Hyper-contextual allomorphy: Negative jussive clauses in Korean Jaehoon Choi (Daegu University)

Introduction Jussive clauses in Korean are marked by a designated particle: -*la* for imperatives (1a), -*ca* for exhortatives (2a), -(*u*)*ma* for promissives (3a). Jussive clauses, despite their shared properties, do not behave in a homogeneous way with respect to sentential negation. Negating imperatives and exhortatives involve *mal* negation (1b/2b) but not long (1c/2c) and short (1d/2d) negations. The negation pattern of promissives is the exact opposite: While *mal* negation is *categorically* ruled out (3b), long (3c) and short (3d) negations are allowed.

- (1) a. Ka-la. b. Ka-ci mal-la. c. *Ka-ci ani ha-la. *An ka-la. go-IMP go-CI go-CI NEG do-IMP **NEG-IMP** NEG go-IMP 'Go.' 'Don't go.'
- (2) a. Ka-ca. b. Ka-ci mal-ca. *Ka-ci ani ha-ca. *An ka-ca. NEG do-EXH go-EXH go-CI **NEG-EXH** go-CI NEG go-EXH 'Let's go.' 'Let's not go.'
- Ka-ma. b. *Ka-ci mal-uma. Ka-ci ani ha-ma. (3) a. d. An ka-ma. go-PRM go-CI **NEG-PRM** go-CI NEG do-PRM NEG go-PRM 'I will go.' 'I will not go.' 'I will not go.'

The goal of this paper is to propose a principled account that captures the diverging negation patterns described above adopting Distributed Morphology (Halle&Marantz1993). *Previous analysis* Han&Lee2007(H&L) propose a Fusion-based account of negative imperatives. H&L first establish the syntax of long (4a) and short (4b) negation: **Long negation** (4a) involves NegP as part of the clausal spine (5a). Neg⁰ blocks head-movement from below; Neg⁰ itself moves up to C⁰ (5b). *Do*-insertion applies to support the stranded verbal inflection [[Neg⁰-Mod⁰]_{Mod⁰}-C⁰]_{C⁰} (5c).

(4) a. Tim-i ka-ci **ani ha**-yess-ta. b. Tim-i **ani** ka-ss-ta. (4a/b)=
T-NOM go-CI NEG do-PST-DECL T-NOM NEG go-PST-DECL 'Tim didn't go.'

Accepting Lee's 1978 treatment of *mal* as a morphological amalgam of *ani* and *ha*, H&L propose that *mal* negation and long negation involve the identical syntactic derivation (5a-c). The difference in surface forms (*mal* vs. *ani ha*) is derived by Neg⁰-v⁰ Fusion triggered by Mod⁰[deonctic] (5d). Neg⁰[neg,v] is realized as *mal*. Neg⁰-v⁰ Fusion is not at work outside the context of deontic modality, and thus Neg⁰ and v⁰ are realized by *ani* and *ha*, respectively.

- (5) a. $\left[\operatorname{CP} \left[\operatorname{ModP} \left[\operatorname{NegP} \left[\operatorname{VP} \left[\operatorname{VP} \right] \operatorname{V}^{0} \right] \operatorname{Neg^{0}} \right] \operatorname{Mod^{0}} \left[\operatorname{deontic} \right] \right] \operatorname{C^{0}} \left[\operatorname{impl} \right] \right]$
 - b. $[CP [ModP [NegP [vP [vP tv^0] [V^0+v^0]v^0] t_{Neg^0}] t_{Mod^0}] [[Neg^0 [neg]-Mod^0 [deontic]]-C^0 [imp]]$
 - c. $[CP [ModP [NegP [vP [vP tv^0] [V^0+v^0]_{v^0}] t_{Neg^0}] t_{Mod^0}] [[[Neg^0 [neg]-v^0 [v]]-Mod^0 [deontic]]-C^0 [imp]]$
 - $d. \quad \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{VP}}\left[{_{VP}}\left[{_{VP}}\left[{_{V^0}} \right]\left[{V^0} \! + \! {v^0} \right]_{v^0} \right]\left[{_{Neg^0}}\right]t_{Mod^0} \right] \right. \\ \left. \left[\left[{_{Neg}}{^0}\left[{_{neg,v}} \right] \! \! Mod^0\left[{_{(deontic)}} \right] \! \! C^0\left[{_{imp}} \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{VP}}\left[{_{VP}}\left[{_{V^0}}\right] \right] \! C^0\left[{_{imp}} \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{VP}}\left[{_{VP}}\left[{_{VP}}\left[{_{V^0}}\right] \right] \! C^0\left[{_{imp}} \right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{VP}}\left[{_{VP}}\left[{_{V^0}}\right] \right] \! C^0\left[{_{imp}}\right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{VP}}\left[{_{VP}}\left[{_{V^0}}\right] \right] \! C^0\left[{_{imp}}\right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{VP}}\left[{_{V^0}}\right] \! C^0\left[{_{imp}}\right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{V^0}}\left[{_{V^0}} \right] \! C^0\left[{_{imp}}\right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{NegP}}\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\right] \right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\right] \! C^0\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\right] \right] \right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{ModP}}\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\right] \! C^0\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\left[{_{V^0}}\right] \right] \right] \right] \right] \right] \right] \right] \right] \\ \left. \left[{_{CP}}\left[{_{CP}}\left[{_{V^0}}\left[{_{V^$
 - e. Vocabulary Insertion: $ka \ \emptyset$ $mal \ \emptyset$ la

In H&L short negation (4b) involves vP adjunction (6a), which is cliticized to v^0 (6b). V^0 head-moves to C^0 (6c). Reordering between V^0 and $[\text{Neg}^0-v^0]_{v^0}$ applies (6d). Neg^0-v^0 Fusion is triggered by $\text{Mod}^0_{[\text{deontic}]}$ (6e). The terminal nodes are realized as shown in (6f). H&L rule out the **mal ka-la* 'NEG go-IMP' based on a morphological well-formedness condition which bans two verbal elements—*mal* and ka 'go'—occurring within a single verbal complex.

- (6) a. $[CP [ModP [vP [NegP Neg^0] [vP [vP V^0] v^0[v]]] Mod^0[deontic]] C^0[imp]]$
 - b. $[CP [ModP [vP [NegP t_{Neg}]] [vP [VP V^0] [Neg^0[neg] + \nu^0[v]] \nu^0]] Mod^0[deontic]] C^0[imp]]$ $[CP [ModP [vP [NegP t_{Neg}]] [vP [VP t_{V}]] t[Neg^0 + \nu^0] \nu^0]] t_{Mod^0}]$
 - c. $[[[V^0-[Neg^0_{[neg]}-v^0_{[v]}]-Mod^0_{[deontic]}]-C^0_{[imp]}]$
 - d. $[[[[\mathbf{Neg^0}_{[\text{neg}]}-\mathbf{v^0}_{[\text{v}]}]_{\mathbf{v^0}}-\mathbf{V^0}]-\mathbf{Mod^0}_{[\text{deontic}]}]-\mathbf{C^0}_{[\text{imp}]}]$
 - e. $[[[[Neg^0_{[neg,v]}]-V^0]-Mod^0_{[deontic]}]-C^0_{[imp]}]$

Problems H&L's analysis is problematic for (at least) three reasons: (i) It predicts that promissives and exhortatives *must* involve *mal* negation since jussive clauses are deontic, contrary to facts (3b). (ii) The ban on two verbal elements within a single verbal complex is groundless given numerous instances of well-formed verbal complex containing two verbal elements in Korean (e.g., ka-peli 'go-discard', twuleywo-ha 'fear-do', etc.). Hence, it is unclear how we can explain the incompatibility between mal negation and short negation. Analysis Adopting H&L's do-insertion analysis of long negation, I propose to treat mal negation as involving hyper-contextual allomorphy, dispensing with Fusion operation. Solution to (i) A solution is readily available if we accept Zanuttini et al. 2012, according to which jussive clauses are headed by Jussive⁰ (equivalent to C⁰). Jussive⁰ is realized as -la, -ca, or -ma depending on its person feature: second person (-S(peaker),+H(earer)) for imperative -la (8f); first person inclusive (+S,+H) for exhortative -ca (8g); first person (+S,-H) for promissive -ma (8h). What distinguishes promissives from imperatives and exhortatives is then the [+H] feature in imperatives and exhortatives, which promissives lack. With this in place, I propose (7) and (8) as the Vocabulary Insertion rules for dummy v^0 and Neg⁰, which apply to the morpho-syntactic structure (5c), but not to the post-Fusion structure (5d).

- (7) a. $v^0 \leftrightarrow mal / [+neg [\dots _ \dots] \dots] +H]$
- (8) a. $Neg^0 \leftrightarrow \emptyset / \underline{\hspace{1cm}} mal$

b. $v^0 \leftrightarrow \emptyset$ / elsewhere

b. $Neg^0 \leftrightarrow ani / _$ elsewhere

There are two important points. First, Vocabulary Insertion targets v^0 before Neg⁰ in compliance with Myler2013's Derivational Order of Vocabulary Insertion, according to which a non-head terminal node undergoes Vocubulary Insertion prior to its sister head terminal node. Second, the proposed VI rules feature a hyper-contextual VI rule (7a) (in terms of Moskal&Smith2016) mentioning both [+neg] and [+H] features: [+neg] is necessary in order to prevent *mal* negation from applying in affirmative jussive clauses and [+H] is necessary in order to prevent *mal* negation from applying in promissives.

Solution to (ii) Since the current analysis dispenses with Fusion operation, VI rules in (7) and (8) apply to the morpho-syntactic structure of short negation in (6d). In (6d), Neg⁰ undergoes Vocabulary Insertion prior to v^0 (Myler2013). Hence, (8b) applies resulting in [+neg] to be replaced by ani. The lack of [+neg] feature bleeds the application of (7a) since the rule requires both of the context-defining features [+neg] and [+H]. Hence, (7b) applies. Applying (8b) and (7b) thus straightforwardly yields regular short negation. The proposed analysis thus deals better with the data under question since it does not produce mal negation with short negation in the first place and thus there is no need to filter out the resulting form on independent morphological grounds, which does not seem to hold.

Subject honorification and negative imperatives Negative imperatives are compatible with the subject honorific marker -si (9). (This marker is incompatible with exhortatives and promissives since it cannot be used with first person subject.) The proposed analysis correctly captures the distribution of -si in (9) if we accept Choi&Harley(in press), according to which Hon^o, which is realized as -si, is inserted as an adjunction of v^0 at PF. Since H&L's Neg^o- v^0 Fusion will get rid of v^0 terminal node from the structure as in (5d), Hon^o-insertion must precede Neg^o- v^0 Fusion in order for Hon^o to be added to the structure. However, pre-Fusion Hon^o-insertion results in [[[Neg^o-[v^0 -Hon^o] $_{v^0}$]Neg^o]-Mod^o]-C^o]. Neg^o- v^0 Fusion cannot apply to this structure: Fusion targets two *sister* terminal nodes but Neg^o terminal node is not a sister node of v^0 terminal node. This structure is entirely compatible with the VI rules proposed above. Since the c-command relationship between v^0 and the two context-defining elements [+neg] and [+H] still holds even with an added Hon^o, (7a) applies resulting in *mal* negation.

(9) Ka-ci ma-si-Ø-eyo. (A null imperative morpheme is assumed go-CI NEG-HON-IMP-POL following Yim2012.)

References Choi&Harley.inpress.Locality domains and morphological rules: Phases, heads, node-sprouting and suppletion in Korean honorification.*NLLT*. Han&Lee.2007.On negative imperatives in Korean.*LI*38:373-394. **Zanuttini&Pak&Portner**.2012.A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects.*NLLT*30:1231-1274.