

Japanese particles WA and GA as scope markers of EXH

Summary The paper presents a new analysis of two Japanese particles, exhaustive *ga* and non-contrastive *wa*. We propose that *wa* marked phrases obligatorily move past Meyer’s (2013) covert K operator, whereas *ga* marked phrases stay below this operator. Furthermore, we assume that a covert exhaustivity operator is present in the structure. Since it requires focus in its scope it is obligatorily active above the doxastic operator in *wa*-marked sentences, yielding a weaker reading.

Background It has been noted that sentences containing non-contrastive *wa* are not interpreted exhaustively, but rather introduce a new discourse topic, see (1) (Heycock, 2008).

- (1) John wa gakusei desu.
John WA student is.
'Speaking of John, he is a student.'

Furthermore, it has been observed that the particle *ga* can be used for exhaustive listing, see (2).

- (2) John ga gakusei desu.
John GA student is
'(Of all the people under discussion) John (and only John) is a student.
It is John who is a student.'

Both *ga* and *wa* can be used in answers to question, however the former comes with a obligatory exhaustivity inference, whereas the latter comes with a weaker ignorance inference, see (3) (Heycock, 2008).

- (3) a. Dare ga paatii ni kita no?
who GA party to come Q
'Who came to the party?'
b. JOHN wa kita.
John WA came.
'As for John, he came.' (Implicature: It is possible that other people did not come, I don't know about other people)
c. John ga kita.
John GA kita.
'John came.' (Complete answer)

Additionally, *wa* has been claimed to have a structurally high position, since it has obligatory wide scope when interacting with different operators.

Analysis We assume that *wa* and *ga* are both inherently focus and therefore must be associated with the covert exhaustivity operator EXH. But the

two particles mark different structural positions and this causes them to take different scope relative to the covert doxastic necessity operator K of Meyer (2013). The LF we assume for *wa* marked sentence is given in (4).

$$(4) \quad [_{\text{TopP}} \text{EXH} [_{\text{Top}'} [_{\text{Top}} \text{John-wa}_1] [\lambda_1 [\mathbf{K} [_{\text{IP}} [_{\text{VP}} t_1 \text{ came}]]]]]]]$$

This LF yields a reading that says the speaker is certain that John came but that it is not the case that the speaker is certain that x came, where x is a contextually relevant alternative. This is in line with the reported intuition that uttering a *wa* marked sentences implies that the speaker is ignorant with regard to the truth of other alternatives (Heycock, 2008).

For *ga* marked phrases the assumption is that they stay lower in the structure. Since movement of EXH is not forced through focus it stays below K , in line with the standard assumption that the strongest possible reading is aimed for. The LF we propose is the one in (5).

$$(5) \quad [\mathbf{K} [\text{EXH} [_{\text{IP}} [\text{John-ga}_1] [\lambda_1 [_{\text{I}'} [_{\text{VP}} t_1 \text{ came}]]]]]]]$$

This LF yields the stronger reading that the speaker is certain that John and no one else came.

Further support for this analysis comes from sentences that contain a overt doxastic operator in form of an attitude verb and an overt “only”. If these sentences contain *ga* only the strong reading is available, where the attitude verb scopes above “only”, see (6a). With *wa* the weak reading is obligatory where “only” has wide scope, see (6b).

- (6) a. John dake ga kuru to omotteita.
 John only GA come that thought.
 ‘I thought that only John would come.’
 b. John dake wa kuru to omotteita.
 John only WA come that thought.
 ‘John is the only one who I thought would come.’

We assume that K cannot occur in complement of *omotteita*. Therefore *John-dake-wa* must move to a position c-commanding both K and *omotteita* in (6b). This results in wide scope of “dake” in (6b). Our accounts for the different inferences *wa* and *ga* marked sentences have been associated with and possibly has theoretical implicatures for the analysis of topics in general.

References : Heycock (2008). *Japanese “wa”, “ga” and information structure*. Kuroda (2005). *Focusing on the matter of topic: a case study of “wa” and “ga” in Japanese*. CFS (2012). *Scalar Implicatures as a grammatical phenomenon*. Meyer (2013). *Ignorance and Grammar*.