

[Special Contribution]

Higher-Level Category *or* Constructions: When Many is One

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All *or* constructions present multiple alternatives, but I here argue that not all introduce these alternatives as *discourse-relevant entities*. Using a Higher-Level Category *or* construction a speaker makes reference to a set of alternatives, but she actually intends the addressee to construct a higher-level category based on these alternatives. For that, the alternatives must be construed as exemplar members of a context-relevant higher-level category, and it is that abstract concept that the speaker intends to refer to. I exemplify such Higher-Level Category *or* constructions, motivate their use, and offer tests for identifying them.

Keywords: *Or*, Higher-level categories, ad hoc categories, discourse relevance

1. Introduction

Most linguists define the core meaning of natural language disjunctions by reference to the speaker's commitment to at least one of the states of affairs specified by the disjuncts (Gamut, 1991, Grice, 1989, Horn, 1972). This is the 'inclusive' meaning. Since they recognize, however, that there is an alternativity relation between the disjuncts, a pragmatic appropriateness condition to that effect has been added on (Simons, 2001). Dik (1972), Harder (1996) and Ariel and Mauri (in preparation) have argued instead that 'alternativity' is *or*'s core linguistic meaning. It is commitment to one or more alternatives that is pragmatically derived according to Ariel and Mauri. But whether linguistically encoded or pragmatically derived, alternativity between a multiplicity of options is heavily implicated in *or* construction usage. Using an *X or Y* construction, the speaker indicates that *X* and *Y* are alternatives to each other. Indeed, consider the following:

1. a. PHIL: Is the ball getting **hotter or colder**.
Everybody say it out loud.
AUD: Hotter.
MANY: .. Colder. (SBC: 027)
- b. ANNETTE: and then I think,
our senior year,

- junior or senior year,**
we lost to em. (SBC: 043)
- c. REBECCA: But if,
.. um,
... a man .. were to be exposed to,
they would ... **laugh,**
.. **or,**
.. you know,
be disgusted,
RICKIE: Mhm.
REBECCA: **or be mad,**
(H) but they wouldn't necessarily feel,
((3 LINES OMITTED))
.. **scared .. or threatened,** (SBC: 008)

Phil (in a) offers his audience a choice between two mutually exclusive alternative states for the ball. Indeed, one of his interlocutors picks 'hotter' as the correct alternative, while the majority picks the other alternative ('colder'). All Annette can do (in b) is narrow down the facts into one of two possible similar, but distinct alternatives: 'our junior year' and 'our senior year'. In (c) Rebecca describes what she assumes would be the prototypical man's reaction to another man obscenely exposing himself to him. According to her, men's alternative reactions might be 'laugh', 'be disgusted' and 'be mad'. She contrasts these alternatives with another set of alternatives, which are what she assumes a woman's reaction would be, 'feel scared' and 'feel threatened'.

Since natural discourse utterances are much more constrained than logical formulas, the question that arose for Grice was what makes disjuncts such as the above, relevant to each other, and hence appropriate. Co-alternativity theorists face the same question, slightly differently framed: what qualifies certain options (but not others) as alternatives to each other? Grice (1989:68) proposed that each of the possibilities occurring in a natural language disjunction must be relevant in the same way to the same topic, and Simons (2001) formulates this as a requirement that each disjunct provide a distinct and informative answer to a single question under discussion. They are, then, alternative answers to a relevant question. This is actually too strong a requirement, we argue in Ariel and Mauri (in preparation), because in quite a few cases, while the listed options are indeed relevant alternatives, the *or* construction as a whole only provides a *single* relevant answer to a question under discussion. As we see below, this is true for Higher-Level Category *or* constructions, the focus of this paper.

I prefer to characterize the relation between appropriate *or* alternatives in terms of distinct members of a single, higher-level category. Phil's *hotter* and *colder* are members of the higher-level category 'changed temperature', Annette's *junior year* and *senior year* are members of the higher-level category of 'year in (high) school'. These two

higher-level categories are quite stable. Other abstract categories are much more ad hoc (Barsalou, 1983, 1991). For example, ‘laugh’, ‘be disgusted’ and ‘be mad’ are *here* members of an ad hoc category of ‘a relatively mild response to a sexually obscene act’. ‘Scared’ and ‘threatened’ are *here* construed as members of an ad hoc category of ‘a relatively strong response to a sexually obscene act’.

Now, if we assume that in order to count as discourse-appropriate *or* alternatives the listed options must be construable as members of a contextually relevant higher-level category, that category may sometimes be salient enough so as to compete with the explicit members over discourse relevance. For example, the alternatives in 1(a) and (b) are clearly more discourse relevant than the higher-level categories they are members of. Phil in (a) is seeking to elicit a single member out of the two he lists, and Annette is finding it hard to zero in on the precise year in high school. Neither Phil nor Annette are interested in the higher-level categories themselves. ‘Changed temperature’ and ‘high school year’ play no discourse role in their respective utterances. They bear no contextual implications (Sperber and Wilson, 1986/1995). They are only useful in explaining why the *or* construction is appropriate in its context.

While this picture is true for many *or* constructions, it’s not invariably the case. Consider 1(c) again. Rebecca, a lawyer, is discussing a sexual abuse case with one of the victims of that crime, preparing her for her testimony in court against the same perpetrator, but in a different incident. The conversation at that point concerns the jury panel in that trial. Rebecca is especially worried about the young male jurors on that panel, because men’s reactions to such abuse is quite different from women’s, she notes:

2. REBECCA: ... And,
 especially,
 .. I have some .. young single men,
 .. on my jury panel.
 RICKIE: Mhm,
 REBECCA: (H) And,
 ... I—
 .. my .. worry is that they don’t .. relate to what a woman feels,
 .. when something like that is happening,
 RICKIE: Mhm.
 REBECCA: because their experience would be totally different. (SBC: 008)

Given this context, in which 1(c) occurs, we can better appreciate the difference between 1(a) and (b) on the one hand and 1(c) on the other. Rebecca has no interest in the specific alternative responses men and women have under such circumstances. What she is interested in conveying is the difference between the relatively *nonchalant male response pattern* and the rather *alarmed female response pattern*. The specific alternative manifestations of these behaviors she lists are of no direct interest. It makes no difference for the discourse if men respond with laughter or by being mad or dis-

gusted. Similarly, it makes no difference to the discourse what women's precise response is. The various alternatives in fact serve as mere pointers to the discourse-relevant higher-level categories, a "no big deal" response among men and a "big deal" response among women. The worry is that the men's lack of appreciation of how traumatic the experience is for women (be it one of scare or threat) would affect their decision as jurors.

1(c) is a typical Higher-Level Category *or* construction, where the speaker leads the addressee to construct a higher-level concept, based on her disjuncts. The explicit alternatives must be taken as exemplar members of the more abstract, higher-level category, and it is the higher-level category that the speaker has a communicative intention about, rather than the specific alternatives. Surprisingly perhaps, my bottom-up, Usage-Based analysis of all 1053 *or* constructions in the Santa Barbara Corpus of Spoken American English (here abbreviated as SBC) revealed that Higher-Level Category is the most frequent reading associated with *or* constructions (250, 23.7%).

In order to argue my point, I will mainly adduce evidence to show that only a *single* discourse entity is evoked in Higher-Level Category cases (3).¹ But I start off with a short discussion of the nature of Higher-Level Category *or* constructions and the motivations behind using them (2).

2. Pointing to a higher-level category

Consider a few more examples of Higher-level Category *or* constructions.

3. a. Buying **or** selling a piece property? Remax. Can't argue with success (an originally Hebrew ad for a real-estate agency, August 2015).
- b. MONTYOY: (H) If you're the chairperson of um .. a major corporation?
 .. would you say that that person ... has some power?
 FRANK: ... Most definitely.
 MONTYOY: .. Alright.
 .. Especially if you're <X in uh X> IBM,
 or General Motors,
 or .. Chrysler Corporation and, (SBC: 012)
- c. Sex determination: How germ cells become sperm **or** egg
 (http://www.sciencemag.org/content/349/6245/279.6.full?utm_campaign=email-sci-twis&utm_src=email)
- d. MONTYOY: ... The fact is,
 that democracy in this country ... is dying.

¹ And see Ariel and Mauri (2015) for arguments why this interpretation is a bona fide *or* construction reading, and not some "special use".

... I want you to put that down.
 ((TWO LINES OMITTED))
 I don't want you to agree,
or disagree at this point,
 just write it down, (SBC: 012)

The ad in (a) aims to generalize over any real estate deals the addressee may be considering. Note that 'renting' and 'renting out' are included in this appeal, although not explicitly mentioned. This is because 'renting' and 'renting out' are members of the higher-level category constructed on the basis of 'buying' and 'selling' in this context. Montoyo in (b) wants to refer to *any* extremely powerful organization in general (so e.g., Microsoft, Ford and many other corporations are included as well), and the article headline in (c) promises an explanation for how sexually indifferent germ cells become sexually committed. While 'sperm' and 'egg' are the only members of the relevant higher-level category here, it is the process of sex differentiation in general which is the focus here, rather than the difference between sperm and egg. *Agree or disagree* in (d) cover a wider spectrum of potential stance alignments between the speaker and his interlocutors (partial (dis)agreement and indifference are included, as is a refusal to address the issue, for example). So, what Montoyo is asking his students is to defer *any* judgment (for now). The individuality of the opinions they may form is not at issue, despite the fact that the difference between agreeing and disagreeing is of course highly significant objectively.²

The first question that arises is why speakers don't simply refer to the higher-level category they have in mind in a more straightforward manner. Why do they choose a linguistically complex expression (the *or* construction), which moreover requires a complex process of comprehension (the online construction of an abstract higher-level category)? I believe that a variety of factors motivate speakers' choice of Higher-Level Category *or* constructions. First, the higher-level category sought may not in fact be lexicalized. We have no single lexeme covering all of 'buying', 'selling', 'renting' and 'renting out'. The addressors in (3) would have had to use linguistically complex expressions, then, such as 'planning some real-estate deal' in (a), 'a powerful corporation' in (b) 'sexually differentiated cells' in (c), and 'a firm opinion regarding Montoyo's claim' in (d). Thus, once we spell out these higher-level concepts it becomes clear that

² Context obviously plays a major role in determining what the higher-level category intended by the speaker is in the specific case. For example, the same question in 3(a) could lead to a narrower higher-level category of 'planning an act of changed-ownership' (leaving out rentals) if this were an ad put out by a property tax law firm. Indeed, Ariel and Mauri (2015) found that different higher-level categories were derived on the basis of one and the same *or* construction, *a table or a bench*, on different occasions. Interestingly, all of them were ad hoc categories, rather than the stereotypical higher-level category we might think of, namely, 'furniture'.

verbalizing them directly does not come with formal simplicity necessarily. In fact, they are not clearly easier to process either. Some lexemes that are available for higher-level categories may be dispreferred because they are rather rare, or belong to too formal a register, rendering their use an unattractive option too. This is how I understand the preference for *king or queen* (SBC: 023, see 31 below) over *monarch*, *your cars or your busses* (SBC: 038) over *your vehicles*. Another advantage of exemplification is that it renders the abstract concept more concrete and vivid. ‘IBM’, for example, is much more imageable than the abstract ‘a very powerful corporation’.³

Note that the specific exemplars do not only lead the way to the higher-level category. At the same time, they also serve to narrow the application of the abstract concept. Contrast the following examples in this connection:

4. a. MONTYOYO: ... 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)
- b. 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 both cases, the speakers are talking about the concept of ‘position’ (see Montoyo’s subsequent use of *position*, and Sue’s adoption of this word following Lori’s suggestion). But the ‘position’ intended by each speaker here is quite different. The position constructed for the president in (a) is organizational, and has to do with *power* to affect people’s lives. The position in (b) is understood as a *socially prestigious* position accompanied by substantial personal wealth. While the different contexts would have led to differential concept constructions all by themselves (Wilson and Carston, 2007), the inferencing responsible for the narrowing down of the relevant concepts is facilitated with the help of the concrete exemplars.

³ Impressionistically, many of the alternatives in Higher-Level Category *or* constructions are basic-level concepts (Rosch and Mervis, 1975), which are easier to process. But this observation has yet to be verified empirically.

Finally, another advantage of an online construction of the abstract category intended is that the speaker herself does not need to precisely define the category. Consider:

5. FRED: usually they put em on a two-year **or** three-year plan **or something**, (SBC: 014).

The higher-level category here constructed is a period of time that's *relevantly similar* to two and to three years. Not only does the speaker not limit himself to either 'two' or 'three', he doesn't put an upper nor a lower boundary on the period, and he doesn't even have to define it as 'short', 'medium' or 'long'. In fact, speakers sometimes have only a vague idea of the concept (the higher-level category in our case) they're after. This is possibly the case with Sue's utterance above, where she can't think of the higher-level category she's after, and more clearly so in the following:

6. Is Naomi Shemer ((a very popular Israeli song writer)) considered a poet like Bialik **or** Alterman **or** Rachel ((three very prominent, canonical Israeli poets))? (tips.co.il/singleask.asp?stipid, Oct. 24, 2012).

The high school girl asking about the status of song writer Naomi Shemer most likely is not aware of the higher-level category she intuitively feels the need for, namely the concept of a 'canonical poet'. Indeed, unlike the three major poets she lists, Shemer is not considered a canonical poet.

Now, if the analysis of the examples above as HLCs is correct, then while HLCs introduce multiple alternatives at some level, they are not ultimately disjunctive in that these alternatives do not play a role in the final reading. According to the analysis here proposed, HLCs convey a single concept, the one constructed on the basis of the explicit alternatives, which are taken as members of the higher-level category intended. The alternatives themselves then typically do not provide distinct and informative answers to a single question which is under discussion (see Ariel and Mauri, in preparation). They are only indirectly relevant to the ongoing discourse. The goal of the next section is to show that indeed, HLCs are taken to denote single concepts.

3. Single-alternative tests

My argument that Higher-Level Category should be recognized as a reading on its own is based on an assumption that such *or* constructions do not in fact convey multiple alternatives. Or, at least, not at the discursive level. If I am correct, then Higher-Level category *X or Y* constructions contribute a single discourse entity. Section 3 introduces discourse-level tests (3.1), semantic scope phenomena (3.2) and structural factors (3.3) all pointing in one direction: Higher-Level category constructions introduce a single option.

3.1. A single discourse entity

The first criterion we can use to help us determine whether some *or* construction is intended as a Higher-Level Category is whether the interlocutor can respond with an affirmative *yes* or a negative *no*. First, note that this is typically not acceptable with constructions that are not interpreted as Higher-Level Category:⁴

7. a. PHIL: Is the ball getting hotter or colder?
AUD: ~??**Yes/No**.

But Higher-Level Category constructions can be properly confirmed or denied:

8. A: Is Naomi Shemer considered a poet like Bialik **or** Alterman **or** Rachel?
B: ~Yes/No.

Moreover, note that the following response would not be coherent as an answer to the original question:

9. ~??No, she's like Tshernichovsky.

Now, the only reason why (9) is inappropriate is that Tshernichovsky is another prominent canonical poet, and if so, a speaker cannot deny that Shemer is like the canonical poets Bialik, Alterman and Rachel but confirm that she's like the canonical Tshernichovsky.⁵

Here is such an attested response:

10. EVELYN: what was it,
hay fever,
or asthma or something, ((1 LINE OMITTED))
LINDA: **Yes**. (SBC: 023).

And note the following minimal pair, where the first is an HLC question, which receives a *yes* response, and the second ('was it month-to-month or a one-year lease'), a multiple alternative construction, which cannot be answered by *yes* or by *no*:⁶

11. JUDGE: And was there a uh written agreement,
or a uh lease?
ROSE: Yes.
JUDGE: ... Was it a 1- —

⁴ ~ indicates a nonattested example.

⁵ Of course, (9) is not absolutely unacceptable. It's only inappropriate when the first speaker intended the Higher-Level Category reading in her question. If the 3 poets she lists had a certain poetic style, for example, which is different from that of Tshernichovsky, then it would be acceptable.

⁶ *No* can be used in such cases if the interlocutor is rejecting both alternatives. This is why a *yes* response is a better test for HLC.

- uh month to month,
or a uh,
 ROSE: A year.
 JUDGE: .. A one-year lease.
 ROSE: One year lease. (SBC: 053)

The next example is a bit confusing at first, for it seems that poll responders chose *yes* when they should have chosen either ‘hurt’ or ‘help’. But in fact, it turns out that the way the speaker chose to report the question does not concern any of these alternatives, but rather, about the higher-level category of ‘affecting Obama’. This is why a “yes” response is appropriate after all:

12. 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>)

Here’s another type of response that testifies to the single HLC intended by a speaker’s *or* construction. I claim that *salad soup or fries* is read as ‘side dish’:

13. JAMIE: what type of **salad soup or fries**.
 ROSEMARY: ... S-,
 Can I have clam chowder for my soup?
 JAMIE: Mhm.
 ROSEMARY: Okay.
 Soup. (SBC: 031)

Rosemary’s first response to the waitress’ question may seem like a response to a multiple alternative construction. But it is not in fact a request for the clam chowder (although it is a type of soup). Rather, it is merely a clarification question (an insert sequence in Conversational Analysis terms — Schegloff, 2007). Once Jamie has answered her clarification question Rosemary is in position to address her question about what type of ‘side dish’ she would like. Indeed, once she is reassured that she can have clam chowder, Rosemary answers Jamie’s original question with “soup”. In other words, *type of* refers to ‘side dish’ and not to either salad or soup or fries (note that most likely the restaurant does not offer more than one type of fries).

Indeed, given a choice between treating an HLC construction as denoting a single or multiple alternatives participants I posed a questionnaire to about *or* readings overwhelmingly chose to treat such constructions as single-alternative cases. (14) is one of a

series of questions posed to 60 English speakers:⁷

14. Which of B's responses (B_1 or B_2) sounds more natural or plausible as a response to A (circle your answer)?

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

B_1 : **Four**. That's a good idea.

B_2 : Yes. That's a good idea.

Subjects chose B_2 over B_1 . They avoided B_1 -style responses, where a choice between the alternatives was made. Instead, they treated A's question as a yes/no question, which means that *three or four days* was interpreted as a single alternative.

In a different question type they again preferred the response which commented on the HLC as a single concept (B_2), rejecting a response that asked for a choice between the alternatives (B_1):

15. Which of B's responses (B_1 or B_2) sounds more natural or plausible as a response to A (circle your answer)?

A: When Ron gets home from work, I wanna spend time with Ron, because he usually doesn't get home till **nine or ten**.

B_1 : So, which is it, nine or ten?

B_2 : Wow, that's late!

Now, it's not invariably the case that subjects on my questionnaire treated *or* questions as yes/no questions. Unlike (14), when context favored a Choice interpretation between distinct alternatives (16), they opted for B_1 responses, rejecting a *yes* response:

16. Which of B's responses (B_1 or B_2) sounds more natural or plausible as a response to A (circle your answer)?

A: Would you like me to buy opera tickets or theater tickets?

B_1 : Opera tickets, please.

B_2 : Yes, please.

Discourse anaphora can also provide a cue that a single entity is involved. Previous research has established that singular versus plural reference tracking expressions may very well be dictated by the number of the discourse entity involved, rather than by morphological number of the antecedent encoding it (Reid, 1991). First, note that multiple-alternative *or* constructions are routinely tracked using plural referring expressions:

⁷ The questionnaire elicited subjects' judgments as to the relative coherence of an interlocutor's response to various *or* constructions, some of them HLCs. The original questionnaire contained no bold faced items. Results of Chi square and Chi square with Yates Correction analyses showed that in all these cases results were highly significant, at $p < 0.01$. I thank Gila Batori for the statistical analyses of the questionnaire results.

17. 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. ((2 LINES OMITTED))
- LENORE: One of **them**.
- ALINA: (H) One of **those places**. (SBC: 006).

'MTM or Lorimer or MGM' is tracked by *them* and *those places*. Tracked HLCs, however, show a different tracking pattern:

18. a. MONTOYO: ... 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)
- b. ROY: **saving the whale**,
 or **saving** uh ... **the .. polar bear**, ((2 LINES OMITTED))
 or **making sure there's enough grizzly bears**,
that's fine. (SBC: 003)

Montoyo treats 'a major labor union or major corporation' as 'that entity', and Roy does the same for his multiple alternatives.

Given the same rationale, referring to HLC alternatives with the plural anaphoric expression *both* should either be unacceptable (19b), or else it should turn the HLC construction into a multiple-alternative one (19d):

19. a. HAROLD: And then like,
 .. r- rural areas,
 or,
 like,
 you know,
 central Iowa and stuff, (SBC: 002).
- b. ~??And then like rural areas or central Iowa and stuff **or both these places**
- c. 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)

d. \sim saving the whale or saving the polar bear **or both**...

The *or* construction in 19(a) refers to a single concept: ‘places remote from major urban population centers’, which include rural areas, but also small cities. This is why it is inappropriate to add *or both* here, which requires two distinct alternatives. The intended reading of the *or* construction in (c) is the HLC ‘endangered animals’. But once we add an *or both* we force a multiple-alternative reading. Note that the original Pete can intervene with “Right. Pandas”, just because Harold’s construction denotes the higher-level category ‘endangered animals, which includes Pandas. But such a response is not appropriate once Harold’s utterance contains *or both*:⁸

20. \sim HAROLD: Saving the whale or saving the polar bear **or both** that’s fine.
 PETE: ??Right. Pandas.

The following questionnaire participants’ clear preference for B_1 over B_2 makes much the same point. Speakers do not treat HLC constructions as introducing multiple alternatives:

21. Which of B’s responses (B_1 or B_2) sounds more natural or plausible as a response to A (circle your answer)?
 A: She got sick and tired of turning on the news, and seeing a corrupt man, or a scandal breaking out.
 B_1 : I can understand her. It’s depressing to watch the news these days.
 B_2 : I can understand her. **Both** of those things are awful.

Subjects overwhelmingly chose B_1 where the topic introduced by A was taken to be a single category of ‘annoying news on TV’. They accordingly rejected B_2 , which treated *a corrupt man or a scandal...* as two distinct alternatives.

§3.1 showed that in terms of discourse role, Higher-Level Category *or* constructions contribute only a single discourse entity. The next section makes much the same point based on semantic grounds.

3.2. Semantic cues

Semantic operators have scope over unified/coherent chunks. A differential interpretation of the scope of semantic operators with respect to different *or* constructions can testify to a distinct HLC reading too. Once again, we will see that HLC constructions are treated as a single constituent, which can fall under the scope of the operator as a *single unit*. To the extent that we get different readings when *X or Y* potentially falls under the scope of some semantic operator we can be assured that indeed, HLC is a distinct reading.

⁸ For convenience I ignore the third disjunct here.

Here's a minimal pair, where I indicate the scope of *at least* using brackets:

22. a. We should contract for [(**at least**) **[five]**] or [maybe ten minutes] to keep going (LSAC).⁹
 b. And you have to be able to give like [(**at least**) **[a five or ten minute]**] introductory talk (LSAC).

The *at least* in 22(a) only has scope over the first disjunct of the construction (*five*), which testifies that (a) is a multiple-disjunct construction. But the *at least* in (b) has scope over *five or ten minute*, taken as a single semantic constituent. The interpretations are distinct accordingly. In (a) the maximal interval is interpreted as between 5 and 10 minutes, whereas in (b) it's 'no less and possibly more than an interval that is about 5 or 10 minutes'. It's longer in (b), then.

Similarly, negation operating on an HLC negates the single higher-level concept, and not only each of the category members. Hence, another HLC diagnostic test is the nonparaphrasability of HLC *not X or Y* with *not X and not Y*. Multiple-disjunct constructions are of course paraphrasable with *not X and not Y*. Compare the original negated HLC utterances in 23(a) and 24(a) with their unacceptable paraphrases in (b):

23. a. ALICE: Ron,
 ... usually doesn't get home till **nine or ten**. (SBC: 007)
 b. ??Ron usually doesn't get home till nine and he doesn't get home till ten.
24. a. It didn't take **more** than five or ten minutes (LSAC)
 b. ??It didn't take more than five minutes and it didn't take more than ten minutes

There aren't two distinct points in time before which Ron does not get home (23). Instead, the speaker conveys that there is a single interval ('quite late for returning home from work') at which Ron is not back home. The same is true for both negation and *more than* in (24).

Another piece of evidence for the semantic cohesion of HLCs as single discourse entities comes from examples such as the following, where X or Y is predicated on 'all':

25. a. **All** of these companies have been bailed out by the government, sold to other companies at deeply discounted prices or simply failed.
 (<http://www.mcclatchydc.com/251/story/53398.html>)
 b. They've **all** just gone dormant or died (LSAC)

In principle, *X or Y (or Z)* here could be interpreted as multiple-disjunct constructions, such that X ('have been bailed out...') is true for a subset of 'all', and Y ('sold to other

⁹ LSAC is a 5-million words corpus of spoken American English.

companies ...') (and Z) are true of different subsets of 'all'. But in reality, such constructions are heavily biased towards an interpretation whereby *X or Y* are interpreted as single higher-level categories, each of which is true of an undivided 'all'. I found 13 such cases in SBC + LSAC.¹⁰ 11 of these are interpreted exactly like (25). 1 is an alternative question about whether 'all are X' or 'all are Y', which again shows that 'all' tends not to be divided into subsets. Only one example shows a multiple-disjunct construction, where 'all' is split into two subsets:

26. Just all the, the fixtures, the water fixtures had to be replaced. They were **all either corroded or uh leaky**. So you see new fixtures in the bathroom and the kitchen. (LSAC)

But note the crucial role of the *either... or* construction in (26). (26) exemplifies an Exhaustive reading according to Ariel and Mauri (2015). Such readings focus on the exhaustivity of the set of alternatives, strongly implicating that some other, salient alternative(s) (here that some of the fixtures were fine) is ruled out. In other words, though not absolute, the pattern revealed in (25) is a very strong discourse pattern. It's due, no doubt, to a more frequent speakers' interactional goal when predicating over 'all'. Still, one can impose distinctness on the would-be higher-level alternatives as was done in (26). Note, however, that when an HLC reading is less plausible, *either... or* is pretty much required:

27. a. ~?All my students got **55 or 80** in the course.
 b. ~ All my students got **either 55 or 80** in the course.
 c. ~ All my students got **75 or 80** in the course.

The preferred interpretation of an *X or Y* predicating over *all* is a construed HLC (e.g., 'failed economically' in 25a). This is possible in 27(c), where the grades point to something like 'B minus', but it is not so plausible in (a), where it's harder to conceive of the failing '55' and the far from marginal passing '80' as members of a single higher-level category. However, it is indeed possible that reality is such that 55 and 80 were the only two grades received by the set of students. Based on the very strong discourse pattern noted above, I'm suggesting that the *either* version in 27(b) would then be chosen. An 'all' predicated on by *X or Y* is then a strongly biasing context for an HLC reading. I expect to find other HLC-biased contexts as well.

Examples (22)–(27) all point to the same phenomenon: an HLC or construction introduces a single semantic concept. §3.3 demonstrates that formal cues too can bias an or construction towards an HLC reading.

¹⁰ The search picked *all* followed by *or* within 2–5 words. I excluded from the count *or* tags (such as *or something/whatever*), which are, of course, more often than not single-alternative constructions.

3.3. Structural cues

HLCs are highly frequent constructions that interlocutors seem to be tuned into, responding to them as if they were not disjunctive (3.1, 3.2). Are there any formal cues addressees can pick up on when identifying an *or* construction as an HLC? While contextual factors are most probably the strongest indicator for an HLC reading (see all the examples above, and especially 11, 12 and 14 versus 16), formal cues too may bias addressees towards an HLC reading. Again, all cues have to do with the fact that HLCs denote single, rather than multiple alternatives. The idea is that speakers often use a more unified syntactic and/or prosodic structure in order to indicate a single conceptual unit.

Assuming that Intonation Units (IUs) are processing units (Chafe, 1994), we expect single-alternative *or* constructions to more often occupy a single IU, rather than spanning over multiple IUs. This is not necessarily so for multiple-disjunct constructions. Indeed, a comparison between HLCs and Choice constructions (where an unresolved choice between alternatives is profiled) shows that HLC is 1.6 times more likely to occupy a single IU. A comparison with Repair, the least tight *or* constructions, shows HLC 55 times more likely to occupy a single IU. By the same token, a tighter syntactic structure is expected for a unified concept.¹¹ Indeed, the same difference shows up when we examine the proportion of phrasal, rather than nonphrasal disjunctions. As many as 86.4% of HLCs are phrasal rather than clausal. This percentage goes down to 61.7% for Choice constructions and to 46.4% for Repairs.

One of the questions on the questionnaire mentioned earlier looked into this question precisely. The original example that the item was based on was a clausal Raised-options construction, where the speaker raises a number of options, not even one of which does she commit to:

28. REBECCA: .. (H) And then,
we could do closing arguments today,
or it could be tomorrow. (SBC: 008)

But when the context was changed on the questionnaire, so that the *or* construction was biased for a Higher-Level Category reading, subjects preferred a phrasal over a clausal disjunction, opting for B₂:¹²

29. A: When are we doing closing arguments?
B₁: Oh, it's soon. We could do it today or we could do it tomorrow. The trial is almost over!

¹¹ See Ariel (2012) for a similar point about *and* conjunctions.

¹² This item is not ideal, since the clausal disjunction may seem clumsier than the original one. It was chosen because it created a minimal pair with the phrasal disjunction.

B₂: Oh, it's soon. We could do it today or tomorrow. The trial is almost over!

Next, Hebrew feminine forms are regularly derived from masculine nouns by adding a feminine ending (much like *-ess* in *princess*). Male and female entities of the same type may then be conjoined by an *or* construction ('male or female') or by a reduced, slash construction (somewhat similar to English *fe/male*). The latter creates a tighter syntactic unit. Indeed the slash construction is restricted to HLC disjunctions:

30. kol nivdak/et zakai le=hibadek al yedey
 Each patient.msc/fem. Suffix is.entitled to be.examined by
 texnai o texnait
 technician.masc or technician.fem
 (Sign posted outside an X Ray examination hall, spotted May 2010)
 'Every male/female patient is entitled to be examined by a male technician or a female technician'

The writer could have used *or* constructions for both occurrences of the male and female referents. But predictably, they chose a slash construction only for the HLC reading, where the 'male or female patient' counts as a single category 'patient of both sexes'. The 'male or female technician', on the other hand, count as two separate entities, patients here being informed that they can choose between the two sexes. Only HLC *or* constructions can be reduced to slash constructions. Using *texnai/it* 'fe/male technician' here would totally change the meaning of the utterance, making it senseless, in fact.

This is why unlike the 'female or male technician' in (30) the next, superficially similar *or* construction can be translated into a Hebrew slash construction:

31. 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)

Since *king or queen* here are used to convey the single-concept 'monarch', it can be rendered by Hebrew *melex/ka* 'king/queen'.

Furthermore, some HLC readings are rather conventionally associated with either idioms (a) or specialized sub-constructions (Ariel, 2014), the most prominent of which is the 'ascending numeral construction' as in (b):

32. a. MITCHELL: ... he used it as,
 .. **more or less** bait me to do the job, (SBC: 053).
 b. ALICE: when !Ron gets home from wor=k,

... I wanna spend time with !Ro=n,
 because !Ron,
 ... usually doesn't get home till **nine or ten**. (SBC: 007)

More or less lexically denotes 'roughly, approximately' and *nine or ten* denotes 'a range of time around nine and ten', but here, actually a more context-specific higher-level category, 'a late hour for one to come back from work'.¹³

If formal cues are involved in prompting the HLC reading, no wonder speakers sometimes wish to de-automatize the interpretative process of such disjuncts when the reading they intend is not that of a Higher-Level Category (but rather, a Raised-options in a, an unresolved Choice in b). One way to achieve this is to reverse the collocative ordering of the disjuncts:

33. a. KEVIN: How old was she? ((2 LINES Omitted))
 LISA: Right now she's like **nineteen or eighteen**. (SBC: 036)
 b. I don't know which is worse, having **less or more**? (LSAC)

The ascending numeral construction seems to be so entrenched that speakers may use a slash construction instead, or simply omit the *or*:

34. PATRICK: so that's what we regularly,
 <PAR well not regularly,
 did this like th- .. **two three** times, (SBC: 045)

Still, not all cases of ascending numeral disjunctions were HLCs.¹⁴

The formal indicators briefly considered in 3.3 are biasing cues that a Higher-level Category may be the reading the speaker intends for the *or* construction. But by no means are they encoded form/function associations.

Conclusions

The *or* constructions discussed in the semantics/pragmatics literature are typically multiple-alternative constructions, where each syntactic disjunct corresponds to one alternative. However, a bottom-up Usage-Based examination of all 1053 *or* constructions in SBC revealed that quite a few of them do not express multiple alternatives semantically or discoursally. The Higher-Level Category constructions focused on here constitute the most frequent reading among single-alternative *or* constructions. In fact, they are the most frequent reading among all *or* constructions. Using a Higher-Level Cate-

¹³ But not all idiomatic *X or Y* constructions receive a Higher-Level Category reading, e.g., *Your money or your life, ready or not...*

¹⁴ And moreover, the higher-level category is often more abstract than the range of the numbers would point to, as in (31b).

gory *or* construction the speaker indeed introduces multiple alternatives, but these alternatives are subservient to a higher end, namely, the construction of a single higher-level category. The exemplars the speaker mentions are to be construed as members of a context-relevant higher-level category, and it is that category that falls under the speaker's communicative intention.

I offered a number of motivations for why speakers have evolved what seems to be a complex and roundabout strategy for conveying higher-level categories.¹⁵ Lexical gaps, especially for nonconventional, ad hoc categories, a wish to create a vivid image, avoiding rare lexemes and difficulties in defining and/or delimiting the concept sought are among the main forces behind the mobilization of *or* constructions for expressing abstract categories. I also noted that Higher-Level Category *or* construction do not only introduce into the discourse an abstract concept, they at the same time help narrow it down, by reference to the specific exemplars provided by the speaker.

Discourse-level, semantic and formal tests were adduced in support of the assumption that Higher-Level Category must be recognized as a distinct *or* construction reading. These tests include responses which are only acceptable for single-point utterances, single-number anaphoric expressions, semantic scope interpretations and various formal cues, all pointing that the explicit alternatives form part of single tight unit. Of course, what are tests for the linguist function as cues for the interlocutors engaged in online utterance interpretation. However, just like any other *or* construction reading, Higher-Level Category readings are above all pragmatically determined, based on what the addressee takes to be the speaker's communicative intentions.

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¹⁵ But I note in passing that Higher-Level Category readings of *or* constructions are not a recent development by any means. I have found them in Biblical Hebrew as well.

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