

## How to answer negative questions: grammar, culture, and linguistic macro-areas

Anders Holmberg  
Newcastle University

There is a division between two answering systems found among the languages of the world. In one system, called the agree/disagree system or the truth-based system, a negative yes-no question is answered 'yes' when the intention is to confirm the negative alternative. In the other system, the polarity-based system, a negative yes-no question is answered 'no' when the intention is to confirm the negative alternative

- (1) 'Is he not coming?'
- a. Yes. ('He is not coming')
  - b. No. ('He is not coming')

East Asian languages are known for employing the truth-based system, while European languages mostly use the polarity-based system.

What is the basis for the variation? Is it cultural conventions comparable to variation in greetings (shaking hands or making a bow)? Is it a matter of the meaning of the words for 'yes' and 'no'? Is it a matter of variation in syntactic structure? The claim is that it is a matter of syntactic structure. It depends on the scope of the negation in the question. Putting it simply, if the negation in the question has narrow scope, say, over the predicate only, the answer 'yes' will confirm the negative alternative and the answer 'no' will disconfirm the negative alternative. If the negation in the question has wide scope (sentential scope), 'no' can confirm the negative alternative, 'yes' cannot. One obvious argument that it isn't a matter of cultural conventions is that some languages, including English, employ both systems depending on the negation used in the question. Many English speakers happily use the alternative (1a) as long as the question uses the negation *not* rather than *-n't* (*Isn't he coming?*); *not* can have a narrow scope reading.

A survey of about 130 languages from different corners of the world shows that the truth-based answer system is used by about 50% of the languages of the world. An interesting finding is that there is a strong geographical factor involved: All languages east of India in the sample employ the truth-based system (16 languages, 10 genera, including New Guinean and Polynesian languages), while European languages typically don't employ truth-based answering.

It is well known that certain linguistic features subject to variation in a global perspective can be spread over vast areas, crossing family boundaries. For example, SOV order is massively dominant in Eurasia, except at the peripheries (Europe in the west, South-East Asia in the east). Answer systems is another such feature. The only explanation for the spread of a feature across a macro-area is language contact. How does this tally with the idea that the answer system a matter of the syntax of negation? The implication is that the (relevant aspect of) the syntax of negation is a macro-areal feature.

As a rule, we expect features that are particularly prone to change under language contact to be features that are easily observable to speakers, such as object-verb order. The scope of sentential negation is not an easily observable feature, as shown by the considerable controversy in the literature over the Japanese negation, for example. But the distinction between the truth-based and polarity based answer system is an easily observable feature. The hypothesis is that a new answer system can be adopted by speakers of a language under language contact, even when their system of negation does not support it. This is supported by the observation that some degree of idiosyncratic variation can be observed within languages. But over time (generations), questions and answers being an extremely prominent and frequent feature of spoken conversation, the relevant aspects of the syntax of negation will change, to support the answer system.

It will be shown as well that the systems of negation can be quite different between two languages, even two otherwise typologically similar languages, yet both can support a truth-based answer system. In this case the similarity goes deeper than just choice of words, yet does not entail that the grammars are identical.