

ON NEGATIVE IMPERATIVES IN  
KOREAN

Chung-hye Han

Simon Fraser University

Chungmin Lee

Seoul National University

**1 Introduction**

Korean has two types of sentential negation: long and short. Long negation occurs after the main verb, followed by the light verb *ha-* 'do', as in (1a). Functioning like the *do* of *do*-support in English, *ha-* carries verbal inflections. Short negation occurs before the verb, as in (1b).

- (1) a. Inho-nun hakkyo-ey ka-ci *ani* ha-yess-ta.  
Inho-TOP school-to go-CI NEG DO-PAST-DECL  
'Inho did not go to school.'  
b. Inho-nun hakkyo-ey *an* ka-ss-ta.  
Inho-TOP school-to NEG GO-PAST-DECL  
'Inho did not go to school.'

However, negative imperatives cannot be formed with either short or long negation, as shown in (2a) and (2b). Instead, they require a special form, *mal-*, as shown in (2c). Syntactically, the *mal-* form is similar to long negation in that it must occur after the main verb, but it differs from long negation in that it cannot be followed by *ha-*. With long negation *ani*, *ha-* is required in order to carry verbal inflections such as tense and sentence type markers, but *mal-* does not require and cannot occur with *ha-* as it is verbal in category and hence directly carries verbal inflections.

- (2) a. \*Hakkyo-ey *an* ka-la!  
school-to NEG go-IMP  
'Don't go to school!'  
b. \*Hakkyo-ey ka-ci *ani* ha-yela!  
school-to go-CI NEG DO-IMP  
'Don't go to school!'  
c. Hakkyo-ey ka-ci *mal-*ala!  
school-to go-CI NEG-IMP  
'Don't go to school!'

Interestingly, as observed in Lee 1988, 1993, young Korean children (2 years of age) sometimes produce negative imperatives with short negation, as illustrated in (3).

- (3) a. (To the child's father, leaving for school)  
Appa, hakkyo *an* ka!  
Daddy school NEG go  
'Daddy, don't go to school!'  
(Lee 1993:44, (7) [SK 2;5])

We thank Jong-Bok Kim, Željko Bošković, David Pesetsky, Heejeong Ko, and the audience at the 13th Japanese/Korean Linguistics Conference for helpful questions and comments. We are also greatly indebted to two anonymous reviewers for their critical comments that helped us reshape and improve this squib. All remaining errors are ours. This work was supported in part by SSHRC Standard Research Grant 410-2003-0544 to Han and by a 2001 KRF Basic Research Project (middle-size) grant 2002-074-AM 1534 through Seoul National University to Lee.

- b. *An pwul kkeyo!*  
 NEG light turn.off  
 'Don't turn off the light!'  
 (Lee 1993:44, (8) [CK 2:1])

The fact that examples such as (3) are allowed in child grammar suggests that the syntax/semantics of the imperative is in principle not incompatible with that of short negation. The question is what aspect of the learner's grammar changes so that examples like (3) come to be ruled out. Identifying this then will enable us to understand why short negation is incompatible with the imperative in adult grammar.

In this squib, we raise and address two questions concerning negative imperatives in Korean: (a) What is the morphosyntactic nature of *mal-* in negative imperatives and why is it impossible to form negative imperatives with long negation *ani?*, and (b) Why is it impossible to form negative imperatives with short negation *an* in adult grammar, yet possible in child grammar?<sup>1</sup> We propose that the constraint that rules out short negation *an* as well as long negation *ani* in the imperative is morphological in nature, and not syntactic or semantic. We will argue that this constraint follows from the Subset Principle and Vocabulary Insertion in Distributed Morphology (Halle and Marantz 1993, 1994).

In section 2, we show that *mal-* not only occurs in the imperative but also occurs in other contexts that can be characterized as contributing deontic modality. Our discussion of *mal-* will lead to the conclusion that the clause structure should somehow make a distinction between a category for modality and a category for illocutionary force (sentence type), and that *mal-* is a spell-out of 'long negation *ani* + *ha-*' in the context of deontic modality, to which the imperative belongs. Building on these conclusions, we then consider why short negation is impossible in negative imperatives. In section 3, we consider and reject a few syntax- and semantics-based approaches. In section 4, we present our morphology-based proposal and show how it accounts for both the adult and the child data.

## 2 Morphosyntactic Nature of *Mal-*

For an account of the morphosyntactic nature of *mal-*, we will extend and refine the descriptive generalization given in Lee 1978: 'long negation *ani* + *ha-*' lexicalizes as *mal-* in the context of imperatives and positives.

*Mal-* can occur in nonimperatives as well, in sentences expressing deontic modality. For example, it can occur in matrix clauses, as in (4), and in embedded clauses under directive or volitional verbs, as in (5).

<sup>1</sup> By *imperatives*, we refer to sentences with distinctive imperative morphology on the verb and/or distinctive imperative syntax. To refer to functions of imperatives, we use terms such as *command* and *request*.

- (4) Cey-ka hakkyo-ey ka-ci *mal-kkayo*?  
 I-NOM school-to go-CI NEG-Q  
 ‘Should I not go to school?’
- (5) a. Inho-ka Yumi-eykey hakkyo-ey ka-ci *mal-lako*  
 Inho-NOM Yumi-to school-to go-CI NEG-COMP  
 tangpwuha-yess-ta.  
 tell-PAST-DECL  
 ‘Inho told Yumi that she should not go to school.’
- b. Inho-nun hakkyo-ey ka-ci *mal-aya* ha-n-ta.  
 Inho-TOP school-to go-CI NEG-COMP do-PRES-DECL  
 ‘Inho should not go to school.’<sup>2</sup>
- c. Inho-nun Yumi-ka hakkyo-ey ka-ci *mal-ki-lul*  
 Inho-TOP Yumi-NOM school-to go-CI NEG-NMZ-ACC  
 pala-n-ta.  
 want-PRES-DECL  
 ‘Inho wants Yumi to not go to school.’<sup>3</sup>

However, in examples like (5b) and (5c) it is also possible to use either short negation *an* or long negation *ani* in the embedded clause without any difference in meaning, as illustrated in (6).

- (6) a. Inho-nun hakkyo-ey ka-ci *ani* ha-yeya  
 Inho-TOP school-to go-CI NEG do-COMP  
 ha-n-ta.  
 should-PRES-DECL  
 ‘Inho should not go to school.’
- b. Inho-nun hakkyo-ey *an* ka-aya ha-n-ta.  
 Inho-TOP school-to NEG go-COMP should-PRES-DECL  
 ‘Inho should not go to school.’
- c. Inho-nun Yumi-ka hakkyo-ey ka-ci *ani* ha-ki-lul  
 Inho-TOP Yumi-NOM school-to go-CI NEG do-NMZ-ACC  
 pala-n-ta.  
 want-PRES-DECL  
 ‘Inho wants Yumi to not go to school.’
- d. Inho-nun Yumi-ka hakkyo-ey *an* ka-ki-lul  
 Inho-TOP Yumi-NOM school-to NEG go-NMZ-ACC  
 pala-n-ta.  
 want-PRES-DECL  
 ‘Inho wants Yumi to not go to school.’

<sup>2</sup> In (5b), the complementizer *-aya* and the higher verb *ha-* are closely connected, and they together express deontic modality. But the fact that both *mal-* and *ha-* can be tensed, as in (i), supports the view that examples like (5b) are complex sentences. We thank a reviewer for clarifying this point.

(i) Inho-nun hakkyo-ey ka-ci *mal-ass-eya* ha-yess-ta.  
 Inho-TOP school-to go-CI NEG-PAST-COMP do-PAST-DECL  
 ‘Inho should not have gone to school.’

<sup>3</sup> The gloss *NMZ* stands for *nominalizer*.

We think this suggests that some of the volitional verbs and/or the complementizers have two selectional possibilities: when a deontic modal clause is selected, *mal-* appears, and when a nondeontic modal clause is selected, *an(i)* appears.<sup>4</sup> This does not result in a difference in meaning, however, because in both cases the volitional matrix verb (and the complementizer) contributes the meaning of deontic modality. In cases where a deontic modal clause has been selected, as in (5), the deontic modality reflected in the embedded clause is behaving like an agreement marker with the complementizer or the matrix verb.<sup>5</sup>

Given that the imperative also constitutes a deontic modality context, we can now recast Lee's original generalization as follows: 'long negation *ani + ha-*' lexicalizes as *mal-* in the context of deontic modality. Under this view, *mal-* and 'long negation *ani + ha-*' have essentially the same syntax, but are spelled out differently depending on the modality encoded in the clause structure.<sup>6</sup> We will formalize this as a morphological constraint in the Distributed Morphology framework in section 4. There, we will also propose that *ha-* in 'long negation *ani + ha-*' is a *dissociated* morpheme (Embick 1997), a morpheme that is inserted in morphology to meet a language-particular well-formedness condition.

<sup>4</sup> A similar situation is attested in Romance, where a predicate can select a subjunctive or an indicative clause (Quer 1998).

<sup>5</sup> This raises the question of why such an optionality in selection exists. We do not have an answer at this time.

<sup>6</sup> A reviewer observes that there are negative sentences that seem to be deontic but require *ani*; as an example, the reviewer provides sentence (i), containing the modal suffix *-keyss* with the meaning of intention. We do not think that *-keyss* expressing intention is a marker of deontic modality. In (i), *-keyss* expresses the speaker's intention to go home, thus implicating that the speaker has the desire to go home.

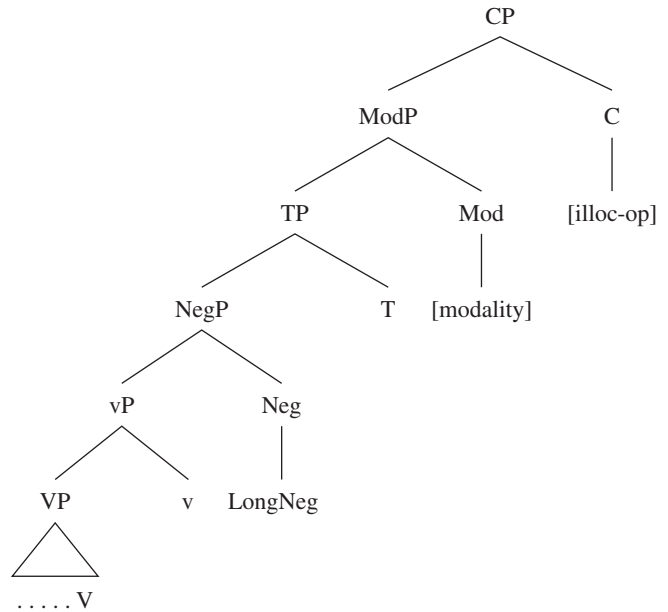
- (i) Na-nun cikum cip-ey ka-ci *ani* ha-keyss-ta /  
 I-TOP now home-to go-CI NEG do-MODAL-DECL /  
 \**mal-keyss-ta*.  
 \*NEG-MODAL-DECL  
 'I do not intend to go home now.'

There are, however, idiomatic usages of *mal-* occurring in sentences that do not express deontic modality, as discussed in Lee 1977. Some examples are given in (ii). The analysis we provide for *mal-* does not extend to these idiomatic usages.

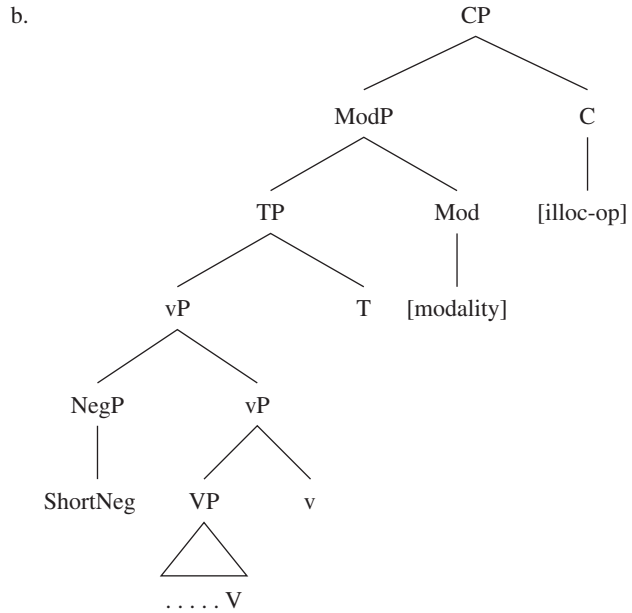
- (ii) a. Kulem, coh-ko mal-ko.  
 of.course good EMPH  
 'Of course, it is good.'  
 b. Pihayngki-ka poil-lak mal-lak ha-n-ta.  
 plane-NOM visible-barely cease-barely do-PRES-DECL  
 'The plane is barely visible.'  
 c. Na-nun ne-ka ka-kena mal-kena sangkwan an ha-n-ta.  
 I-TOP you-NOM go-or not-or concern NEG do-PRES-DECL  
 'I don't care if you go or not.'

But before we can present our analysis, we need to clarify our assumptions about clause structure and the syntax of the two types of negation. The fact that *mal-* can be used in imperatives as well as in nonimperatives that express deontic modality suggests that the category for deontic modality and the category for the imperative need to be distinguished somehow in the clause structure. Although there may be different ways to implement this idea (see Sells 2004), we will choose to do so by postulating two separate projections for each category: a projection for modality and a projection for illocutionary operator, as illustrated in (7). Although the projection of modality is present in the clause structure of imperatives, we will assume that it may not be present in the clause structure of simple nonmodal sentences. We will also assume that in tensed sentences, TP projects right below ModP, but that it does not do so in imperatives, as they are untensed (Zanuttini 1991, Han 2000). The clause structure proposed here is consistent with Cinque’s (1999) proposal regarding the universal hierarchy of functional projections in which the force-indicating projection is higher than the projections of modality.<sup>7</sup>

(7) a.



<sup>7</sup> For the sake of simplicity, we omit all specifiers from the structures in (7).



We will further assume that long negation projects NegP as in (7a), and that short negation starts out as a left adjunct of vP as in (7b) but cliticizes to v, similar to Neg-cliticization in Romance (Cinque 1999).<sup>8</sup> The fact that a sentence can contain both short and long negation as in (8) supports the view that there are two different positions for the two types of negation (see also Kim 2002). And the fact that *ha-*, which is similar to English *do*, is required with long negation supports the assumption that long negation is a head that projects a phrase of its own (NegP) and blocks the verb from coming together with inflections (see Ahn 1991, Cho 1994, Yi 1994).

<sup>8</sup> A reviewer asks what our thoughts are regarding the status of *-ci* on the main verb followed by long negation. One of the main views about *-ci* is that it is a nominalizer that introduces a new clause (Hagstrom 2002 and references therein). Under this view, a sentence with long negation would be a complex clause, with *-ci* heading an embedded clause. But as pointed out by Han, Lidz, and Musolino (2007), this analysis does not comport well with the way negative polarity item (NPI) licensing works in Korean. An NPI is possible in Korean as long as negation occurs in the same clause (Choe 1988). Han, Lidz, and Musolino observe that if *-ci* is a nominalizer that introduces a new clause, then NPI in an object position should not be licensed by long negation, as an object and long negation would belong to different clauses. But this is not true, as (i) shows. In light of this fact, we treat *-ci* as an inflection on the verb selected by long negation, similar to perfect *have* in English, which selects for a participial form of the following verb.

- (i) Toli-ka [amwu kesto mek-ci] ani ha-yess-ta.  
 Toli-NOM any thing eat-CI NEG do-PAST-DECL  
 'Toli didn't eat anything.'

- (8) Inho-nun amwu kes-to     *an* masi-ci *ani*  
 Inho-TOP any    thing-even NEG drink-CI NEG  
 ha-yess-ta.  
 do-PAST-DECL  
 ‘Inho didn’t not drink anything. ≈ Inho drank something.’

A good indicator of the clitic status of short negation comes from the fact that while in the adult grammar, short negation must occur immediately before the verb (see Han 1987, No 1988, Kim 2000a), 2-year-old children often produce sentences in which short negation and the verb are separated by an object or an adverb, as in (9) (Hahn 1981, Cho and Hong 1988, Kim 1997, Baek 1998, Hagstrom 2002). Assuming that children’s phrase structure is continuous with adults’, these productions by children tell us that they know where to generate short negation, but not that it is a clitic. So the difference between adult and child grammar can be explained as follows: short negation, which heads its own projection, left-adjoined to vP, cliticizes onto v in the adult grammar but fails to do so in the child grammar (Han and Park 1994).

- (9) a. Na *an* pap mek-e.  
 I    NEG rice eat-DECL  
 ‘I do not eat rice.’  
 (Cho and Hong 1988:34 [2;2-6])  
 b. *An* mak uwl-e.  
 NEG much cry-DECL  
 ‘(I) do not cry much.’  
 (Cho and Hong 1988:35 [2;2-6])

Note that whereas identifying the correlation between *mal-* and the deontic modality context sheds light on why long negation cannot be used in negative imperatives, it is not yet obvious why short negation cannot.<sup>9</sup> We now turn to this issue.

### 3 Syntax- and Semantics-Based Approaches?

In this section, we will rule out a few possible syntax- and semantics-based approaches, as a way of motivating our own morphological analysis proposed in section 4.

Many authors have proposed to account for the (in)compatibility of negation and the imperative on the basis of various Romance, Balkan, and Germanic languages (see Zanuttini 1991, 1994, 1997, Rivero 1994, Rivero and Terzi 1995, Han 2000, 2001). Although the details

<sup>9</sup> Alternatively, as in Kim 2000a and Yoon 1994, we can take ‘long negation *ani* + *ha-*’ to be a lexical unit that has the status of an auxiliary verb, and say that *aniha-* gets spelled out as *mal-* in a deontic modality context. But this approach fails to explain why negative imperatives cannot be formed with short negation, just as the approach based on our view of long negation does.

differ, an idea shared by all these approaches is that in some languages (such as Italian, Spanish, and Modern Greek), the syntax of the imperative and the syntax of negation are incompatible, ruling out negative imperative formation, and so negative commands are instead formed with another sentence type, most commonly the subjunctive. This approach cannot be extended to Korean, however, because it would miss the generalization that short negation cannot occur in a wider range of sentences, which can be characterized as deontic modality sentences. Note also that the problem that Zanuttini, Rivero, Terzi, Han, and others have tackled is not the same problem that we face here. In the languages they are dealing with, the negative imperative simply does not exist. In contrast, in Korean, the negative imperative does exist, as indicated by the imperative mood morphology on the verb, as in (2c). Thus, it is not at all obvious that an account of why negative imperatives cannot be formed in a language should also explain why negative imperatives in a language are formed with a particular type of negation.

An approach similar in spirit to ours has been proposed by Miyoshi (2002) and Bošković (2004). They argue that negative imperatives are ruled out in Greek and other languages because at PF, when the merger of morphological features takes place, negation blocks the [imp] feature in C from merging with the verb in I. Their analysis can be extended to Korean *mal-* negation, if we say that (a) the deontic modality feature in Mod must merge with the verb and (b) the *mal-* form is inserted in Mod. Assuming the clause structure in (7), deontic modality sentences with long form *ani* are ruled out because in this construction, Neg intervenes between Mod and the verb, but the *mal-* form is not a problem because it supports the deontic modality feature in Mod (Željko Bošković, pers. comm.). This approach, however, cannot explain why negative imperatives are impossible with short negation, as short negation does not intervene between the verb and Mod.

Another possible approach is to exploit the assumption that there is a scope difference between long and short negation, and to formulate an analysis based on this assumption. Elsewhere (Han and Lee 2002), we pursue this approach and propose that the semantics of short negation with restricted scope possibility is incompatible with the semantics of negative imperatives. But the problem is that there is no consensus in the literature or among speakers about what the scope facts of negation are (see Cho 1975, Song 1982, Suh 1989, Baek 1998, H. Park 1998, Kim 2000a, Hagstrom 2002, Han, Lidz, and Musolino 2007). Crucially, the speakers who report that there is no scope difference between long and short negation reject negative imperatives with short negation. Given this, it is doubtful that the scope of short negation has anything to say about why short negation is impossible in imperatives (or deontic modality sentences).

A related approach is to formulate an analysis based on the assumption that there is a semantic difference between short and long



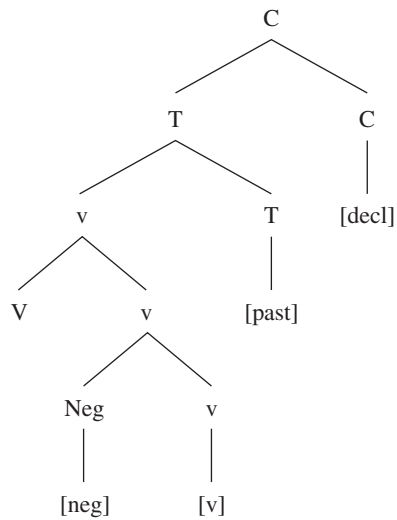
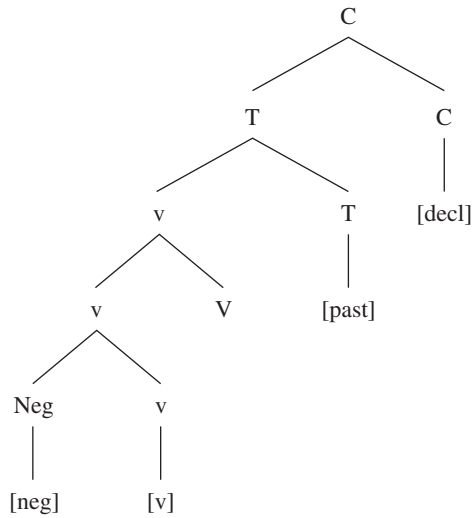
negation. However, it is doubtful that this will work because as far as semantics is concerned, they are the same type of object, a function from propositions to propositions ( $\lambda p. \neg p$ ).

#### 4 Our Proposal: A Morphological Constraint

We propose that the same morphological constraint that rules out long negation in the deontic modality context also rules out short negation in the same context. This constraint applies postsyntactically to the verbal complex, which is formed either through V-raising (Cho 1994, Yi 1994, Choi 1999) or I-lowering (Han and Park 1994, Yoon 1994, M.-K. Park 1998).<sup>10</sup> For instance, because short negation in Korean behaves like a clitic on the verb, the verbal complex of a tensed sentence with short negation will include nodes for tense, modality, and illocutionary (sentence type) morphology as well as negation. Within the framework of Distributed Morphology (DM), this verbal complex is formed and spelled out after the syntactic structure is shipped off to the morphological component. In what follows, we will argue that the fact that negative imperatives (as well as other types of deontic modality sentences) cannot be formed with short negation or long negation *an(i)* follows from the Subset Principle and Vocabulary Insertion in DM. We will start by discussing simple tensed sentences with short and long negation *an(i)*, and then move on to imperatives with *mal-*.

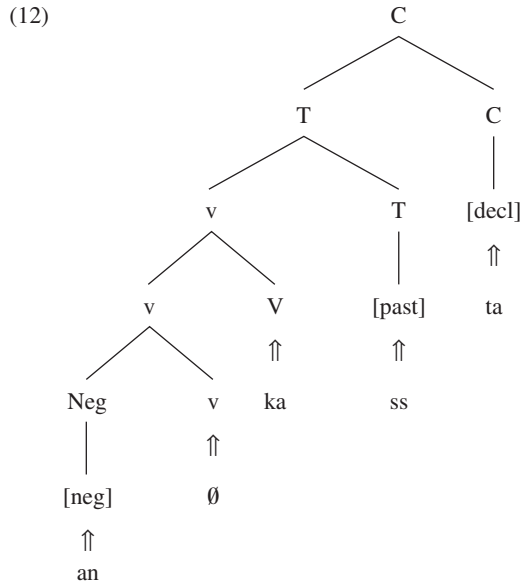
In DM, the output of syntax is a structure with a bundle of morphosyntactic (and semantic) features on each node, which then can be readjusted via applications of highly constrained language-particular morphological operations. For instance, for the tensed nonmodal declarative sentence in (1b) with short negation, assuming the clause structure in (7b) (minus ModP) and V-raising, the syntax will derive the verbal complex structure represented in (10a), by first Neg-cliticizing short negation to *v* and then raising the verb all the way to C. In morphology, this structure will undergo readjustment: the ordering between V and the *v* containing Neg and *v* will be inverted, a change enforced by the proclitic property of Neg (10b).

<sup>10</sup> There is some disagreement in the literature about whether Korean has V-raising or I-lowering. For present purposes, it does not matter which position is adopted, as long as the syntax allows the verb to come together with the material under the functional nodes, resulting in a verbal complex, which is spelled out as an inflected verb.

(10) a. *Output of syntax*b. *Reordering*

Vocabulary items, which are also specified with features, are inserted in (10b) postsyntactically, in the morphological component. Insertion is controlled by the Subset Principle: for a feature bundle of a given node, the vocabulary item that has the greatest number of matching features and/or contextual conditions is inserted. For example, given the vocabulary list specified in (11), (10b) will be spelled out as (12).

(11)	Features	Vocabulary item
	[neg]	an(i)
	[past]	(ye)ss
	[decl]	ta
	[v]	∅/___V
	[v]	ha

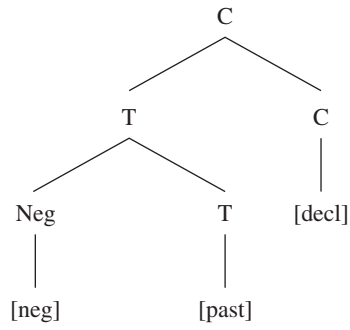


Note that the Subset Principle dictates that *v* be spelled out as zero, and not as light verb *ha-*, as zero is contextually conditioned to be inserted if there is a *V* in the environment, being more specific than *ha-*. This contextual condition is motivated by the morphological constraint that a single verbal complex cannot have more than one verbal element supporting the verbal inflections.

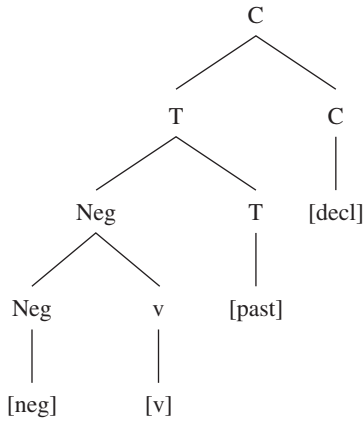
In the tensed declarative sentence with long negation in (1a), assuming the clause structure in (7a) (minus ModP) and *V*-raising, *V* moves and adjoins to *v*; but it does not continue up the clause structure, as *Neg* intervenes. Instead, *Neg* moves all the way up to *C*, deriving the complex structure represented in (13a). In this structure, however, there is no verbal element to support tense and sentence type inflections. Thus, an operation similar to English *do*-support takes place in morphology (Halle and Marantz 1993:137–138): the light verb *v* is inserted, adjoining to the *Neg* node, as a dissociated morpheme; see (13b). Vocabulary Insertion then takes place as shown in (13c).<sup>11</sup> In this case, *v* is spelled out as *ha-*, as there is no *V* in the environment.

<sup>11</sup> We are assuming that short negation *an* and long negation *ani* are phonologically variable spell-outs of the same vocabulary item. However, as we argued in section 2, we take short and long negation to be different syntactically.

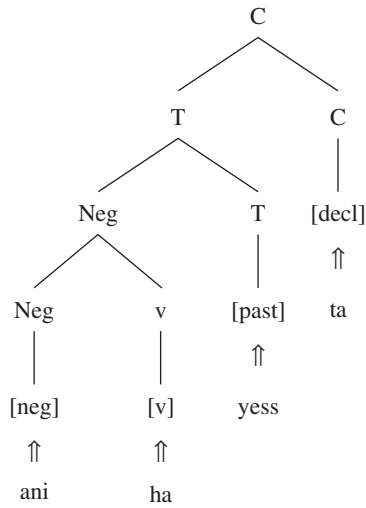
(13) a. *Output of syntax*



b. *v-insertion*

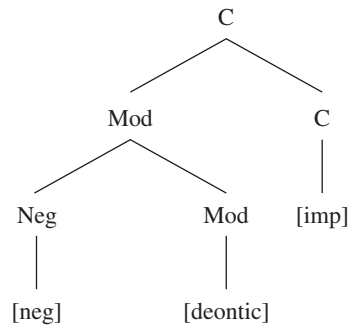


c. *Vocabulary Insertion*

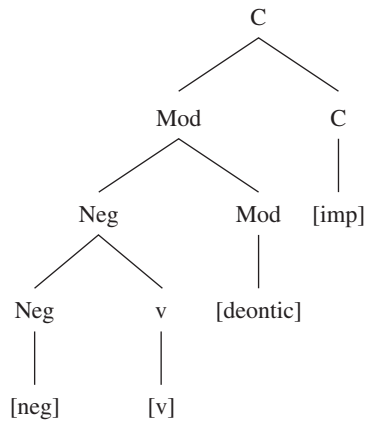


In the imperative with *mal-* in (2c), assuming the clause structure in (7a) (minus TP), V moves up only to v, and Neg moves all the way up to C, deriving the complex structure represented in (14a). Since there is no verbal element to support the verbal inflections, v will be inserted, as a dissociated morpheme, as in (14b). We propose that before Vocabulary Insertion takes place, a contextually conditioned morphological operation called Fusion applies to Neg and v nodes, as summarized in (15). Fusion (Halle and Marantz 1993:116) is an operation that takes two sister terminal nodes located under a single node and fuses them into a single terminal node. In the case at hand, in the environment of [deontic], Neg and v that are sisters under Neg are fused into a single terminal node (14c). Vocabulary Insertion can now apply to derive (17), using the list in (16).

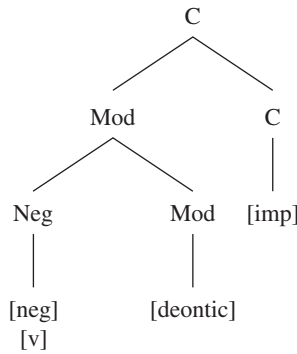
(14) a. *Output of syntax*



b. *v-insertion*

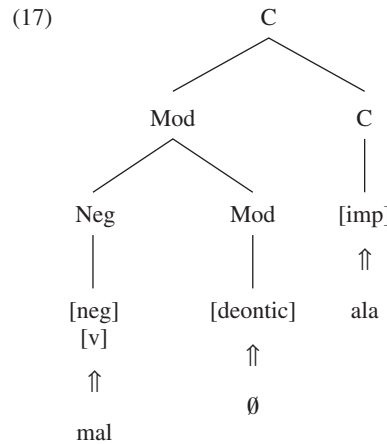


c. Fusion



(15) In the environment of [deontic], fuse Neg and v that are sisters under a single node into a single terminal node.

Features	Vocabulary item
[neg]	an(i)
[neg, v]	mal/___ [deontic]
[deontic]	∅
[imp]	(a)la

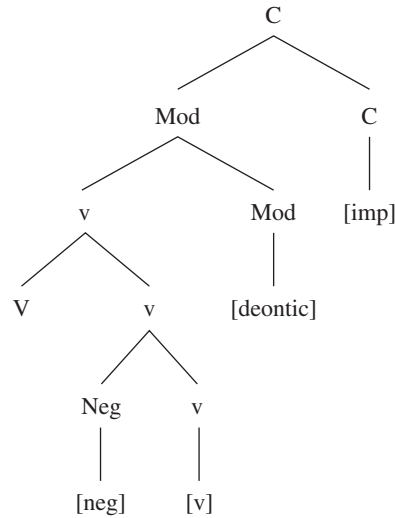


In (16), *mal-* is more specified than *an(i)*, and the specification for *mal-* matches the feature content and the environment of the terminal node Neg in (14c). Thus, *mal-* is inserted instead of *ani* in (17). We will assume that [deontic] is spelled out as zero.

We now turn to how imperatives with short negation are ruled out under the proposed morphological analysis. If one were to form an imperative with short negation as in (2a), then the syntax would output the structure in (18a) for the verbal complex, assuming the

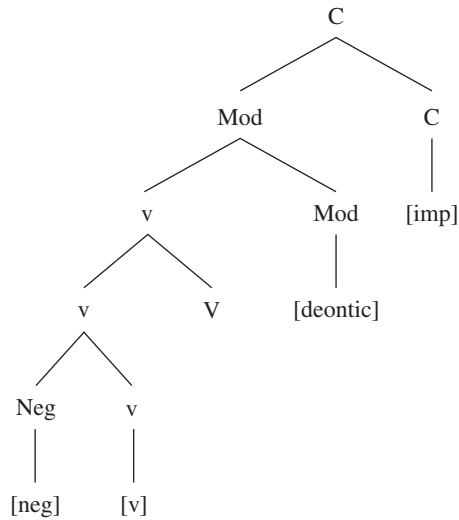
clause structure in (7b) (minus TP). To this structure, reordering would apply as in (18b). Moreover, Neg and v would undergo Fusion because these nodes would meet the contextual condition of being sisters under a single node and being in the environment of [deontic]. This then would feed the Vocabulary Insertion of *mal-* under the fused node, spelling out v as well as [neg] (18c). Further, a lexical verb would have to be inserted under the root V node. But then the verbal complex would end up with two verbal elements, *mal-* and the lexical verb, an ill-formed morphological object. This then is why imperatives and other types of deontic modality sentences are incompatible with short negation.<sup>12</sup>

(18) a. *Output of syntax*

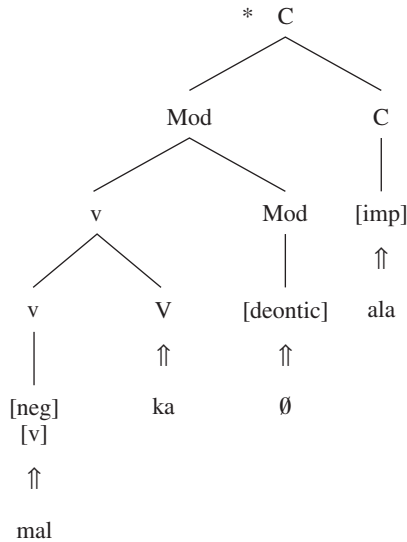


<sup>12</sup> A reviewer suggests that the grammar should be able to make a distinction between auxiliary and lexical verbs, possibly using features such as [+aux] and [-aux]; if so, there would be no competition between *mal-* and the lexical verb, as the auxiliary verb status of *mal-* would be simply incompatible with a verbal complex requiring a lexical verb. However, we do not think that *mal-* should be prespecified as an auxiliary verb. We adopt the DM assumptions that vocabulary items are not specified with category labels and that category terms such as *noun* and *verb* are derivative and configurational.

b. *Reordering*



c. *Fusion and Vocabulary Insertion*



Our analysis can account for the acquisition data in (3). There are two possible accounts consistent with the proposed morphological analysis. The first exploits the fact that children in the same age range sometimes fail to cliticize short negation onto the verb, as illustrated in (9). For the children who have not yet acquired the clitic status of short negation, Neg will not be included in the verbal complex of an imperative with short negation. This means that Neg and v are not



sisters and thus cannot be fused. The condition for inserting *mal-* hence will not be met. Instead, *an* will be inserted under Neg, and the lexical verb and the verbal inflections will be inserted in the terminal nodes in the verbal complex, without any morphological violation.

A second possible account of the acquisition data arises from the fact that Korean-speaking children acquire short negation before long negation. H. Park (1998) shows that 3-year-olds in general can only produce short negation, whereas 5-year-olds can produce both short and long negation. Given that *mal-* has the syntax of long negation, children who have not yet acquired the syntax of the long form *ani* would not have acquired the syntax of *mal-* either. In such a case, the young learner's list of vocabulary items would not include *mal-* with its corresponding feature specifications [neg, v]. At this stage, a child who has not yet learned the clitic status of short negation will insert *an* for [neg] without any violation, as explained above. And if the child has learned the clitic status of short negation, then the verbal complex would include a node with [neg] and [v] in the context of [deontic]. But since *mal-* specified with [neg, v] is not in the child's list of vocabulary items, the next best choice is *an* with [neg], according to the Subset Principle. This then allows the insertion of a lexical verb along with the cooccurring inflections.<sup>13</sup>

A prediction that emerges from our proposal is that an imperative should be able to contain short negation if it also contains long form *mal-*. This is because in a sentence with both long and short negation, the lexical verb with cliticized short negation and the verbal complex with long negation are contained in separate head-level constituents. The prediction is borne out, as (19) shows.

- (19) Amwu kes-to     *an* masi-ci *mal-ala!*  
       any    thing-even NEG drink-CI NEG-IMP  
       'Don't not drink anything!'

Assuming V-raising and the clause structures in (7) (minus TP), to generate the structure for (19), short negation cliticizes to v, the lexical verb V raises up only to v, and long negation moves through Mod and then to C. So, the syntax outputs the structure in (20a), where one of the head-level constituents contains the lexical verb and short

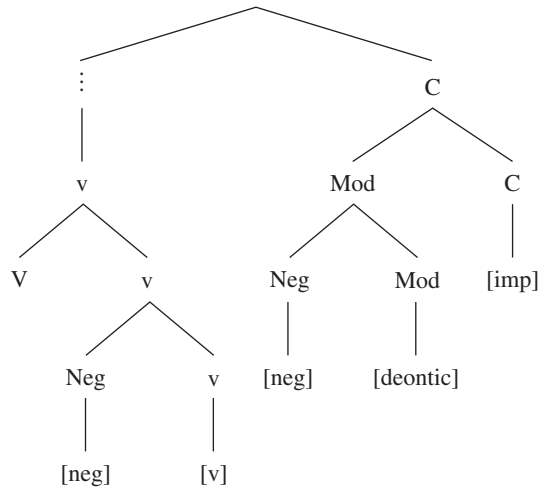
<sup>13</sup> In addition to *an(i)* and *mal-*, Korean has another type of negation, *mos*, expressing inability. The syntax of *mos* is similar to that of *an(i)* in that it can appear in both short form and long form contexts.

- (i) Inho-nun hakkyo-ey *mos* ka-ss-ta     / ka-ci *mos* ha-yess-ta.  
     Inho-TOP school-to   NEG go-PAST-DECL / go-CI NEG do-PAST-DECL  
     'Inho could not go to school.'

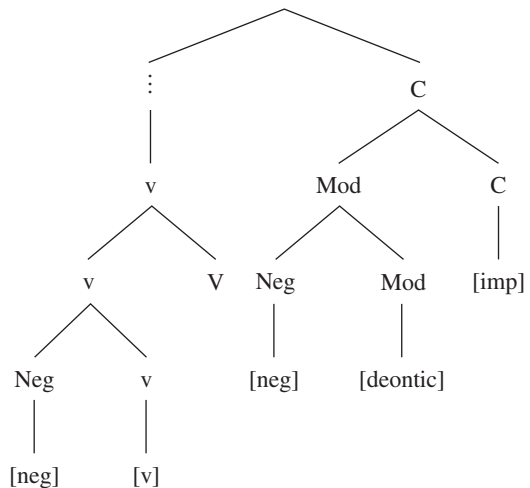
Our morphological analysis can be extended to handle *mos*. To generate sentences like those in (i), we need to say that the clause structure of sentences expressing inability has Mod encoding the modality of ability, and that *mos* is a vocabulary item specified with [neg] and is contextually conditioned to be inserted in the environment of this modality.

negation, and the other contains long negation. Then, in morphology, reordering between V and v containing Neg takes place (20b), followed by v-insertion under the Neg node contained in C (20c), as a verbal element is needed to support the inflections. Moreover, the Neg and v contained in C undergo Fusion, as they are sisters under a single terminal node Neg and occur in the environment of [deontic]. Vocabulary Insertion takes place as before, resulting in (20d).<sup>14</sup>

(20) a. *Output of syntax*

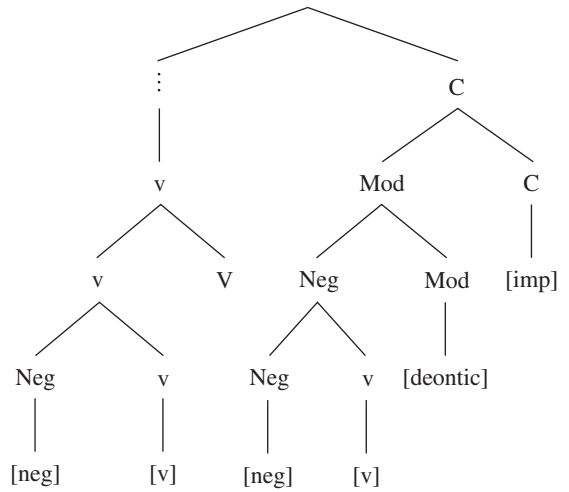


b. *Reordering*

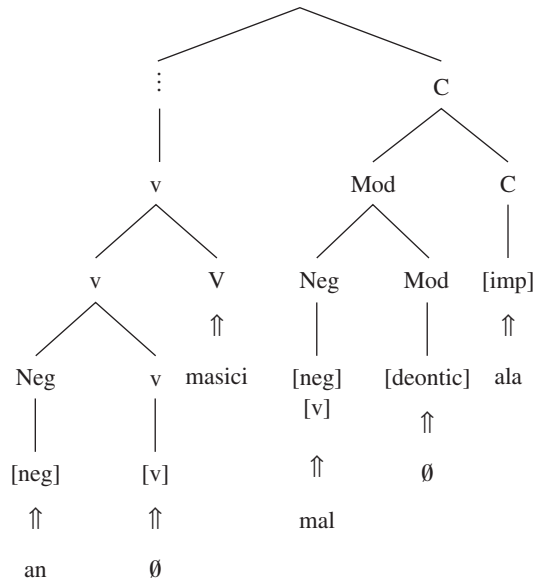


<sup>14</sup> A reviewer notes that long negation and short negation should not be competing, since if they did, they could not both exist in the language. We would like to clarify that in our analysis, it is the vocabulary items corresponding to

c. *v-insertion*



d. *Fusion and Vocabulary Insertion*



*mal-* and *an(i)* that are competing, not the syntactic derivations corresponding to long negation and short negation. Thus, the fact that both forms exist syntactically is not an issue for our proposal, whether they occur in separate sentences or in the same sentence, as in (19).

## 5 Conclusion

To conclude, assuming that the clause structure of Korean imperatives includes a projection of deontic modality and a projection of the imperative operator contributing illocutionary force, we have proposed that *mal-* in negative imperatives is a spell-out of long negation and *v* in the context of deontic modality. Assuming further that long negation and short negation occur in two different positions in clause structure, we have proposed that the reason why short negation and long negation *an(i)* are incompatible with imperatives (and other deontic modality sentences) is morphological, not syntactic or semantic. We have argued that this incompatibility follows from the Subset Principle and Vocabulary Insertion in Distributed Morphology. It remains to be seen whether it is feasible to extend a similar morphology-based analysis to Romance and Balkan languages that do not allow negative imperatives.

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BLOCKING EFFECTS IN AGREEMENT  
BY CORRESPONDENCE

Gunnar Ólafur Hansson

University of British Columbia

A salient feature of long-distance consonant agreement (LDCA) or “consonant harmony” phenomena is the inert behavior of all material intervening between the trigger and target segments. For example, in Yaka nasal agreement (Hyman 1995, Walker 2000c), which targets voiced consonants, any segments not fitting that description are transparent to the assimilatory interaction between potential triggers and targets (*/-mí:tuk-idi/* → [*-mí:tukini*] ‘sulk-PERF’). Systems where intervening segments of a particular type can prevent assimilation from reaching potential targets are conspicuously absent from the typology of LDCA (Hansson 2001, Rose and Walker 2004). This striking absence of segmental opacity, or *blocking effects*, has motivated the theory (Walker 2000a,c, 2001) that LDCA involves not spreading but featural *agreement* mediated by a correspondence relation linking segment pairs within the output (Hansson 2001, Rose and Walker 2004).

An assumption shared by the works cited is that agreement by correspondence is inherently incompatible with blocking effects (i.e., cannot generate them). If intervening segments are not participants in the correspondence relations over which agreement is defined, it would appear to follow that they cannot interfere with it.<sup>1</sup> This squib aims to demonstrate the fallacy of that assumption. Blocking can arise in correspondence-based agreement, owing to the formal independence of featural agreement as such from the correspondence relations that carry it. A segment that is prevented from undergoing agreement by some high-ranked markedness constraint will, under certain conditions, remain a *covert* participant in the network of correspondence relations, and as such it may block agreement from reaching more distant target segments.

The central argument to be made here is a purely formal one, and the squib is mainly populated by hypothetical examples rather than ones taken from real languages. This is in large part because no LDCA system displaying these kinds of blocking effects has yet been attested (though see section 5).

I would like to thank Eric Baković, Joe Pater, Doug Pulleyblank, Rachel Walker, and an anonymous reviewer for helpful comments and discussion. This research was supported in part by SSHRC Standard Research Grant 410-2004-0710.

<sup>1</sup> In what follows, I will use the term *opaque segment* quite narrowly, restricting it to segments that are not merely *nonundergoers* (fail to take on the feature value being propagated) but also *nontriggers* (do not actively propagate their own feature value).