

PHASES AND IDIOMS*

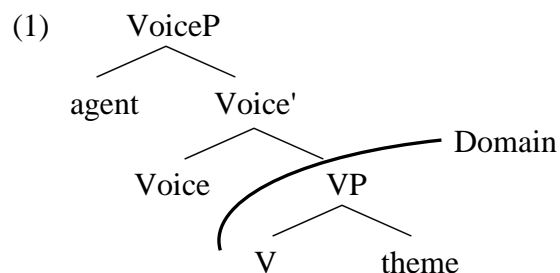
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1 Phase and Interpretation

Chomsky (1999, 2000) suggests that syntactic derivations undergo semantic and phonological interpretation in incremental chunks, or *phases*. Phases (i.e., strong phases) can be headed by a number of possible categories including C, D, and a head (v or Voice) that carries active voice features and projects an agent external argument in its specifier (see (1)). Once a phase is complete, the complement of the phase (i.e., the domain) is sent for phonological or *semantic* interpretation. As a consequence, the domain of the phase, e.g. VP of the phase VoiceP, is not accessible to further operations (e.g., movement).



If syntactic computation is interpreted cyclically in phases, it is predicted that there should be a strict boundary restricting idiomatic interpretations. For instance, idiomatic interpretations would depend on context no larger than a phase, as a phase is the maximum boundary that can be semantically interpreted at a *single* time. Voice, which merges external to VP and introduces an agent as in (1), is argued to be one such boundary, which captures Marantz's (1984, 1997)

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generalization on idioms (Harley and Stone in press). For example, the idioms in (2) exclude an agent from their idiomatic interpretations. The exclusion of an agent from the idioms can be attributed to the fact that an agent-introducing head, Voice, is a phase head, and thus Voice can delimit the boundary for idiomatic interpretations, namely its domain, VP.¹

- (2) a. kill a bug ‘cause the bug to die’
 b. kill an evening ‘while away the time span of the evening’
 c. kill a bottle ‘empty the bottle’

I argue that another VP-external head, high applicative head (ApplH) (3a), can also restrict the domain of idiomatic interpretation, but a VP-internal head, such as low applicative head (ApplL) (3b) cannot. Importantly, the proposed analysis builds on the recent proposal in which ApplH is a phase head but ApplL is not (McGinnis 2001). Thus, it is predicted that the phase head ApplH can delimit idiomatic interpretations, while the non-phase heads ApplL cannot, and I show that this prediction is borne out by data from Korean, Japanese, and English.

ApplH is proposed to merge external to VP (3a), while ApplL merges internal to VP (3b) (Pylkkänen 2008). Moreover, it has been shown that ApplH is similar to Voice in that it relates its argument to an event VP, but different from Voice in that it introduces a non-agentive external argument (Kim, K 2011, 2012).



I show that the phasal difference between ApplH and ApplL has consequences for idiomatic interpretation by providing evidence from the Double Object Construction (DOC) and the Postpositional Dative (PD) in Korean and Japanese (sections 2 & 3). In particular, I argue that the specifier of ApplH is excluded from idiomatic interpretation, but the specifier of ApplL is not. An additional consequence emerging from the proposed analysis is that the PP that merges under VP can be included in idiomatic expressions, as will be shown with PD. I also show that the proposed analysis can be extended to the distribution of idioms in English ditransitives (section 4.1). A phase being a boundary for idiomatic interpretations could be viewed as a more general pattern, as evidenced by the cross-linguistic observation regarding the distribution of idioms (section 4.2). The theoretical contribution of this paper is that it provides novel empirical support to a cyclic domain of semantic interpretation, i.e., phases, as ApplH, like Voice, constitutes a phase head.

¹ A similar view is presented in Svenonius (2005) regarding English data. It is suggested that a boundary for an idiomatic expression corresponds to a phase boundary.

2 ApplH vs. PP in Korean DOC and PD

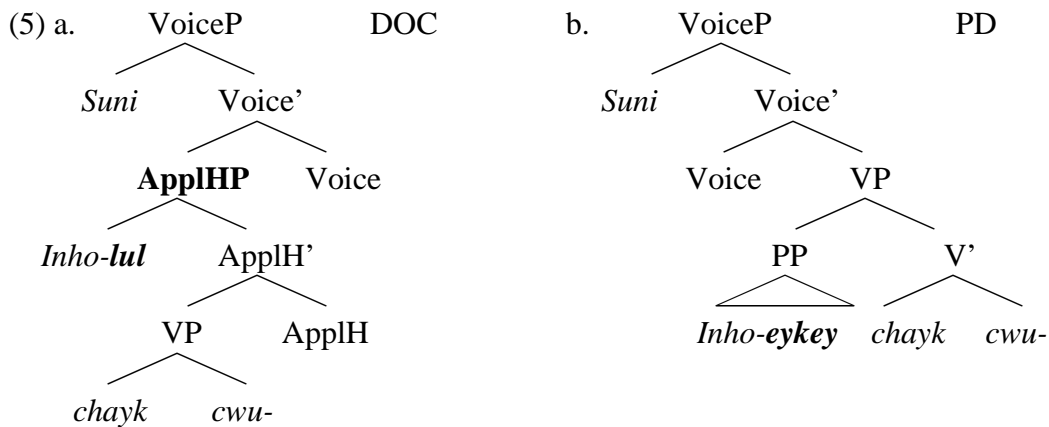
In this section, I show that a phase head, ApplH, may be a structural boundary restricting idiomatic interpretations, but a PP that merges under VP (i.e. domain) is not (see (8) at the end of this section).

2.1 DOC, PD, and observations on Korean idioms

DOCs and PDs in Korean are distinguished by a morphological difference on the goal argument (e.g., Jung and Miyagawa 2004). For instance, DOC (4a) marks its goal *Inho* with accusative case *-lul*, while PD (4b) marks its goal with dative case *-eykey*.

- (4) a. Swuni-ka Inho-**lul** chayk-ul cwu-ess-ta DOC
 Suni-NOM Inho-ACC book-ACC give-PAST-DEC
 ‘Suni gave Inho the book.’
- b. Swuni-ka Inho-**eykey** chayk-ul cwu-ess-ta PD
 Suni-NOM Inho-to book-ACC give-PAST-DEC
 ‘Suni gave the book to Inho.’

Assuming an asymmetrical approach to DOC and PD in which the complements of each clause involves a different structure (Bruening 2010, Kim, L 2013) in contrast to a symmetrical approach (Harley 2002), the structures of DOC and PD can be illustrated as in (5).



In DOC (5a), the complement is a projection of ApplHP where an accusative-marked goal merges in its specifier. On the other hand, in PD (5b), the complement is a VP, and a dative-marked goal merges under the VP. In particular, the dative goal appears as a PP in the VP.

Interestingly, idioms in DOC and PD have been observed to have different distributions (Hong 1998, Kim, L 2013). In DOC, for instance, the accusative goal never belongs to an idiomatic expression, as illustrated in (6) (idiomatic parts are underlined).²

² Some native speakers of Korean do not accept the idiom in (6a). However, it is well attested in Google search, and including myself, other native speakers accept the idiom.

(6) a. IOACC DOACC- V ✓

nwuna-un (sopung kacako maku) [ApplHP tongsayng-lul
 elder sister-TOPIC picnic go a lot brother-ACC
 [VP palam-ul neh]]-ess-ta
 wind-ACC put.into-PAST-DEC

‘The elder sister instigated her brother to go on a picnic.’ (Retrieved from Google)

b. IOACC DOACC-V ✗c. IOACC DOACC V ✗

The idiom in (6a) consists of the accusative theme ‘wind’ and the verb ‘put into’ meaning ‘instigate’. Importantly, the accusative goal ‘brother’ does not belong to the idiomatic meaning. In fact, it has been found that Korean does not have idioms that include an accusative goal; thus, idioms like (6b) or (6c) are absent. By contrast, in PD, a dative goal in PPs can appear in idiomatic expressions, as illustrated in (7). In (7a), the idiom ‘cherished resentment’ consists of the PP ‘on chest’ and VP ‘bear knife’, and in (7b) the idiom ‘remember something clearly’ consists of the PP ‘in the head’ and V ‘engrave’.

(7) a. PP DO-V ✓

Swuni-ka [VP [PP kasum-ey] [kal-lul pum]]-ess-ta.
 Suni-NOM chest-P knife-ACC bear-PAST-DEC
 ‘Suni cherished resentment.’

b. PP DO V ✓

Swuni-ka [PP meli-ey] ku il-ul [V saykeyneh]-ess-ta
 Suni-NOM head-P that accident-ACC engrave-PAST-DEC
 ‘Suni remembered that accident clearly.’ (Naver Online Dictionary)

The contrast between the accusative and dative goals of DOC and PD with respect to idiomatic expressions supports the claim that a phase head ApplH delimits the boundary of idiomatic expressions, but a non-phase head, a P that appears in the domain (i.e., VP), does not, as proposed in this paper. This is schematically presented in (8).

$$(8) \quad [\dots \text{ApplH} \downarrow [_{\text{VP}} \text{PP} [\text{V}]]]$$

a phase boundary for idiomatic interpretation

3 ApplH vs. PP/ApplL in Japanese DOC and PD

In this section, I show that in Japanese, like in Korean, the phase head, ApplH, restricts the domain of idiomatic interpretation, while ApplL and P that merge in the VP domain do not (see (12)).

Unlike Korean, there is no case distinction on the goals in DOC and PD in Japanese. Both are marked by *-ni* dative, as shown in (9). However, they can be distinguished by whether *-ni* can be alternated with a postposition *-e* (Miyagawa and Tsujioka 2004).

- (9) a. Taroo-ga **Hanako-ni**/??-e okasi-o atae-ta. DOC
 Taro-NOM Hanako-DAT/P sweets-ACC send-PAST
 ‘Taro gave Hanako sweets.’
- b. Taroo-ga **Hanako-ni**/-e nimotu-o okutta. PD
 Taro-NOM Hanako-DAT/P package-ACC sent
 ‘Taro sent a package to Hanako.’

In DOC (9a), the *-ni* marked goal ‘Hanako’ cannot be alternated with the postposition *-e*, while in PD (9b), the *-ni* marked goal can be alternated with *-e*. As established in previous studies on Japanese ditransitives (e.g. Miyagawa and Tsujioka 2004), I refer to *-ni* dative DPs in DOC as possessor DPs and to *-ni* marked goal PPs in PD as locative PPs. In recent studies (Miyagawa and Tsujioka 2004, Kishimoto 2008), *-ni* possessors are shown to merge as the specifier of an applicative phrase *above* VP, whereas *-ni* locative PPs merge in the VP, *below* the applicative phrase. As I distinguish ApplH and ApplL (see (3)), this amounts to saying that *-ni* possessors merge in the specifier of ApplH while *-ni* locative PPs merge under VP (see (12)).

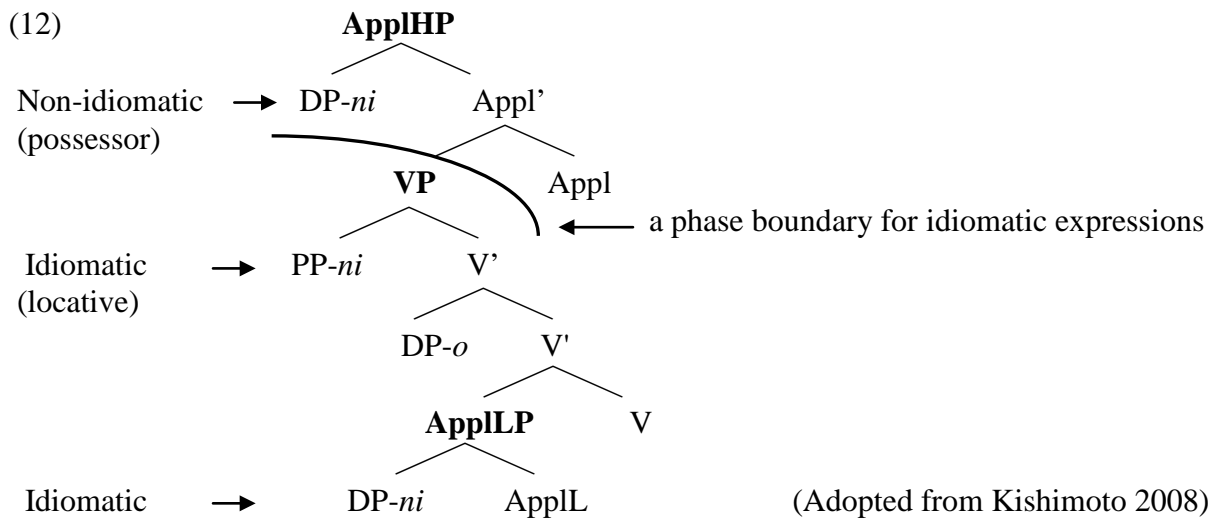
Thus, as shown in Korean DOC and PD, it is predicted that possessor DPs do not belong to idiomatic expressions, as they merge in the specifier of a phase phrase, ApplHP, but other materials that merge in the domain, i.e., VP, can belong to the idiomatic expressions. This is also borne out by the data in Japanese. It has been observed that *-ni* marked possessors do not belong to idioms (Miyagawa and Tsujioka 2004, Kishimoto 2008), as predicted by the current proposal. In contrast, *-ni* marked PPs that merge below VP are observed to belong to idiomatic expressions. Consider the examples in (10) where idiomatic expressions consist of PPs and VP.

- (10) a. kokyoo-ni/-e nisiki-o kazar-u
 hometown-DAT/-P silk-ACC decorate-PRES
 ‘return in glory’
- b. kayui tokoro-ni/-e te-ga todok-u
 itchy place-DAT/-P hand-NOM reach-PRES
 ‘give a timely service.’ (Miyagawa and Tsujioka 2004)

In (10), the *-ni* marked argument is a PP as the grammaticality of the postposition *-e* on the PP shows. This PP is the part of the idiom ‘return in glory.’ The idiomatic meaning is not affected by the alternation of *-e*. Furthermore, interestingly, a dative DP, which is not a possessor, can appear in idiomatic expressions, as shown in (11) (Kishimoto 2008).

- (11) a. omotta koto-o [kuti-ni/*-e das]-u
 thought thing-ACC mouth-DAT/-to let.out-PRES
 ‘Say what’s on his mind.’
- b. sainoo-o [hana-ni/*-e kake]-ru
 talent-ACC nose-DAT/-to hang-PRES
 ‘Boast of a talent.’ (Kishimoto 2008)

As illustrated in (11), the *-ni* marked arguments are DPs, rather than PPs, as the ungrammaticality of the postposition *-e* on them suggests. However, they do not merge in the specifier of ApplH like a *-ni* possessor, but in the VP domain (Miyagawa and Tsujioka 2004; Kishimoto 2008; Tsujioka 2011). Specifically, Kishimoto (2008) argues that they appear in the specifier of an applicative phrase *below* VP. Evidence for this claim comes from the differences in nominalization of the idiomatic *-ni* DPs and non-idiomatic *-ni* DPs (i.e., possessors in the specifier of ApplHP) above VP. In a nominalization, each DP has a different morphological marking that suggests that the *-ni* possessor merges above VP but an idiomatic *-ni* DP merges below VP, namely in ApplP (see Kishimoto 2008 for detail).³ In accordance with my assumptions about Appl (see (3a) vs. (3b)), the ApplP below VP is ApplLP. In other words, idiomatic *-ni* DPs appear in ApplLP, in the domain of a phase, which is exactly what we would expect based on my claim. Summary of the distribution of idioms in Japanese ditransitives are represented in the following tree structure (12).



Data from both Korean and Japanese confirm that the phase head ApplH can be a boundary that delimits idiomatic expressions, but the elements in the domain of the phase cannot (see (8) for Korean and (12) for Japanese). Rather, they can easily belong to an idiomatic expression; for instance, PP or ApplL in both Korean and Japanese are parts of the domain of the phase.

³ Tsujioka (2011) argues that a wider range of data from idioms in nominalizations support the analysis of Miyagawa and Tsujioka (2004), rather than Kishimoto (2008): idiomatic DP in VP vs. below VP (i.e. ApplL). In other words, the *ni* marked argument in idioms (17) belong to a goal PP like in (18) rather than to a goal DP as argued in Kishimoto (2008). The difference does not affect the proposed analysis, as both goals, PP and DP, appear in the VP domain.

4 Consequences

4.1 Phases and Idioms in English DOC and PD

In this section, I show that phase may provide a better account for the distribution of idioms in English ditransitives than idiom-as-selection in Bruening (2010). We will see that the distribution of ditransitive idioms in English is very similar to those of Korean and Japanese.

Building on O'Grady's (1998) work, Bruening proposed the theory on idiom formation shown in (13). In order for two syntactic constituents, X and Y, to form an idiom, one must select the other.

(13) *The Principle of Idiomatic Interpretation*

X and Y may be interpreted idiomatically only if X selects Y. (Bruening 2010)

According to Bruening, selection with respect to idiomatic interpretations is the same principle that governs general interpretation and composition. In other words, it is via selection that two elements combine together and are interpreted contextually. In addition to the principle in (13), the following constraints are proposed to hold:

(14) *Constraint on Idiomatic Interpretation*

If X selects a lexical category Y, and X and Y are interpreted idiomatically, all of the selected arguments of Y must be interpreted as part of the idiom that includes X and Y.

(15) Lexical categories are V, N, A, and Adv.

(Bruening 2010)

Let us look at the examples in (16) in order to see how the principle in (13) and constraints in (14)-(15) can account for idiomatic interpretations in English. The idioms in (16) consist of a verb and a direct object. In accordance with the principle in (13), the verbs in (16) select direct objects, and together they can be interpreted idiomatically.

- (16) a. pull strings
b. kick the habit

Now consider verb-theme idioms in English ditransitives as shown in (17). These idioms are proposed to have ApplHP as illustrated in (18) (Bruening 2010).

- (17) a. give NP the boot.
b. give NP the sack.
c. give NP the creeps.

(18) [_{ApplHP} NP [_{ApplH'} [_{ApplH} [_{VP} [V give] theme]]]]

(Bruening 2010)

In (18), according to Bruening (2010), ApplH selects V and V selects the theme. Thus, ApplH and V are interpreted idiomatically and all of the selected arguments of V belong to the idiomatic interpretation. However, what is missing is an account of why the arguments of ApplH, the NPs in (17-18), are excluded from the idiomatic interpretations. They are also *selected* by ApplH.

There seems to be no principled reason to exclude the specifier of ApplH under the idiom-as-selection account. Thus, the question with the idiom-as-selection approach may be how the specifiers of functional heads are treated with respect to idiomatic interpretations. The constraints in (14)-(15) do not make any reference to functional phrases. It seems that the idiom-as-selection approach does not rule out the specifiers of functional heads, and they can be included in the idioms.

As an alternative, as I argued for Korean and Japanese, I suggest an account in terms of phases: the phase-based account could capture the distribution of idioms in English ditransitives (see (19) below), and surprisingly the distribution is parallel to those of Korean and Japanese discussed in the previous sections. Consider the following overall distribution of idioms in English DOC and PD, as suggested in Bruening (2010) (idiomatic parts are underlined, X in brackets is a variant).

- (19) a. Class I: Verb NP NP (give X the creeps)
 b. Class II: Verb NP to NP (give rise to X)
 c. Class III: Verb NP to NP (send X to the showers)
 d. Class IV: V NP NP (nonexistent) (Bruening 2010)

Like Korean and Japanese, PPs in English ditransitives can be included in the idiomatic expressions as in Class III (19c), but not the specifiers of ApplH as in Class I (19a), which is predicted by a phase oriented account. ApplH in English ditransitives may be a phase boundary for idiomatic interpretations. Therefore, its specifier is excluded (Class I), while its domain can belong to idiomatic expressions (Class III). In fact, as in Korean and Japanese, the specifiers of ApplH are always excluded from idiomatic expressions, as the lack of Class IV (19d) demonstrates. Class II (19b) is also predicted, as the idiomatic parts consist of a verb and its object that appear in the domain of the VP phases. Thus, the distribution of idioms in English ditransitives can be accounted for by a phase-based approach, as recapitulated in (20).

- (20) a. Class I and IV
-
- always excluded from idioms
- b. Class II and III
-
- can be included in idioms

4.2 Phases and Cross-linguistic Generalizations on the Distribution of Idioms

The core of the proposed analysis is that a phase head such as ApplH can be a boundary for the idiomatic interpretations, but the elements, PP or ApplLP, inside the VP domain cannot, as those

elements can easily belong to idiomatic interpretations. This view is schematically represented in (21).⁴

$$(21) \left[\begin{array}{c} X \\ \downarrow \\ [_{VP} V \ YP] \end{array} \right] \text{ where } X \text{ is a phase head}$$

a phase boundary for idiomatic expressions

The pattern in (21) seems to appear in other languages, although whether X can be a phase head in those languages is not completely clear (as pointed out in section 5 as well). I discuss two instances, Slavic languages and Blackfoot (Algonquian). In addition, I show that idioms in simple transitives in Korean and Japanese behave in the same way as presented in (21).

Slavic has two types of prefixes, lexical and superlexical prefixes that largely belong to prepositional element (see Svenonius 2005 and references therein). Examples of lexical and superlexical prefixes are illustrated with Russian *za-* in (22). The sentence (22a) shows its use as a lexical prefix, and its meaning is *into*, while the sentence (22b) shows its use as a superlexical prefix. In this use, the prefix has an aspectual meaning, *begin to*, thus the verbal complex has a meaning of ‘starting throw’.

- (22) a. Helder **za-**brošil mjač v vorota angličan.
 Helder into-threw ball in goal English
 ‘Helder kicked the ball into the English goal’
- b. Ricardo nervno **za-**brošal mjač.
 Ricardo nervously INCP-threw ball
 ‘Ricardo began to nervously throw the ball’

Putting aside their other properties (see Svenonius for details), lexical prefixes easily form idiomatic expressions as illustrated with the Russian examples in (23).

- (23) a. iz-lūcitj out-shine ‘emit’
 b. iz-lōzitj out-put ‘put into words’
 c. iz-datj out-give ‘publish’
 d. iz-motatj out-spin ‘exhaust [e.g. nerves]’

On the other hand, it is rare that superlexical prefixes form idiomatic expressions (Svenonius 2005). The typical meanings of superlexical prefixes are transparent, as shown in (24).

- (24) a. pere-kidatj DSTR-throw ‘throw one by one’
 b. pere-kusatj DSTR-bite ‘bite one by one’
 c. pere-bitj DSTR-beat ‘beat one by one’

Svenonius proposed that lexical prefixes appear inside VP, while superlexical prefixes appear outside VP, and this can capture their distribution with respect to idioms, as Marantz (1984)

⁴ The account in terms of phase proposed in this paper also captures the lack of a fixed recipient idiom in English and Korean/Japanese (Rappaport Hovav and Levin 2008, Levin 2010). Such recipients are always merged in the specifier of ApplH, and thus are expected to be excluded from idioms.

proposed. An interesting aspect of this proposal is that the division along the VP with respect to idioms is in parallel to those of Korean, Japanese, and English. That is, in all these languages, elements inside VP can belong to idioms, while the elements outside the VP cannot. Interestingly, this pattern is also found in Blackfoot, an Algonquian language, spoken in Southern Alberta and Montana. In Kim, K (2013), I have shown that Blackfoot has two types of prepositions: a functional one (p) and a lexical one (P). Both appear as prefixes on the verb. The functional p, *itap*- 'to' is illustrated in (a), and the lexical P, *waamis*- 'up' is in (b).

- (25) a. yaak-**itap**-okska'si-wa **anni** **napioyisi** functional p
 FUT-DIRECTION-run-3S DEM house
 'She will run **to the house**.'

- b. yaak-**waamis**-okska'si-wa lexical P
 will-up-run-3s
 'He will run up.'

(Kim, K 2013)

A functional preposition is proposed to appear as an adjunction to vP (represented as a functional p), while the lexical preposition appears inside VP, as presented in (26) (Kim, K 2013).

- (26) [_{VP} [_{PP} p DP] [_{VP} V ... [_{VP} V PP]]

Crucially to the present discussion, Kim, K (2013) shows that the lexical P can appear in idiomatic expressions but the functional ones cannot, based on the Blackfoot dictionary (Frantz and Russell 1995). It has also been pointed out that the pattern is very consistent. Idiomatic examples of lexical P are illustrated in (27).

- (27) a. yaak-[_{VP} [_{PP} **istaah**t]-oo]-wa
 FUT-under-go-3S
 'He will [go to Hell].' (Lit. 'He will go under.')

- b. **waapat**-sska'si
 behind-act
 'act reluctant' (Lit. 'act behind')

(Frantz and Russell 1995)

The Blackfoot facts indicate that elements above VP cannot form an idiom while the elements inside VP can.

The patterns of idiomatic interpretations examined in this paper indicate that this is not a coincidence, but strikingly regular and general cross-linguistically. Moreover, the proposal of Harley and Stone (in press) mentioned in section 1 can be subsumed under this generalization. An agent introduced by a head above VP, namely Voice, is excluded from idiomatic expressions, but a verb and an object inside VP can belong to idiomatic expressions. In fact, this is also true in Korean and Japanese. For instance, in Korean, there are many idioms formed with a verb and an object without an agent (28), but, as observed by many others, e.g., Ko (2005; see references therein), it is rare to find idioms consisting of an agent and a verb (with or without an object).

- (28) a. Swuni-ka (ecey sihem-ey) miyeykkuk-lul mek-ess-ta
 Suni-NOM yesterday test-P seaweed soup-ACC eat-PAST-DEC
 ‘Suni failed the exam.’
- b. Minswu-ka (cikcang-eyse) os-lul pes-ess-ta
 Minsu-NOM (work-at) cloth-ACC take.off-PAST-DEC
 ‘Minsu resigned.’

For Japanese, Kishimoto (to appear) suggests that it is also a general pattern that an object of the verb tends to form an idiom easily, but an agent of the verb does not. Some of the Japanese examples are provided in (29):

- (29) a. me o tukeru [eye ACC attach] ‘pay attention’
 b. keru o tukeru [end ACC attach] ‘put an end to’ (Kishimoto, to appear)

Thus, we have a cross-linguistic generalization regarding the distribution of idiomatic expressions, as replicated in (21). This can be an extended view of Marantz's (1984, 1997) original observation that agents are excluded from verb and object idioms. The cross-linguistic generalization appears to suggest that not only agents (of Voice) but also a non-agentive argument (of e.g. ApplH) that merge *outside* VP (i.e. spell-out domain) does not easily constitute an idiomatic expressions. One way of capturing this generalization can be in terms of phase as proposed in this paper (thus X being a phase head as in (21)), which has also been suggested for Slavic (super-)lexical prefixes presented above (Svenonius 2005, X being Asp head where a superlexical prefix is realized). Phase heads above the domain of VP, such as Voice or ApplH, can be boundaries for idiomatic interpretations. In order to be interpreted as an idiom, each part of the idiomatic expression must be accessed in the domain of the phase, namely inside the VP, which is sent for PF and LF representations. After spell-out, the materials in the domain will not interfere with the elements outside the VP, which exactly predicts the exclusion of those elements from the idiomatic expressions.

5 Conclusion

I have provided a unified account of the structural restrictions on idiomatic interpretation in Korean and Japanese. The phase head, ApplH, can be a structural boundary to delimit idiomatic interpretations, while non-phase heads, ApplL and P, cannot delimit idiomatic expressions. I also show that this type of analysis may account for the distribution of idioms in English ditransitives. Moreover, a phase based account may be able to capture cross-linguistic patterns of idiomatic expressions.

A remaining issue to be resolved is whether every head above VP can be a phase. It seems that there is a clear boundary between external and internal arguments of VP regarding the distribution of idioms, as discussed in this paper. External arguments, whether agentive or not, are excluded from idioms, in contrast to internal arguments. However, it is still an open question whether any phrase above VP can be a phase that delimits an idiomatic expression.

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