

## Parallelism and Sluicing

**Synopsis:** This paper presents a previously unnoticed fact that in certain well-defined contexts *negative question sluicing with an NPI inner antecedent* (henceforth, NQS) is allowed in Japanese and Greek but never in English. The following two points will be made:

(A) It is Parallelism (cf. Merchant) rather than the Bijection Principle (cf. Chung et al) or a pragmatic felicity condition that plays a crucial role in determining the acceptability of NQS.

(B) NPIs in Japanese and Greek are wide scope universal scoping over negation (cf. Shimoyama 2003, Giannakidou 2000) as opposed to NPIs in English, which are narrow scope existential.

**(A) Parallelism and NQS:** Let us see two ways to explain the general unacceptability of NQS.

(1) A: John doesn't want to eat any vegetable.

B: \*Do you know which ~~vegetable he doesn't want to eat~~?

Chung et al's (1995) propose a theory of sluicing, according to which an ellipsis site is recovered by recycling the antecedent sentence. In doing so, it is crucial that the recycled sentence is an open proposition with the WH-correlate unbound, so that the WH-phrase can quantify over the proposition without violating the Bijection Principle. However, (1B) violates this principle because the WH-correlate any vegetable, being an indefinite (cf. Kamp/Heim's theory of indefinites), is bound by the negation operator as well as the WH-operator, as shown in (2).

(2) LF of (1B): \*Do you know which<sup>x</sup> he doesn't<sup>x</sup> want to eat [any vegetable]<sup>x</sup>?

In response to Chung et al's analysis, Merchant (2001) proposes an account based on Parallelism, an informal definition of which is given in (3).

(3) In an ellipsis construction the relationship among the scope bearing elements in the antecedent must be identical to the relationship among the parallel elements in the elided clause.

Given Parallelism, (1B) is ruled out because the WH-phrase which is scoping over negation in the ellipsis sentence while the WH-correlate any vegetable is under negation in the antecedent.

Which of the two approaches is superior? Before comparing them, let me note that (1B) is pragmatically odd because the speaker B is asking a question whose answer was already given in the utterance of the speaker A. Indeed, the non-elided counterpart of (1B) "*Do you know which vegetable he doesn't want to eat?*" is similarly odd as a response to the utterance by (1A). This might lead one to suspect that pragmatic considerations will provide a vital alternative to the two approaches mentioned above. I will show that it will not, however. Consider the dialogue (4).

(4) A: John likes every vegetable.

B: \*Do you know which ~~vegetable he likes~~? B': #Do you know which vegetable he likes?

As a response to (4A), a question involving sluicing is impossible (4B), and its full version in (4B') is pragmatically odd just like the full version of (1B) is. However, if the WH-phrase is modified by an adverb specifically, both elided and non-elided questions become good.

(5) A: John likes every vegetable

B: Do you know specifically which ~~vegetable he likes~~?

B': Do you know specifically which vegetable he likes?

Here the speaker B is asking which vegetable John likes among others, which is not given in the utterance by the speaker A, hence pragmatically felicitous. One can understand the function of specifically which by imaging a scale that ranks all the contextually salient vegetables according to the degree to which they are liked by John. The speaker B is asking if the speaker A knows which vegetable is ranked (near) the highest. So the answer would be "Yes, he likes carrots best."

Given that specifically has the ability to fix the pragmatic oddity, (1B) would be predicted to become fine by adding this adverb if it were bad solely due to pragmatics. This prediction fails.

(6) A: John doesn't want to eat any vegetable.

B: ?\*Do you know specifically which ~~vegetable he doesn't want to eat~~?

To capture the meaning of (6B), imagine a scale ranking all the contextually salient vegetables in terms of the degree to which John does not want to eat them. The speaker B is asking if the speaker A knows which one is ranked (nearly) the highest. So (6B) makes sense, yet it is bad.

What does this tell us? First, the unacceptability of NQS cannot be solely due to pragmatics. Second, notice that the grammaticality of (5B) is a counterevidence against Chung et al's analysis, which would predict that (5B) would be ungrammatical because the recycled sentence will be John likes every vegetables. This is not an open proposition and the WH-phrase has nothing to bind in it, a vacuous quantification. (If the WH-phrase binds a variable created as result of QR of every vegetable, the Bijection Principle will be violated.) Third, Parallelism is the only approach that can rule in (5B) and rule out (6B). (6B) is ruled out as it violates Parallelism on a par with (1B). (5B) is ruled in because Parallelism is vacuously satisfied, with only one scope bearing element contained in the antecedent and ellipsis sentences.

To lend further support to Parallelism, consider (7).

(7) A: John said that he doesn't want to eat vegetables.

B: Do you know specifically which ~~vegetables he doesn't want to eat~~

(7B) is a minimal pair of (6B), the difference being that it contains the bare plural in place of the NPI. The grammaticality of (7B) can be explained under the assumption that bare plurals are kind denoting individuals (cf. Chierchia 1998) and do not carry any quantificational force of their own. On this assumption, the scope bearing elements that enter into the consideration of Parallelism will only include negation and want, and the relationship between the two in the antecedent (want>neg) is identical to that in the ellipsis sentence (want>neg), hence satisfying Parallelism.

**(B) Wide Scope Universal NPIs:** Giannakidou (2000) proposes to analyze NPIs in Greek as wide scope universal scoping over negation, and Shimoyama (2003) claims that this analysis holds of NPIs in Japanese too. If their analyses are correct, then the Parallelism approach leads us to predict that NQS will be acceptable in Greek and Japanese. This prediction is borne out. (Note that NPIs in Japanese consist of a WH + Case particle + MO.)

(8) A: O Yanis lei oti dhen theli na dhi KANENAN. [Greek]

**the John say.3sg that not want subj see.3sg NPI-person**

'John said that he does not want to meet anybody.'

B: (Mipos) kseris idietera PJON?

**(Q-part) know.2sg specifically who.acc**

'Do you know specifically who?'

(9) A: John-wa [dare-ni-mo ai-taku-nai-to] it-tei-masu [Japanese]

**John-Top who-dat-MO meet-want-Neg-Comp say-Pres-Polite**

'John said that he does not want to meet anybody.'

B: [Tokuni dare-ni ~~John-ga ai-taku-nai-to~~ ~~it-teiru~~ ka] wakari-imasu-ka

**specifically who-dat John-Nom meet-want-Neg-Comp say-Pres Q know-Polite-Q**

'Do you know specifically who(m) ~~John said that he does not want to meet?~~'

In both dialogues, Parallelism is satisfied; the WH-phrase scopes over negation in the elided clause and so does the WH-correlate in the antecedent. This counts not only as a new piece of evidence for the existence of wide scope universal NPIs in Greek and Japanese, but also a counterexample against Chung et al's analysis, which would wrongly rule out these NQS examples because the recycled sentence is not an open proposition.

### **Partial References**

Chung, S., et al (1995) Sluicing and Logical Form. *NLS* 3, 239-282.

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