

Synopsis This paper provides an analysis of hitherto unnoticed data concerning left branch extraction of PP (PP LBE) in Japanese. While (leftward) LBE of nominals (NP LBE) is impossible in Japanese (Kato 2007, Nomura and Hirotsu 2005), we show that PP LBE is in fact allowed. The analysis crucially relies on a specific definition of phases and Watanabe's (2010) suggestion that the so-called genitive marker *-no* in fact has dual status. We also show that PP LBE behaves as overt Wh-movement.

NP/PP LBE It has been reported that (leftward) LBE of nominals (NP LBE) is impossible in Japanese (Kato 2007, Nomura and Hirotsu 2005). Thus, while a genitive possessor *dare* 'who' can occur within an object headed by *tegami* 'letter' ((1a)), the possessor cannot move out of the object ((1b)). However, what has gone unnoticed is that LBE of PPs (PP LBE) is in fact possible. A PP *dare-kara* 'from who' appears inside an object and gets the genitive marker *-no* ((2a)). Significantly, the PP can be located outside of the object ((2b)). There is evidence that the PP in (2b) indeed undergoes movement. First, (2b) is ungrammatical without *-no*. Given that PPs usually get *-no* within a nominal (Kitagawa and Ross 1982), the PP in (2b) should be within the object at some point of the derivation. Second, the dependency between the PP and the object in (2b) is island-sensitive. Note first that PP LBE across a sentence boundary is possible ((3a)). While a PP within an object can appear in a RC island (cf. (3b)), the PP cannot appear outside of the RC ((3c)). Given island-sensitivity of movement, the contrast suggests that the dependency also involves movement.

Analysis We argue that the contrast between (1b) and (2b) receives a principled account by an interaction of locality of movement and phasehood (Bošković 2005, to appear). We assume that K(ase)P is projected above NP in Japanese. We also assume that possessors and PPs are adjoined to host NPs (cf. Bošković 2010, Cheng 2011). We now propose that while KPs with possessors are phases ((4a)), KPs with genitive PPs are not phases ((4b)) (see below for a deduction). The contrast between (1b) and (2b) now follows from an interaction of the phase impenetrability condition (PIC), which requires a moving element to move to phase edges, and anti-locality, which states that movement cannot be too short (Abels 2003, a.o.). We assume a version of anti-locality adopted by Bošković (2005), which dictates that movement must cross at least one full phrase. (4a), which shows a derivation of NP LBE, is now ruled out by the PIC and anti-locality. First, the possessor cannot directly move outside of the KP due to the PIC, which requires the possessor to move to the KP edge. Option 1 in (4a) is thus ruled out. However, the possessor cannot move to the KP edge because such movement is blocked by anti-locality: the possessor is NP-adjoined, thus the movement to the KP edge does not cross a one full phrase. The option 2 in (4a) is also ruled out. On the other hand, in (4b), which shows a derivation of PP LBE, KP is not a phase. PP LBE is thus predicted to be possible because there is no violation of anti-locality or the PIC.

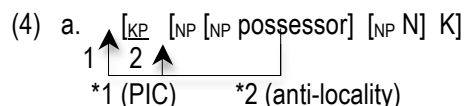
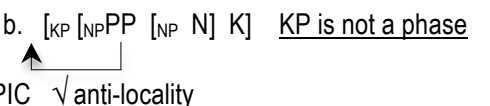
Dual status of *-no* and phases We now consider why KPs are phases in NP LBE but not in PP LBE. Watanabe (2010) suggests that the so-called "genitive" *-no* has dual status: *-no* is a structural Case marker when it appears with a nominal while it is a linker when it appears with a PP. In the latter case, the PP does not receive structural Case. Furthermore, it has been proposed on independent grounds that Case-valuation determines phases (Epstein, Kitahara, and Seely to appear, Miyagawa 2011, M. Takahashi 2010, a.o.). The two independent proposals show an interesting convergence in NP and PP LBE. In the case of NP LBE, *-no* is a structural Case-marker. We assume that the possessor gets genitive Case from K. Given the Case/phase hypothesis, this means that KP is a phase in NP LBE. NP LBE is thus prohibited by the PIC and anti-locality as shown in (5a). On the other hand, in the case of PP LBE, *-no* is a linker, which means that there is no Case-valuation by K. This means that KP is not a phase in PP LBE. PP LBE is thus predicted to be possible because there is no violation of the PIC or anti-locality ((5b)).

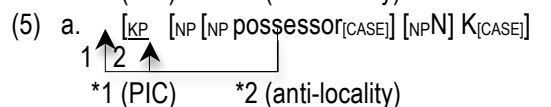
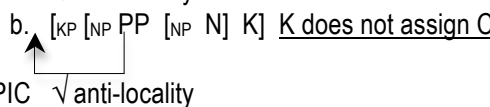
PP LBE as WH-movement One interesting property of PP LBE is that it behaves as A'-movement. First, PP LBE is degraded if a non-wh PP is extracted ((6a)). This indicates that PP LBE must move a wh-phrase. Second, PP LBE is subject to superiority (cf. D. Takahashi 1993). (7a-b) show that PP LBE is impossible when the subject is also a *wh*-phrase, which we suggest is due to the superiority effect. Note that clause-internal scrambling of a *wh*-phrase, which can behave as A-movement, does not show a superiority effect ((7c)) and (7b) is significantly worse than (1b). Above observations provide new evidence that Japanese has overt wh-movement (D. Takahashi 1993, 1994).

- (1) a. Minna-ga [NP dare-no tegami-o] sute-ta-no? everyone-Nom who-Gen letter-Acc discard-Past-Q 'lit. Everyone discarded whose letter?'
 b. *Dare-i-no minna-ga [NP t_i tegami-o] sute-ta-no? who-Gen everyone-Nom letter-Acc discard-Past-Q 'lit. Whose_i did everyone discard [t_i letter]?'

 (2) a. Minna-ga [NP dare-kara-no tegami-o] sute-ta-no? Everyone-Nom who-from-Gen letter-Acc discard-Past-Q 'lit. Everyone discarded a letter from who?'
 b. Dare-kara-i-(no) minna-ga [NP t_i tegami-o] sute-ta-no? who-from-Gen everyone-Nom letter-Acc discard-Past-Q 'lit. From who_i did everyone discard [a letter t_i]?'

 (3) a. Dare-kara-i-no Hanako-wa [Taroo-ga [t_i tegami-o] sute-ta]-to omottei-ru-no? who-from-Gen Hanako-Top Taro-Nom letter-Acc discard-Past-that think-Pres-Q 'lit. From who_i does Hanako think Taro discarded a [letter t_i]?'
 b. Taroo-wa [RC [NP dare-kara-no tegami-o] sute-ta]] hito-o sagasitei-ru-no? Taro-Top who-from-Gen letter-Acc discard-Past person-Acc be.looking.for-Pres-Q 'lit. Taro is looking for a person that discarded a letter from who?'
 c. *Dare-kara-i-no Taroo-wa [RC [NP t_i tegami-o] sute-ta]] hito-o sagasitei-ru-no? who-from-Gen Taro-Top letter-Acc discard-Past person be.looking.for-Pres-Q 'lit. From who_i is Taro looking for a person who discarded [a letter t_i]?'

 (4) a.  KP is a phase
 b.  KP is not a phase
 *1 (PIC) *2 (anti-locality) √ PIC √ anti-locality

 (5) a.  K does not assign Case
 b.  K does not assign Case
 *1 (PIC) *2 (anti-locality) √ PIC √ anti-locality

 (6) a. ??Hanako-kara-i-no minna-ga [t_i tegami]-o sute-ta-no? Hanako-from-Gen everyone-Nom letter-Acc discard-Past-Q 'lit. From Hanako_i, did everyone discard [a letter t_i]?'
 b. Dare-kara-i-no minna-ga [t_i tegami]-o sute-ta-no? who-from-Gen everyone-Nom letter-Acc discard-Past-Q 'lit. From who_i did everyone discarded [a letter t_i] ?'

 (7) a. Dare-ga [NP dare-kara-no tegami-o] sute-ta-no? who-Nom who-from-Gen letter-Acc discard-Past-Q 'lit. Who discarded a letter from who?'
 b. *Dare-kara-i-no dare-ga [NP t_i tegami-o] sute-ta-no? who-from-Gen who-Nom letter-Acc discard-Past-Q 'lit. [From who]_i did who discarded [a letter t_i] ?'
 c. Dare-kara-i dare-ga t_i [NP tegami-o] morat-ta-no? who-from-Gen who-Nom letter-Acc receive-Past-Q 'lit. [From who]_i did who receive a letter t_i ?'

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