Major Phrase as Spell-Out Domain: Evidence from Japanese Scrambling and NPI Shinichiro Ishihara, University of Potsdam (ishihara@uni-potsdam.de)

The paper discusses the interaction among word order, scope relation, and prosodic phrasing. I claim that the default Major Phrase (MaP) structure is a mapping of Spell-Out (Chomsky, 2001) domain onto prosody. I also claim that focus intonation (FI) modifies the default MaP phrasing and derives/blocks certain scope relation in a principled way. **Data:** Miyagawa (2003) observes that the partial negation reading, which is unavailable in (1a), becomes available in (1b), where the object scrambles above the subject.

- (1) a. zen'in-ga sono tesuto-o uke-nakat-ta 'All di all-NOM that test-ACC take-NEG-PST \*not >
  - b. sono tesuto-o zen'in-ga uke-nakat-ta that test-ACC all-NOM take-NEG-PST

'All did not take that test.'
\*not ≫ all, all ≫ not

'That test, all didn't take.' not  $\gg$  all, (all  $\gg$  not)

If we look at the most neutral intonation of these sentences, we can make a new generalization about the scope interaction. If a negation (-nakat-) and the quantifier (zen'in 'all') are included in a single Major Phrase (MaP), the negation can take a higher scope than the quantifier.

When the phrasing is modified by focus, interpretation changes as in (3). Again, the generalization holds. From these facts, I postulate the *Scope-MaP Generalization* in (4).

- (3) a. (zen'in<sub>F</sub>-ga sono tesuto-o uke-nakat-ta) not  $\gg$  all, all  $\gg$  not b. (sono tesuto-o) (zen'in-ga) (uke-nakat-ta<sub>F</sub>) \*not  $\gg$  all, all  $\gg$  not
- (4) **Scope-MaP Generalization:** When  $\alpha$  precedes  $\beta$ , and  $\beta$  takes a wide scope over  $\alpha$ , then  $\alpha$  and  $\beta$  are in the same prosodic phrase.

**Data 2:** Based on the experimental data, I will show that a negative polarity item (NPI) and a negation are included in a single prosodic phrase. If such a phrasing is interrupted by a narrow focus (e.g., wh-phrase), the sentence cannot be interpreted (Tomioka, 2004). This means that what has been analyzed as LF intervention effect (Beck and Kim, 1997) can be reinterpreted as a violation of (4). The intervening focused phrase breaks the MaP containing the NPI and the negation into two.

Analysis: I propose that MaP boundary is created at each Spell-Out (i.e., VP and TP). This proposal makes a different prediction from previously proposed syntax-prosody mapping analyses such as Selkirk and Tateishi (1991). In addition, it has been claimed that FI is also created at relevant Spell-Out domains (Ishihara, 2003). The combination of these two analyses explain the phenomena above in a uniform fashion. Syntactic structure, i.e., c-command relation, is mapped onto prosody as MaP phrasing. Left edges of Spell-Out domains (VP, TP) are marked by MaP boundaries. MaP boundaries thus indicates the c-command relation. If two elements are in a single MaP, the phrase-heads (e.g., V, Neg) c-commands the other. When an FI is superimposed onto this default MaP phrasing, it creates a new prosodic phrasing which contains a focused phrase and its scopally-related item. This new phrasing allows a scope relation that is unavailable with the default MaP phrasing.

## References

- Beck, Sigrid, and Shin-Sook Kim. 1997. On wh- and operator scope in Korean. *Journal of East Asian Linguistics* 6:339–384.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Ishihara, Shinichiro. 2003. Intonation and interface conditions. Doctoral Dissertation, Massachusetts Institute of Technology.
- Miyagawa, Shigeru. 2003. A-movement scrambling and options without optionality. In Word order and scrambling, ed. Simin Karimi, 177–200. Blackwell.
- Selkirk, Elisabeth, and Koichi Tateishi. 1991. Syntax and downstep in Japanese. In *Interdisciplinary approaches to language: Essays in honor of S.-Y. Kuroda*, ed. Carol Georgopoulos and Roberta Ishihara, 519–543. Dordrecht: Kluwer Academic Publishers.
- Tomioka, Satoshi. 2004. Pragmatics of LF intervention effects: Wh-interrogatives in Japanese and Korean. Unpublished ms., University of Delaware.