

Negative Inversion

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Negative Inversion (NI), illustrated in (1) (from Huddleston and Pullum (2002)), has been discussed widely in the syntactic literature, but has received very little attention from semanticists (with the exception of early informal studies in Klima (1964) and Liberman (1974)):

- (1) a. None of them did he find useful.
- b. Nowhere does he mention my book.

To a first approximation, NI is triggered whenever a constituent denoting a downward entailing function (more accurately, though less understood: an NPI licensing constituent) is fronted:

- (2) Nowhere did he (ever) mention my book. \Rightarrow Nowhere did he (ever) praise my book.

In some cases, though, inverted and non-inverted versions of sentences with fronted adverbials exist alongside each other:

- (3) a. With no job, John would be happy.
- b. With no job would John be happy.
- (4) a. Not even 10 years ago, you could buy a house for less than 50K.
- b. Not even 10 years ago could you buy a house for less than 50K.
- (5) a. In less than 5% of these sentences can you see a truth conditional difference.
- b. In less than 5% percent of these sentences, you can see a truth conditional difference.

We can show that (3) and (4) are case of genuine syntactic ambiguity, which, like all good syntactic ambiguities, involve truth conditional differences be-

tween the readings (cf. discussion in McCawley (1988)). And in fact, only the reading that does trigger NI turns out to be negative (i.e. license downward entailments, *not even* continuations etc.).

This is much less clear for cases like (5), which haven't been discussed in the literature at all. Though it does appear as though only the inference in (6a) is intuitively valid, while that in (6b) is not, one is hard-pressed to actually point to any truth conditional difference between these case:

- (6) a. In less than 5% of these sentences can you find a truth conditional difference. \Rightarrow In less than 5% of these sentences can you find a dramatic truth conditional difference.
- b. In less than 5% percent of these sentences, you can find a truth conditional difference. $? \not\Rightarrow$ In less than 5% percent of these sentences, you can find a severe truth conditional difference.

Fortunately, I was able to find at least some examples that do clearly mean very different things. One example is (7):

- (7) a. In less than 20 lockers, we found more than 50 adult magazines.
- b. In less than 20 lockers did we find more than 50 adult magazines.
- c. We found more than 50 adult magazines in less than 20 lockers.

Sentence (7a) seems to describe a search that, after 20 lockers, has totalled 50-some magazines. (7b), on the other hand, says that stacks of 50 or more magazines were not found in more than 20 lockers, but still, about 1000 magazines may have been found in total. (7c) seems truly ambiguous between these two readings.

This difference in reading, it turns out, can be traced back to a *cumulative/distributive* ambiguity, which, lo and behold, in turn does derive the desired entailment differences, too.

I will say more about the details of these readings, and how they pan out both in examples that do have clearly distinguishable truth conditions, and in examples where they don't. More broadly, the talk discusses the syntax-semantics mapping and the question of semantic ambiguities. While clearly semantic in spirit, I promise to keep semantic formalism to a minimum, so as to make this talk accessible to people with little or no background in formal semantics.

References

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