**‘Or’ has an inclusive and an exclusive reading or it has an inclusive reading.**

**Arguments for *exclusive or* in English:**

The thesis that there is an exclusive or in English is called the ‘ambiguity thesis’ since there is no question that there is an inclusive reading. The question is whether ‘or’ is ambiguous because it also has an inclusive reading.

**The Argument from Examples:**

⋆ Either it’s raining or it is not.

⋆⋆ You can have free soup or you can have free salad.

The most obvious way of demonstrating an *exclusive or* in English would be to give an ‘or’ sentence with two true components that is false. The restaurant situation in which ⋆⋆ is stated usually is *not* a situation in which both disjuncts are true. Also, there is no possible situation in which the disjuncts of ⋆ are both true. So these examples fail to demonstrate *exclusive or* in the obvious way. However, if the following argument had a valid interpretation then the ‘or’ in the premise would be exclusive:

1. You can have free soup or you can have free salad.
2. So, it is not the case that you can have free soup and free salad.

The validity of the corresponding argument for ⋆ would prove no similar thing since the conclusion is tautological. The standard response to the proposal that the argument (1 so 2) has a valid interpretation is that the conclusion is *suggested* when the premise is uttered but is not logically guaranteed. If a server knew that a diner could select both soup and salad but didn’t mention it then the server was not providing the relevant information typically provided by waitstaff. Restaurant goers assume that servers are conversationally cooperating with them, so 2 is communicated by an utterance of 1 but is not validly implied. The fancy name for the mechanism of the suggestion is ‘scalar implicature.’ I mentioned it several times in class; you can look it up if interested.

**The Trying Argument:**

This argument probably didn’t originate with Mr. Lohrer, but he has consistently been its emphatic proponent.

When enough people try to use a word with a certain meaning it comes to have that meaning.

Enough people have tried to use ‘or’ to mean *exclusive or*.

So, or has the meaning of *exclusive or*.

Premise one might be false (I took this line in class), because when a speaker’s intention is to communicate with a word in an utterance something that is already communicated by their utterance then their modifying effect on the language is nullified. For example, suppose someone utters ⋆ (or ⋆⋆) and attempts to use ‘or’ exclusively. Since the impossibility of both disjuncts is already communicated by logic alone (or by scalar implicature in the case of ⋆⋆), the speaker’s attempts to use *exclusive or* go unnoticed and are not impactful on the language.

Perhaps premise one could be saved by emphasizing the word ‘enough.’ There’s **some** threshold past which even barely impactful uses of a word can change meaning in a language. It’s a challenge to show that the threshold has been met, and, in fact, the arguments below demonstrate that it has not been met (and consequently that premise two is false).

**Arguments against *exclusive or* in English**

**The Neither Argument**

I heard this argument from Michael McKinsey, and it seems to have been first published by G. Gazdar in ‘Univocal Or’ *The CLS Book of Squibs*, University of Chicago (1977): 44,45.

Consider the sentence:

1. Albania has an ambassador or Bulgaria does.

If ‘or’ is ambiguous then so is:

1. It’s not the case that either Albania has an ambassador or Bulgaria does.

In other words:

1. Neither Albania nor Bulgaria has an ambassador.

If 3 has an interpretation that is false if Albania and Bulgaria both have an ambassador then 4 and 5 have an interpretation that is true (!) when both have an ambassador. Obviously there is no such interpretation.

**Browne’s Squib**

This argument is from Allen C. Browne in ‘Univocal Or – Again’ *Linguistic Inquiry* V17, N4 (1986): 751-754.

Consider the sentence:

1. John is either patriotic or quixotic or both

According to the ambiguity thesis there are four possibilities for the meaning of 6 since each ‘or’ is ambiguous. Three of the possibilities are equivalent to P∨Q, of which 6 seems to be a straightforward expression. The other reading (P∨Q)⊽(P∙Q) is equivalent to P⊽Q.[[1]](#footnote-2) But if there were a reading of 6 that were equivalent to P⊽Q then that reading would contradict

1. John is both patriotic and quixotic.

On the contrary, there is no such reading and 7 obviously entails 6.

**The Nesting Argument**

I got the insight for this argument from Larry Powers, though I don’t know whether he would endorse the conclusion to which I applied his insight.

Consider the sentence:

1. Albania, Bulgaria, or Croatia has an ambassador.

On any interpretation of ‘or,’ 8 is equivalent to:

1. Albania or Bulgaria or Croatia has an ambassador.

If ‘or’ has an exclusive interpretation then 8 has a reading that is only true when exactly one of the three countries has an ambassador. However, if ‘or’ is interpreted exclusively in 9 then the sentence is true when all three have an ambassador. (Because A⊽ B is false when both inputs are true; hence, (A⊽ B) ⊽ C is true when C is also true.) That’s inconsistent with 8 being equivalent to 9. However, rejecting the equivalence would (absurdly) make ‘or’ infinitely ambiguous; there would be a two-place *exclusive or*, a three place *exclusive or*, a four place *exclusive or* and so on.

**The Argument from Bizarre Entailments**

On the ambiguity thesis (or the thesis that there is an exclusive or in English) the following argument has a valid reading.

(A and B) or A

So, ~B

That’s absurd. For an English example consider:

1. Either Albania or Bulgaria has an ambassador or (at least) Albania does.

The sentence might be a little strange but certainly (all interpretations of) it could be true if Bulgaria has an ambassador. To me, it seems obvious that it **must** be true if Bulgaria has an ambassador, but *at the very least* it’s wrong to say that it couldn’t be true if Bulgaria has one! If the ‘or’ is exclusive and 10 is true then since A and B implies A, if A is true then B cannot be (otherwise both disjuncts would be true and 10 would be false).

For another example in English, consider the obviously and unambiguously true title of this document. On the ambiguity thesis there’s a reading of it that implies that the ambiguity thesis is false. So, on pain of self-refutation, the believer in *exclusive or* cannot unreservedly agree with even the innocuous title.

**The Argument from Bizarre Contradictions**

According to the ambiguity thesis the following sentence has a contradictory reading:

A or A

The sentence is strange, but not contradictory. Consider, ‘am I right or am I right?’ The author, if rhetorically asserting ‘I am right or I am right,’ is not self-refuting but is rather just asserting ‘I am right.’

Also, according to the ambiguity thesis, the following sentence (absurdly) has a contradictory reading.

Albania has an ambassador or Bulgaria does; in fact, they both do.

This sentence, because it is plainly not contradictory, is consistent with ‘not both A and B’ being a conversational implicature of an utterance of ‘A or B’ rather than a logical implication of it. In fact, attempting the explicit cancellation of a supposed implication is so useful for distinguishing implicature from implication, it functions as a test (frequently called, after Grice, ‘cancellability’).

**—D. Yeakel**

1. The symbol ⊽ represents exclusive disjunction. [↑](#footnote-ref-2)