

## **Formal/Morphology-Phonology Interface**

### **Prosodically Conditioned Ellipsis and Lexical Integrity in Sino-Japanese Morphology**

Lexical integrity is a general property of grammatical words such that no syntactic process is allowed to refer to subparts of grammatical words. Bresnan and Mchombo (B&M: 1995) propose five criteria: 1) inbound anaphoric islands (i.e. subparts of words do not allow an anaphoric use), 2) phrasal recursivity (i.e. subparts of words disallow the arbitrarily deep embedding of syntactic phrasal modifiers), 3) conjoinability (i.e. subparts of words cannot be coordinated), 4) gapping (i.e. subparts of words cannot be gapped), 5) extraction (i.e. subparts of words cannot be extracted). To defend these criteria from exceptions, they regard apparent sublexical coordination and gapping as involving a Prosodically Conditioned Ellipsis (PCE), which is a phonological process that applies to phonological words.

In this paper, I examine lexical integrity of a string made up of Sino-Japanese Verbal Noun (VN) and Temporal Morpheme (TM) in Japanese by applying B&M's criteria to the VN + TM string. The result of the examination brings about two hypotheses, H1 and H2, about grammatical wordhood of the string. The H1 predicts that the wordhood of VN + TM is determined by a syntactic context where it appears, with respect to inbound anaphoric islands (1) and phrasal recursivity (2). The H2 predicts that the wordhood of VN + TM is determined by a class of TM, with respect to conjoinability (3, 4) and gapping (5). The PCE analysis of apparent sublexical coordination (6, 7) allows H1 rather than H2 to be maintained.

The goal of this paper are to demonstrate that the PCE analysis is phonologically motivated, allowing a dynamic view of lexical integrity such that the grammatical wordhood of lexical items can vary according to syntactic contexts where they appear.

The goal is achieved by showing that the result of the PCE analysis is necessarily led by interaction of phonological requirements. The PCE analysis of apparent sublexical coordination/gapping allows a prosodic ambiguity of the VN + TM such as  $[[kenkyuu\ no]\ sai]$  or  $[kenkyuu\ [no\ sai]]$  'in the case of research', where brackets represent phonological wordhood. I argue that the ambiguity is necessarily led by two competing phonological requirements, 1) nouns must follow particles as prosodic words (Nasu 2000) and 2) a preceding noun alone must be the target of the Pre-*no* deaccenting rule (Poser 1984). The former requirement explains the prosodic wordhood of  $[kenkyuu\ no]$ . It serves to prevent a class of noun, which has an accent (or a pitch fall (') from H(igh) to L(ow)) on the final morae (8), from violating Non-finality such that no prosodic head is final in prosodic words (Prince and Smolensky 1993). The latter explains the prosodic wordhood of  $[no\ sai]$ . The Pre-*no* deaccenting rule requires a class of preceding noun to be deaccented and keep the subsequent noun's accent intact (9a vs. 9c). Assuming that phonological words are accent-preserving (Kubozono et al. 1997), the Pre-*no* deaccenting rule allows a prosodic constituency for genitive NPs (10d) as well as that for N-N compounds (10c).

## Data

- (1)a. (John-wa) kanojo-no ainugo-no sore(= kenkyuu) izen/no-sai, (ronbun-o happyoo-sita.)  
(John-TOP) she-GEN Ainu-GEN it(=research) before/of-case (paper-ACC presentation-did)  
'Before/in the case of her research on Ainu, (John presented his paper.)'  
b. \*(John-wa) kanojo-ga ainugo-o sore(= kenkyuu)-izen/-no-sai, (ronbun-o happyoo-sita )  
(John-TOP) she-NOM Ainu-ACC it(=research)-before/-of-case (paper-ACC presentation-did)
- (2)a. John-no ainugo-no kuwasii kenkyuu go/no-sai, ...  
John-GEN Ainu-GEN detailed criticism after/of-case,  
'after/in the case of John's detailed research on Ainu'  
b. \*John-ga ainugo-o kuwasii kenkyuu-go/-no-sai, ...  
John-NOM Ainu-ACC detailed criticism-after/-of-case,
- (3) John-ga ainugo-o kenkyuu- to tyoosa-no-sai/\*-tyuu  
John-NOM Ainu-ACC research- and survey-mid  
'in the case of/during John's research and survey on Ainu'
- (4)a. \*John-ga ainugo-o kenkyuu-tyuu to -go  
John-NOM Ainu-ACC research-mid and -after  
'during and after John's research on Ainu'  
b. John-ga ainugo-o kenkyuu-no-sai to -ori  
John-NOM Ainu-ACC research-of-case and -occasion  
'in the case of and on the occasion of John's research on Ainu'
- (5)a. John-wa ainugo-o kenkyuu-~~no-sai~~/\*-tyuu, Mary-wa maorigo-o tyoosa-tyuu, ...  
John-TOP Ainu-ACC research-~~of-occasion~~/mid, Mary-TOP Maori-ACC survey-mid,  
'John ...during his study of Ainu and Mary ...during her survey of Maori.'
- (6)a. \*[kenkyuu-tyuu<sub>i</sub>]to [tyoosa-tyuu<sub>j</sub>] (cf. 3)  
b. kenkyuu-~~[no-sai<sub>i</sub>]~~to tyoosa-[no-sai<sub>j</sub>] (cf. 3)
- (7)a. \*[kenkyuu<sub>i</sub>-tyuu]to [~~kenkyuu~~-go] (cf. 4a)  
b. [kenkyuu-no]-sai to [~~kenkyuu-no~~]-ori (cf. 4b) (N.B. brackets represent phonological wordhood)
- (8) [hasi'-ga] (LH-L)  
bridge-NOM
- (9)a. uma'-ga (LH-L) b. sippo (LHH) c. uma-no sippo (LH-H#LHH)  
horse- NOM tail horse-GEN tail 'horse tail'
- (10)a. nyu'u (HL) 'new'  
b. karedonia (LHHHH) 'Caledonia'  
c. [nyuu-[karedonia]] (LH-LHHHH) 'New Caledonia'  
d. [uma-[no sippo]] 'horse tail' cf. (4c)

## References:

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