s only a Truth Compatible Inference, see 7.2 below). This is why Ron₂ is less coherent.

Next, while both choice and exhaustive readings may involve a so-called exclusivity interpretation (‘one of the alternatives’ for us), for the choice cases it is the contrastive relation between the explicit alternatives themselves that is highlighted (an internal contrast, involving a choice between the two). For the exhaustive cases what’s focused on instead is a contrastive relation between the explicit alternatives, taken together, and any other alternatives (not explicitly mentioned) that could be entertained (an external contrast, leading to the rejection of the implicit alternatives).³⁴ Indeed, just like the choice cases are at the same time taken to be exhaustive, so the majority of the exhaustive cases are in addition typically, but not necessarily, understood to introduce mutually incompatible alternatives, as in:

- (62) FOSTER: ... *Human nature*,
 .. *does not .. possess .. free will*.
 (H) *It is like a horse*.
 (H) *Ridden by God **or** the Devil*.
 ... *The rider possesses the will*.
 ... *The horse .. obeys*.
 (SBC: 025)

³⁴ But of course, one of these inexplicit deniable options can be ‘both X and Y’, as we see in Section 7.1 below.

This mutual incompatibility is not part of the speaker's intended meaning for exhaustive *or* constructions, however.³⁵ Rather, it is a TCI (Truth-compatible inference), potentially derived based on our world knowledge about which states of affairs are mutually incompatible (the majority), which are most likely mutually incompatible, and which are actually compatible with each other (a minority). For example, unlike the mutually incompatible alternatives in (62), 'being brave' and 'being stupid' in (57a) are quite compatible with each other: One can certainly be both brave and stupid. But the applicability of Julie's utterance re 'brave or stupid' to people who are simultaneously brave and stupid is, we submit, merely a TCI. In (57c) the two alternatives are not necessarily mutually incompatible, but quite plausibly so. In (62), the preacher's immediate goal is to assert that human beings are controlled by some higher power and to rule out the alternative that human nature possesses free will. The difference between being controlled by God versus being controlled by the devil is not in fact at issue here.

Consider now the following example, which nicely shows the difference between a choice *or* construction, where choice resolution is highly relevant (the first disjunction), and an exhaustive *or* construction, where deciding between the options is not at issue, although ruling other options is (the second disjunction):

- (63) *The speaker said that the Israeli ambassador to Congo demanded from his hosts to inquire if it was **an accident or an assassination**, and the Congo police made inquiries on the matter till they reached the conclusion that it was **an accident or an assassination***
 (Originally Hebrew, Assaf Inbari, Habaita, 2009: 221).³⁶

As shown by the application of the explicature 'That is (to say)' test, all the police could do was narrow down the nature of the event to only two alternatives, the achievement being that they ruled out other options (e.g., natural death). To be sure, there is a TCI to mutual incompatibility between the alternatives here, but that is not a speaker-intended message:

- (64) *The Israeli ambassador to Congo demanded from his hosts to inquire if it was an accident or an assassination, **that is (to say)** he demanded that they*

³⁵ We're here in agreement with Zimmermann (2000), who clearly distinguishes between exhaustivity and exclusiveness, even if the way we draw the semantics/pragmatics division of labor is different from his.

³⁶ We owe this interesting example to Israela Becker.

*resolve the choice between the two alternatives, and the Congo police made inquiries on the matter till they reached the conclusion that it was an accident or an assassination, **that is (to say)** that the only alternatives are accident and assassination (other options ruled out).*

Based on our analysis, we characterize as exhaustive *or* constructions cases where:

- (65) a. The speaker *puts on the table* multiple alternatives, but ones heavily restricted in number.
- b. While referentially quite distinct from each other, the explicit alternatives are not asserted in order to support different contextual implications.
- c. The speaker's aim is to assert that the set of possible options is limited to the set of explicitly mentioned alternatives (other options ruled out).
- d. Which implicit alternative(s) are ruled out (by implicature) is contextually determined.

7 Where have all the exclusive and inclusive interpretations gone?

If our analyses above are correct, then natural languages do not have much use for *explicating* inclusivity and exclusivity (as currently defined). Could these inferences then be Generalized or Particularized Conversational Implicatures (GCIs/PCIs), in which case, while indirect, they still fall under the speaker's communicative intention? 7.1 shows that *or* constructions are sometimes associated with certain PCIs on top of their explicatures. But 7.2 argues that exclusive and inclusive assumptions are routinely *not* among these implicatures. There is no need for privileged 'possibly both' or 'not both' nor for a grammaticized 'not both'. 'Not/possibly both' are TCIs or background assumptions. We exemplify our point with respect to 'not both'.

7.1 Particularized conversational implicatures

Speakers definitely use *or* constructions to further generate PCIs sometimes. We here chose to exemplify two cases of PCIs accompanying exhaustive constructions.

Recall that exhaustive constructions receive an ‘only X and Y (other options ruled out)’ explicature. While this much is explicated, the rejection of the *specific* alternative is a PCI, albeit a very strong PCI sometimes. Consider (57c) again, here repeated as (66a). Note that the paraphrase which specifies the alternative ruled out passes the ‘Indirectly conveyed’ diagnostic for PCIs (b):

- (66) a. *FRANK*: But apparently it was either a heart attack or an aneurysm.
 b. Frank said that apparently a heart attack and an aneurysm were the only alternatives (other options ruled out). **In addition, he indirectly conveyed that non-natural causes of death were ruled out.**

Next, note that while ‘not both’ is overwhelmingly irrelevant for exhaustive cases (see again (59b)), here is an example where ‘not both’ is indeed a strong PCI:

- (67) a. *Bar On: Either security or welfare*
 (Originally Hebrew, cited by Shelly Chemotic, 15 August 2008).
 b. *Bar On said that the only alternatives are security and welfare (other options ruled out). In addition, he indirectly conveyed that the alternative of both security and welfare is ruled out.*

The Israeli politician’s (67a) was uttered against a background assumption that the alternative favored by Israelis is ‘both security and welfare’. Given budgetary constraints, however, the speaker does generate a ‘not both security and welfare’ PCI. But we maintain that the ‘not both’ interpretation here is part of the speaker’s intended message simply because it *happens* to be the salient implicit alternative ruled out by the exhaustive explicature. In other words, ‘not both’ as a PCI derived from exhaustive constructions is simply a special case of the general pattern whereby *ad hoc* implicit alternatives are rejected. It is *not* the dedicated ‘not both’ implicature assumed in the literature, based on some specific Gricean or grammatical process.³⁷

The brief discussion in 7.1 shows that our analysis of *or* readings in terms of explicatures does not eliminate the discourse reality of additional PCIs. Now, we’ve argued against an explicated status for inclusive and exclusive

³⁷ Note that Bar On may also generate a “please choose between welfare and security” implicature here, but again, this *ad hoc* implicature must be distinguished from our choice reading, where choice is directly conveyed (explicated).

assumptions. In order to show that they don't fall under the speaker's communicative intention we need to show that the exclusive and inclusive interpretations have not all gone to PCIs either.

7.2 Mutual (in)compatibility, background and truth-compatible inferences

Interlocutors can no doubt infer (in)compatibility between alternatives, at least in the majority of *or* constructions. The crucial question, however, is not whether they are able to draw such inferences but whether they actually do, and whether they are licensed to view them as part of the speaker's *communicated message*.³⁸ We propose that mutual (in)compatibility inferences are only truth-compatible inferences or background assumptions for the most part.³⁹

We focus on TCIs, but first, here's an exemplification of the working of background assumptions, instrumental in disambiguating the following case:

(68) *They always came from Cuba or South America I guess*
(LSAC)

For the *or* construction here to constitute a narrowed reading the speaker intends the addressee to assume as background that 'all the bananas came from *one* location', which leads to an incompatibility assumption. For the separative conjunction reading, the background assumption must be that 'the bananas referred to came in alternating batches, from different places', which leads to a compatibility assumption. Needless to say, neither assumption is speaker-communicated (the reader is invited to verify that the assumptions fail any of the diagnostic tests above).

Moving on to TCIs, recall that we classify *or* constructions as 'raised options' when the speaker does not commit to even one of the alternatives being true. We classify other constructions as HLCs, because the speaker's point is not so much the explicit members she presents, but rather, the higher-level category constructed

³⁸ For grammaticized theories such as Chierchia (2004) and onwards the question would be whether such assumptions should be generated by the grammar.

³⁹ We should emphasize, however, that we are not rejecting these inferences on the basis of some "economy" principle, namely, since these (in)compatibility inferences may be "freely" derived from general knowledge and/or the specific context anyway, we don't need to include them in our analysis. Freely available assumptions may well be linguistically encoded or intended to be pragmatically derived, as they indeed are in choice *or* constructions.

based on these members. But what about the assumptions concerning mutual compatibility or incompatibility of the explicitly mentioned alternatives? We propose that even when such inferences can be made, the mutual (in)compatibility question is simply not an issue when these readings are expressed.⁴⁰ They are TCIs, i.e., assumptions possibly subscribed to by the speaker given her utterance, but crucially, not part of the speaker-intended message.

Let's consider the raised options examples in 3.1 first. Most of these introduce mutually incompatible alternatives (11, 12, 13). For example, the addressee in (12) couldn't possibly be there (awake) and be sleeping at the same time. But other cases introduce alternatives which are compatible with each other. A similar picture emerges when we examine the HLCs in 3.2. (17), and (18) present compatible alternatives, and (16) and (21) present incompatible alternatives. For example, low HIV percentages may very well be true of both rural areas and central Iowa (17). On the other hand, 'king' and 'queen' (16) are incompatible with each other.

To see that (in)compatibility inferences are irrelevant to the speaker's goal we can look at how they fare on the PCI 'Indirectly Conveyed' test applied to (21):

- (69) ?? *Montoyo said that if he is the president of a major labor union or a major corporation, the position as president of that entity gives him so much power. **And in addition, he indirectly conveyed** that he cannot be the president of both a major labor union and a major corporation.*

While (21) is compatible with a 'not both' inference, the failed paraphrase in (69) shows that 'not both' does not fall under the speaker's communicative intention. (70) makes the same point for an "inclusivity" TCI for (3):

- (70) ?? *Gilbert said that she got sick and tired of turning on the news and seeing another corrupt man or another scandal breaking out, **and in addition he indirectly conveyed that** she possibly got tired of both another corrupt man and another scandal breaking out.*

And here's a raised options case (11), where despite the fact that the individual alternatives are prominently profiled, the exclusive assumption is not implicated:

⁴⁰ Our position is then different from Zimmermann's (2000) (and other philosophers) although they too view 'exclusive' interpretations as only pragmatically derived, based on the incompatibility between the alternatives. We distinguish between speaker-intended and speaker-non-intended exclusive inferences, even if both are pragmatic.

- (71) ??*S said that part of the shares were transferred to the children or they were returned, **and in addition he indirectly conveyed that the shares were not both transferred to the children and returned...***

S did not intend to convey the incompatibility assumption in (71), although it is most likely true, given his utterance and the way of the world.

Here's the test applied to an exhaustive *or* construction ((57a), with an inclusive inference):

- (72) ??*Julie said that it's a sport for either the brave or the stupid, **and in addition she indirectly conveyed that it's possibly a sport for those who are both brave and stupid.***

Applying the PCI test to the separative conjunction in (30b) (see (73a)), to the narrowed construction in (46) (see (73b)) and to the choice in (53a) (see (73c)) shows that (in)compatibility inferences do not carry a PCI status for these readings as well:

- (73) a. ?? *The speaker said that it's easier to do naked eye **or** binoculars, **and in addition he indirectly conveyed that both were easier to do.***
 b. ?? *Alina said that right next door is Ted Rich, who's one of the biggies at MTM or Lorimar, **and in addition she indirectly conveyed that Ted Rich was not at both MTM and Lorimar.***
 c. ?? *Mom wanted to know if M.T ate the orange cake or the chocolate cake, **and in addition she indirectly conveyed that M.T did not eat both.***

The point is that while (in)compatibility inferences regarding the alternatives introduced in all six readings may be derived by the addressee, he is *not* licensed to incorporate them as *speaker-intended messages*. Because they are not relevant for the speaker, they do not fall under her communicative intentions. In other words, the answer to the question of where have all the inclusive/exclusive inferences gone is that they've gone to background and truth-compatible inferences, almost every one of them.

8 Conclusions and future research

Our main conclusion in this paper is that speakers' *or* constructions profile an alternativity relation in order to express many different readings not previously

recognized. These readings were identified by examining the 1053 SBC *or* examples in their natural conversational context, and applying to them relevant diagnostic tests. We characterized each reading in terms of the explicature it expresses and in terms of the number of alternatives the speaker commits to. The result of these analyses shows that the two readings which have dominated the literature, namely the inclusive and exclusive readings, as currently defined, are only marginally relevant for natural interactions. Assumptions about the (in)compatibility between the explicit alternatives, we argued, are more often than not merely background or truth-compatible inferences, which do not constitute part of the speaker's explicature, nor implicature. In addition, we reclassified free choice readings as conjunctive readings, either separative conjunction or free alternative (which, in addition, collects some "inclusive" cases as well).

Alternativity is what unifies all *or* constructions (Ariel and Mauri in prep. b). But speakers mobilize profiled alternatives for different discourse goals/readings. We've argued that speakers use *or* constructions in order to raise alternative options for discussion even if they cannot commit to even one of them (raised options), because they want to refer to a higher-level category (HLC), because they offer a single predication over alternatives they wish to construe as independent of each other (conjunctive), because they cannot zero in on a single alternative, so they only narrow the options to a tight set (narrowed), because they want to profile an unresolved choice, typically in order to elicit such a choice (choice) or because they wish to profile some alternatives as the only alternatives on the table (exhaustive). Table 3 summarizes the six readings we proposed for *or* constructions (exclusive of repair and idiomatic cases, which we are currently analyzing—see the appendix). The table lists the explicatures associated with each, and the number of alternatives the speaker necessarily commits to:

Table 3: *Or* readings and committed alternatives.

Reading	Meaning	Committed Alternatives
Raised Options	Possibly X, possibly Y	0
Higher-Level Category	Higher-level category Z, comprising members such as X and Y	0
Conjunctive	Both/any of X and Y	2
Narrowed	One of X and Y	1
Choice	Unresolved choice between X and Y	1
Exhaustive	Only X and Y, (other options ruled out)	1/2

The second column shows that all six explicatures differ in their profiled meanings from “inclusive” and “exclusive” readings, as well as from each other. As can be seen in the third column, only narrowed, choice and some of the exhaustives meet the predictions of the classical theory regarding the number of committed alternatives. Using a conjunctive (and some exhaustives) the speaker commits to both alternatives, which is a stronger commitment than the predicted ‘possibly both alternatives’. And the speaker does not necessarily commit to even one of the explicit alternatives under raised options and HLC.

Our claims have both empirical and theoretical implications. First, we submit that research addressing natural language has to be empirically based in order to clearly distinguish between what is discourse-relevant and speaker-intended for interlocutors and what is not. Meshing the utterance meaning with the objective reality behind it is not a goal in and of itself. Second, we submit that any lexical analysis proposed for *or* must be able to derive the readings we found in the data, and specifically as explicatures (rather than as special, nonliteral uses). The findings for raised options and HLC readings, where the speaker does not necessarily commit to even one alternative, cast doubt on the classical ‘at least one alternative’ semantic analysis (linguistic meanings are cancelable). In Ariel and Mauri (in prep. b) we support a minimalistic *procedural* meaning of an “alternativity” relation between the disjuncts as *or*’s core meaning, an analysis which is quite compatible with Dik’s (1968) Zimmermann’s (2000), Mauri (2008b: 155–161) and Alonso-Ovalle’s (2006) nonpropositional “set of possibilities” core for *or*.

We expect that this procedural core meaning of alternativity should be associated with the 6 readings here discussed in a universal way, because they provide a discourse motivation for the speaker’s choice to list alternatives. What may vary across languages is how the meaning of alternativity is mapped onto grammar, i.e., through a general connective, such as English *or* or through more specific constructions for specific sub-types of alternativity relations (see Mauri 2008b: Ch. 5] for a distinction between general versus dedicated or constructions). It should be interesting to examine what readings are associated with more specific *or* constructions, and what additional readings may be attested for the general *or* constructions cross-linguistically (see the sub-constructions/readings listed in the appendix for English). Furthermore, there may very well be diachronic relations such that the evolution of some reading depends on the prior availability of another.

Another important direction for future research concerns the question of how addressees arrive at the specific reading intended by the speaker. While we emphasized the role of pragmatics here, we believe that some of the readings are

at least partly compositional. In addition, specific contexts are biased towards certain but not other readings. Choice constructions, for example, are restricted to direct and indirect yes/no questions. This is a necessary condition for this reading. It is not, however, a sufficient condition, so other readings occur within (in)direct questions. *Only* compositionally forces an exhaustive reading, while *either X or Y* provides a strong explicit cue for it. Still, not all *either all* constructions are interpreted as exhaustive, and nonspecialized *or* constructions may be exhaustive too. Raised options are often read off of constructions which potentially indicate lack of commitment (questions, non-falling intonation boundary). They also come in multiple disjuncts more often than other readings. But again, these are biasing cues at best. separative conjunction readings are very strongly associated with some downward entailing (DE) contexts (especially negation and complements of a comparative construction), as well as with contexts availing a plurality of events (such as generics and habituais). But we certainly found cases where the presence of such factors did not result in a separative conjunction reading. Free alternative cases are restricted to nonfactual modals (such as *can*), as well as nonfactual DE contexts (conditional antecedents). But again, these linguistic contexts do not guarantee a Free alternative reading. Narrowed readings are associated with very tight sets of similar alternatives which carry similar contextual implications, and higher-level category readings are more often restricted to a single intonation unit than other readings. Obviously, for the latter two readings the indications are rather weak.

All in all, different readings vary as to how strongly they are indicated for formally and/or semantically. And we can't emphasize enough the role of pragmatics in zeroing in on the contextually relevant reading. Most of the contributing factors, although conducive to specific interpretations, do not encode them. Moreover, implicit semantic cues (such as modality) are only made available by pragmatic processes. For example, consider:

- (74) ERIKA: *Where's your bathroom at?*
 MAUREEN: *Right around the bend. ((1 LINE OMITTED))*
 Or upstairs.
 One or the other.
 (SBC: 035).

If we interpret Maureen's utterance as 'our bathrooms are right around the bend or upstairs' the *or* construction is a (factual) separative conjunction, which predicates locations on two separate bathrooms. But if we adopt a modal interpretation (something like 'you can use any one of the bathrooms') then the reading is Free alternative. We opted for the latter (partly because of the

following *or* construction), but a different context might favor a separative conjunction reading.

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Appendix A: *Or* readings not here analyzed

Here are typical examples of the readings excluded from this paper, arranged in descending order of frequency. The main purpose of this appendix is to show that the classical analysis of *or* constructions as inclusive or exclusive is not at all based on the types of examples we too had to exclude due to space limitations.

1. ALINA: *We had to go see !Jan last Sunday?*
 *.. at her house **for dinner?***
 (H) *And- --*
 or breakfast?
 (SBC: 006) (Repair)
2. CAM: *well what do you mean,*
 *he's **gay or something,***

- (SBC: 044) (Hedged X)
3. LENORE: *He has a .. **restaurant or something**,*
(SBC: 006) (Member of a restricted higher-level category)
4. DANNY: ... *Our mission is **a goal or task** which one is destined to accomplish.*
(SBC: 030). (Equivalence)
5. SHARON: *there's **a privacy code or whatever**,*
(SBC: 004) (Provisional X)
6. LINDSEY: (H) .. *she didn't have **any sores, or anything**,*
(SBC: 018) (X widening)
7. MELISSA: *I made some stupid comment, like **why are you voting for them.***
(H)*or something like that.*
(SBC: 019) (X or similar)
8. LYNNE: *I mean **whether the horse being used a lot or not**, that's twelve bucks.*
(SBC: 001) (Indifference)
9. SHERI: ... ***Is that um,***
*... **full of yucky stuff?***
Or what.
(SBC: 058) ('I can't imagine')
10. KEVIN: *Well it's just **a .. month or so**,*
(SBC: 036). (Haloed X)
11. ALINA:... *Was that **nasty,***
or what.
(SBC: 006) (Strengthened X)
12. MONTOYO: *Would you say, ((1 LINE OMITTED))*
...that your parents were very much influenced by the Vietnam war?
*... **One way or the other?***
(SBC: 012) (Some/any)