Ditransitivity hierarchy, semantic compatibility and the realization of recipients in Korean dative constructions[1]

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It has been observed that a subset of dative verbs that can express causation of possession such as *cwu-* 'give', *ceykongha-* 'offer' and *cikupha-* 'pay' may be found in the double accusative frame as well as in the DAT(ive)-ACC(usative) frame in Korean. These verbs contrast with transfer of possession verbs such as *kennay-* 'hand' and *phal-* 'sell' and verbs of sending and throwing, which are found in the DAT-ACC frame only. This paper presents a meaning-based account of the limited productivity of the dative/accusative alternation in Korean dative verbs. Building on Croft et al. (2001) and Levin (2004, 2008b), I argue that the semantic classes of dative verbs form an implicational hierarchy pure caused possession > transfer of possession > caused motion, which ranks verbs in terms of the degree of the compatibility with a caused possession event type. I suggest three criteria for compatibility between verb meaning and constructional meaning and show that the analysis of verb–construction pairings proposed here, when combined with an account of variation, provides a unified explanation for verb distribution patterns observed for ditransitive constructions within and across languages and the morphosyntactic expression of recipients of dative verbs in Korean. It accounts for the limited productivity of the dative/accusative alternation in dative verbs in Korean as a consequence of choosing the cut-off point at the highest end of this hierarchy, thus explaining why only the verb class that is most compatible with the caused possession event type, i.e. pure caused possession verbs, may be used ditransitively.

KEYWORDS: argument realization, case marking, constructional meaning, dative verbs, ditransitivity hierarchy, possession, recipients, semantic compatibility, verb meaning

1. INTRODUCTION

Dative verbs – that is verbs that take agent, recipient, and theme arguments – have received considerable attention in recent years from a typological perspective. Much research on the morphosyntactic realization options that languages make

available for these verbs has focused on the expression of recipients, which has turned out to be major locus of cross-linguistic variation (e.g. Croft et al. 2001; Levin 2004, 2008a, b, 2010; Haspelmath 2005; Kittilä 2006; Beavers & Nishida 2010; Malchukov, Haspelmath & Comrie 2010). Previous studies of how recipients of dative verbs are grammatically accommodated have made significant contribution to the study of the nature of transitivity, grammatical relations and verb meaning. This paper examines the realization of recipients of dative verbs in Korean and explores its implications for the study of the relation between verb meaning, constructional meaning and their morphosyntactic expression. Korean dative verbs express their recipient using the dative case, as shown with the verb *cwu-* 'give' in (1).[2] Korean has fairly free word order and (1), as well as other examples of the DAT (ive)-ACC(usative) frame, allow alternative orders of the argument NPs.[3]

(1)   Mina-ka   Swuni-eykey   sopho-lul   cwu-ess-ta.
      Mina-NOM Sooni-DAT   package-ACC give-PST-DECL
      'Mina gave a package to Sooni.'

While all Korean dative verbs may be found in the DAT-ACC frame illustrated in (1), only a subset of dative verbs that can express causation of possession such as *cwu-* 'give', *ceykongha-* 'offer' and *kaluchi-* 'teach' may also be found in the ACC-ACC frame, as in (2) (Y. Kim 1990, Hong 1991, Cho 1996, Park & Whitman 2003, Jung & Miyagawa 2004, L. Kim 2015, among others).[4]

(2)   (a)   Mina-ka   Swuni-eykey/-lul   sopho-lul   cwu-ess-ta.
            Mina-NOM Sooni-DAT/-ACC   package-ACC   give-PST-DECL
            'Mina gave Sooni a package.'
      (b)   Wuri-ka   senswu-tul-eykey/-ul   sisel-ul   ceykonghay-ss-ta.
            we-NOM   player-PL-DAT/-ACC   facility-ACC   offer-PST-DECL
            'We offered players facilities.'
      (c)   Nay-ka   Yenga-eykey/-lul   pwule-lul   kaluchi-ess-ta.
            I-NOM   Younga-DAT/-ACC   French-ACC   teach-PST-DECL
            'I taught Younga French.'

These verbs contrast with the other major subset of dative verbs, verbs of sending and throwing, which are found in the DAT-ACC frame only, as shown in (3).

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[2] The abbreviations used in this paper are as follows: ACC = accusative, DAT = dative, DECL = declarative ending, DIR = directional suffix, GEN = genitive, LOC = locative marker, MOD = modifier suffix, NOM = nominative, NS = nominalizer suffix, PASS = passive, PST = past tense, PL = plural marker, PROSP = prospective marker, TOP = topic marker.

[3] There are four allomorphs of the Korean dative case marker: *-eykey*, *-ey*, *-hanthey* and *-kkey*: *-eykey* (formal), *-hanthey* (informal) and *-kkey* (honorific) are used with animates, and *-ey* is used with non-animates.

[4] There is a very strong preference for a recipient to precede a theme in the ACC-ACC frame, so the order of the two non-agent arguments in the ACC-ACC frame is less flexible than in the DAT-ACC frame.

(3) (a) Mina-ka   Swuni-eykey/*-lul sopho-lul   ponay-ss-ta.
          Mina-NOM Sooni-DAT/-ACC   package-ACC send-PST-DECL
          'Mina sent a package to Sooni.'
     (b) Mina-ka   Swuni-eykey/*-lul kong-ul   tenci-ess-ta.
          Mina-NOM Sooni-DAT/-ACC   ball-ACC throw-PST-DECL
          'Mina threw a ball to Sooni.'

An often-proposed view of the Korean dative verbs in (2) and (3) is that both *give*-type verbs and *send-/throw*-type verbs are associated with a caused motion meaning and that *give*-type verbs are associated with an additional meaning – caused possession meaning (Park & Whitman 2003, Jung & Miyagawa 2004, L. Kim 2015, among others). This view, which I refer to as the polysemy approaches to *give*-type verbs, is summarized in (4).

(4) *The polysemy approach to* give-*type verbs*
                          Meaning(s) associated with verbs
          give-type verbs   caused motion caused possession
          send-type verbs   caused motion   —
                          ↓   ↓
                  DAT-ACC frame ACC-ACC frame

This approach appears to correctly capture differences in the distribution of non-animates in the two constructions. Thus, the class of possessors is plausibly restricted to animates like persons (only people can get or receive things), whereas the class of motion targets or spatial goals has no similar conceptual restriction. We thus predict the well-known observation that nonanimates are able to occur in the locative construction as the locative NP, but not in the ACC-ACC frame.

(5) Mina-ka   hakkyo-ey/*-lul ton-ul   cwu-ess-ta.
     Mina-NOM school-LOC/-ACC money-ACC give-PST-DECL
     'Mina gave money to school.'
                          (Jung & Miyagawa 2004: 109)

This polysemy approach to *give*-type verbs has been called into question. Based on evidence from the distributional property of the directional suffix *-lo*, an asymmetry in dative verb distribution in idioms and verb–abstract theme combinations, Levin (2010) argues forcefully against the picture in (4) − specifically, against the association of caused motion with *give*-type verbs. In place of the picture in (4), she proposes alternative associations of verbs with event types in (6) and the corresponding partitioning of verbs in (7), presented further below.

(6) (a) *Verbs expressing only caused possession* (give-*type verbs*)
          cwu- 'give', *kennay-* 'hand', *kichungha-* 'donate', *mathki-* 'entrust', *phal-*
          'sell', *tayyeha-* 'rent', …; include verbs of future having: *ceykongha-* 'offer',
          kwenha- 'offer', *namki-* 'bequeath', *pwuyeha-* 'grant', *sunginha-* 'grant',
          swuyeha- 'award', *yaksokha-* 'promise', …

39

(b) *Verbs expressing both caused possession and caused motion*
send-type verbs: *centalha-* 'forward', *pannapha-* 'return', *paysongha-* 'ship', *paytalha-* 'deliver', *ponay-* 'send', *pwuchi-* 'mail', …; *throw*-type verbs: *cha-* 'kick', *chi-* 'hit', *ponay-* 'pass', *tenci-* 'throw', …

On this proposal, the association of the two frames of Korean dative verbs with the two event types is partly verb-sensitive: the ACC-ACC frame is univocal, but the DAT-ACC frame is polysemous, with its sense depending on the particular verb that appears. Thus, verbs like *cwu-* 'give', which are associated strictly with a caused-possession meaning, are predicted to occur in both frames. Verbs of sending and throwing, which express both caused possession and caused motion, are predicted to occur in the DAT-ACC frame with both meanings.

Levin's (2010) verb-sensitive approach, however, leaves several issues open. First, Levin (2010) does not address why verbs of sending and throwing in Korean do not occur in the ACC-ACC frame even if they can express both caused possession and caused motion. The partitioning of verbs in (6) predicts verbs of sending and throwing to occur in the ACC-ACC frame only with the caused possession meaning. In her earlier work (Levin 2008a, Rappaport Hovav & Levin 2008), Levin argued that verbs of giving are associated with a caused possession meaning, while verbs of sending and throwing are associated with a caused motion meaning and, in many languages such as English, Hebrew, and Russian, a caused possession meaning. Levin (2010) shows that verbs of giving and verbs of sending and throwing in Japanese and Korean show the same associations with event types as their English counterparts. She further shows that the actual realizations attested in different languages for each verb type are not exactly the same because the morphosyntactic resources of languages differ. But she has left unexplained how the pairings of semantic classes of dative verbs with morphosyntactic frames disallowed in Korean should be ruled out in a principled way.

A second, related issue is the morphosyntactic expression of recipients of a subset of dative verbs that express transfer of possession such as *phal-* 'sell', *kennay-* 'hand', *mathki-* 'entrust' and *namki-* 'leave, bequeath'. These verbs express their recipient argument using dative case only, as shown in (7).

(7) (a) Mina-ka   Swuni-eykey/*-lul   cha-lul   phal-ass-ta.
       Mina-NOM Sooni-DAT/-ACC   car-ACC   sell-PST-DECL
       'Mina sold a car to Sooni.'
   (b) Cina-ka   Mary-eykey/*-ul   pyenci-lul   kennay-ss-ta.
       Jina- NOM Mary-DAT/-ACC   letter-ACC hand-PST-DECL
       'Jina handed a letter to Mary.'

Despite the considerable amount of work on the argument realization of Korean dative verbs, little work has asked why, unlike the verbs in (2), the verbs in (7) are not found in the ACC-ACC frame even though verbs of both types inherently signify acts of giving and have been classified as *give*-verbs (Pinker 1989; Goldberg 1995; Krifka 2004; Levin 2004, 2008a, b, 2010; Rappaport Hovav & Levin 2008).

This paper develops an alternative, meaning-sensitive approach to the argument realization of Korean dative verbs that can account for the limited productivity of the dative/accusative alternation in dative verbs (i.e. the contrast between (2) and (3) and between (2) and (7)), while at the same time correctly explaining patterns of verb distribution in ditransitive constructions within and across languages. Building on Croft et al. (2001) and Levin (2004, 2008b), I argue that the semantic classes of dative verbs form an implicational hierarchy which ranks verbs in terms of the degree of the compatibility with a caused possession meaning and that potential variation in and across languages may be modeled by the choice of the cut-off point on this hierarchy with respect to expression in the ditransitive construction.

This paper is organized as follows: In Section 2, I delineate the verbs I focus on in this study and propose a classification of these verbs based on the result they inherently encode: (i) pure caused possession verbs, (ii) transfer of possession verbs and (iii) caused motion verbs. Section 3 analyzes the meanings of the two dative constructions. Based on previously unobserved meaning differences between the two constructions, I argue that they differ in the type of possessive or 'have' relations they encode and that the DAT-ACC frame expresses a superset of the events described by the ACC-ACC frame. Section 4 presents an alternative, meaning sensitive approach to argument realization that succeeds in explaining the limited productivity of the dative/accusative alternation in dative verbs. Building on ideas presented in Croft et al. (2001) and Levin (2004, 2008b), I first argue that these semantic classes of dative verbs form a refined implicational hierarchy which ranks verbs in terms of the degree of the compatibility with a caused possession meaning (see Croft et al. 2001): 'give' > pure caused possession > transfer of possession > *send*-type verbs > *throw*-type verbs. I then suggest three criteria for compatibility between verb meaning and constructional meaning and show that the analysis of verb–construction pairings proposed here, when combined with an account of variation, provides a unified explanation for verb distribution patterns observed for ditransitive constructions within and across languages and the morphosyntactic expression of recipients of dative verbs in Korean. Section 5 investigates the question whether the DAT-ACC frame and the ACC-ACC frame exhibit syntactic asymmetries similar to the ones observed in the English double object construction and the prepositional dative construction. On the basis of a careful examination of quantifier scope interaction in the DAT-ACC and the ACC-ACC frames, I show that both frames do not show asymmetries in quantifier scope and argues for an analysis which posits the same structure for the two frames. Section 6 concludes the paper.

2. MAJOR CLASSES OF DATIVE VERBS IN KOREAN

The focus of this study is a major class of ditransitive verbs that are referred to as dative verbs, i.e. verbs that take agent, recipient and theme arguments.[5] This

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[5] In this paper, I will largely ignore the other major set of ditransitive verbs that take agent, location and theme arguments such as *noh-* 'put' and *twu-* 'put; leave'.

section examines the association of semantic classes of dative verbs with event types and proposes a classification of these verbs based on their association with event types.

2.1. *Evidence for the monosemy view of* give-*type verbs*

The meaning of dative verbs has been analyzed in terms of two distinct but related event types in (8) (Pinker 1989, Harley 2002, Krifka 2004, Rappaport Hovav & Levin 2008, Beavers 2011).[6]

(8)   (a)   Caused possession: [[X ACT] CAUSE [Y HAVE Z]]
       (b)   Caused motion: [[X ACT] CAUSE [Z GO TO Y]]

These event structures embody distinct types of causative events, one involving possession and the other motion to a goal, perhaps in an abstract domain along the lines embodied in the Localist Hypothesis (Gruber 1965; Jackendoff 1972, 1983). Since both event types involve agent and theme arguments, the x and z arguments, respectively, the essence of the distinction between them is embodied in the semantic role of the y argument: in the caused possession event type this argument is a recipient, generally an animate entity capable of possession, while in the caused motion event type this argument is a spatial goal. This difference between the two schemas is often represented in standard decompositional terms as in (8), indicating caused possession via a primitive HAVE predicate ranking the recipient higher than the theme and caused motion via a primitive GO TO predicate that ranks the theme higher than the goal.

An often-proposed view of the Korean dative verbs in (6) above is that both *give*-type verbs and *send-/throw*-type verbs are associated with a caused motion meaning and that *give*-type verbs are associated with an additional meaning – caused possession meaning (Park & Whitman 2003, Jung & Miyagawa 2004, L. Kim 2015, among others). Proponents of the multiple meaning approaches to *give*-type verbs propose that what drives the DAT-ACC case alternation on recipients of these verbs is their multiple meanings whereas the absence of this alternation in *send-/throw*-type verbs is attributed to their monoseny. It is commonly assumed that these meanings are syntactically encoded by distinct syntactic event decompositions (Park & Whitman 2003, Jung & Miyagawa 2004, L. Kim 2015, among others).

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[6] It is commonly assumed in the literature on English dative verbs that the double object construction (e.g. 'Kim gave/sent/threw Sandy a ball.') encodes caused possession while the prepositional object construction (e.g. 'Kim gave/sent/threw a ball to Sandy.') encode directed motion. Rappaport Hovav & Levin (2008) challenge this predominant view of the English dative alternation, which takes all alternating verbs to have two meanings and, concomitantly, associates each meaning with a particular syntactic realization (e.g. Green 1974, Oehrle 1976, Pinker 1989, Harley 2002, Beck & Johnson 2004, Krifka 2004). They argue instead that *give*-verbs are not associated with the caused motion event type, supporting the distinct association of *give-* and *send*-type verbs with event types in English.

However, the polysemy approaches to *give*-type verbs have been called into question. Levin (2010) has proposed that *give*-type verbs are associated only with the caused possession meaning, lacking a (possessional or spatial) path constituent: concomitantly, these verbs select a recipient and cannot add a spatial goal. Support for this proposal can be found in *-lo* suffixation discussed by Levin (2010). She shows that only *send-* and *throw*-type verbs, which select for spatial goals as well as recipients, allow the addition of the suffix *-lo*, which denotes the direction 'to, toward, (heading) for' (Sohn 2001: 337). In clear spatial uses, the dative marker *-eykey* may be suffixed by *-lo*, while *-ey*, the dative found with inanimates, alternates with *-lo* (there is no form *-ey-lo), as shown in the motion verb sentences in (9):

(9) (a) Na-nun Swuni-eykey(-lo) ka-ss-ta.
          I-TOP   Sooni-DAT-DIR   go-PST-DECL
          'I went to Sooni.'
     (b) Na-nun kakey-ey/-lo   ka-ss-ta.
          I-TOP   store-DAT/-DIR go-PST-DECL
          'I went to the store.'

Levin (2010) contends that the suffix -(*u*)*lo*, used elsewhere with spatial goals, is found with *ponay-* 'send', but not *cwu-* 'give', as shown in (10) and (11). She interprets the unacceptability of (11) as evidence that argues against the proposal that *cwu-* 'give' has a caused motion meaning in the DAT-ACC frame.

(10) Na-nun Swuni-eykey-lo sopho-lul   ponay-ss-ta.
      I-TOP   Sooni-DAT-DIR   package-ACC send-PST-DECL
      'I sent a package to Sooni.'

(11) *Na-nun Swuni-eykey-lo sopho-lul   cwu-ess-ta.
       I-TOP   Sooni-DAT-DIR   package-ACC give-PST-DECL
      'I gave a package to Sooni.'

Other *give*-type verbs contrast with *ponay-* 'send' and pattern with *cwu-* 'give' in this respect: unlike typical goals of motion verbs and recipients of *send-/throw*-type verbs, recipients of verbs such as *ceykongha-* 'offer', *swuyeha-* 'award' and *phal-* 'sell' do not allow the addition of *-lo*, as shown in (12).

(12) (a) *Wuri-ka   senswu-tul-eykey-lo sisel-ul   ceykonghay-ss-ta.
            we-NOM   player-PL-DAT-DIR   facilities-ACC offer-PST-DECL
            'We offered players facilities.'
      (b) *Nay-ka   haksayng-tul-eykey-lo sang-ul   swuyehay-ss-ta.
            I-NOM   student-PL-DAT-DIR   prize-ACC award-PST-DECL
            'I awarded students a prize.'
      (c) *Mina-ka   Swuni-eykey-lo cha-lul phal-ass-ta.
            Mina-NOM   Sooni-DAT-DIR   car-ACC sell-PST-DECL
            'Mina sold a car to Sooni.'

43

The distribution of *-lo* would follow if *give*-type verbs are associated only with the caused possession event type and take recipients in both frames, while *send-/throw*-type verbs are associated with the caused motion meaning and take spatial or possessional goals. However, there are *give*-type verbs that allow the addition of *-lo*. Native speakers of Korean I have consulted accept sentences in (13), in which the verbs *kennay-* 'hand' and *nemki-* 'pass' occur with *-lo*.

(13) (a) Cina-ka   Mary-eykey-lo pyenci-lul kennay-ss-ta.
         Jina- NOM Mary-DAT-DIR   letter-ACC hand-PST-DECL
         'Jina handed a letter to Mary.'
     (b) Mary-ka   sangsa-eykey-lo mwunse-lul nemki-ess-ta.
         Mary-NOM   boss-DAT-DIR   document-ACC pass-PST-DECL
         'Mary passed a/the document to her boss.'

It should be noted, however, that their judgments on *-lo* suffixation to the dative recipient of *cwu-* 'give' show greater variability, ranging from marginal acceptability to unacceptability.

Therefore, the facts of *-lo* suffixation do not appear as simple as Levin (2010) describes, and hence other conclusive evidence needs to be provided to support the proposal that Korean *give*-type verbs unambiguously encode caused possession, while *send-/throw*-type verbs do not. In the following, I present alternative evidence for this proposal adduced from the (in)ability of *give*-type verbs to take a purely spatial goal.

The Korean *give*-type verbs can take an inanimate location which is reinterpretable as able to possess. Under this interpretation, these verbs can occur in both the LOC-ACC and the ACC-ACC frames, as in (14), contra Jung & Miyagawa (2004).

(14) (a) Kyocang-i   yokwuhay-se,   Mina-ka   ku hakkyo-ey/-lul
         principal-NOM ask.for-because Mina-NOM that school-LOC/-ACC
         ton-ul   cwu-ess-ta.
         money-ACC give-PST-DECL
         'Mina gave money to that school because the principal asked for it.'
     (b) Sacang-I   yokwuhay-se,   John-i   ku hoysa-ey/-lul
         president-NOM ask.for-because John-NOM that company-LOC/-ACC
         ton-ul   cwu-ess-ta.
         money-ACC give-PST-DECL
         'John gave money to that company because the president asked for it.'

Hakkyo 'school' in (14a) and *hoysa* 'company' in (14b) are reinterpretable as referring to members of an organization or a company which are understood to be a willing recipient.[7]

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[7] As observed originally by Oehrle (1976), the same interpretive coercion is found in English in cases where an NP that is ambiguous with regard to animacy occurs in the first object position in

With an inanimate location which does not allow such a reinterpretation, both frames of the verb *cwu-* 'give' is unacceptable, as in (15), suggesting that this verb is associated only with a caused possession meaning and concomitantly, it does not select a purely spatial goal.[8]

(15)   *Mina-ka   chayksang-ey/-ul ton-ul   cwu-ess-ta.
       Mina-NOM desk-LOC/-ACC   money-ACC give-PST-DECL
       'Mina gave money to the desk.'

Unlike *give*-type verbs, verbs of sending and throwing can take a non-possessional or spatial goal, as in (17), as well as an inanimate location which allows a reinterpretation as a recipient, as in (16).

(16) (a) Kyocang-i   yokwuhay-se,   Mina-ka   ku   hakkyo-ey
          principal-NOM ask.for-because Mina-NOM that school-LOC
          ton-ul   ponay-ss-ta.
          money-ACC send-PST-DECL
          'Mina sent money to that school because the principal asked for it.'
    (b) Hwa-ga   na-se   Minswu-ka   yehayngsa-ey
          anger-NOM   arise-because Mina-NOM   travel.agency-LOC
          caki   kapang-ul   tenci-ess-ta.
          self   bag-ACC   throw-PST-DECL
          'Minsoo threw his own bag to the travel agency because he was angry.'
(17) (a) Khochi-ka cwuca-lul   samlwu-ey   ponay-ss-ta.
          coach-NOM   the runner-ACC third.base-LOC send-PST-DECL
          'The coach sent the runner to the third base.'
    (b) Minswu-ka mwun-ey   kong-ul   tenci-ess-ta.
          Minsoo-NOM door-LOC ball-ACC throw-PST-DECL
          'Minsoo threw the ball to the door.'

Other *give*-type verbs that are found in the DAT-ACC frame only such as *kennay-* 'hand' and *phal-* 'sell' contrast to *ponay-* 'send' and *tenci-* 'throw' and pattern with

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       the double object construction. In the prepositional dative construction (i), *London* can refer either to the city or, metonymically, to members of a company or organization located in the city. However, in the double object construction (ii), only the latter interpretation is possible–the 'London office' effect.

    (i)   John mailed a letter to London. (either regular or office reading OK)
    (ii)   John mailed London a letter   (London office reading only)

  [8] One might take the contrast between the examples in (14) and the one in (15) as evidence suggesting that *cwu-*'give' only takes a possessional goal and it does not take a non-possessional goal. In Section 2.2, I argue against this view, demonstrating that *cwu-* 'give' does not lexicalize a path of motion even in the possessional field and concomitantly, it cannot lexically select a possessional goal .

cwu- 'give' in that they are incompatible with a purely spatial goal, as shown in (18b) and (19b).

(18) (a) Mina-ka   ku cip-ey   umsik-ul   kennay-ss-ta.
           Mina-NOM   that house-LOC food-ACC   hand-PST-DECL
           'Mina handed food to that house.'
      (b) *Minswu-ka ku pangang-ey unsik-ul kennay-ss-ta.
            Minsoo-NOM that room-LOC food-ACC hand-PST-DECL
           'Minsoo handed food to that room.'

(19) (a) Mina-ka   ku kakey-ey   cha-lul phal-ass-ta.
           Mina-NOM   that shop-LOC   car-ACC sell-PST-DECL
           'Mina sold a/the car to that shop.'
      (b) *Minswu-ka ku pang-ey   cha-lul phal-ass-ta.
            Minsoo-NOM that room-LOC car-ACC sell-PST-DECL
           'Minsoo sold a/the car to that room.'

This difference between the Korean *give*-type verbs and the *send-/throw*-type verbs would follow if the former is associated only with the caused possession event type and take recipients in both frames, while the latter are associated with the caused motion event type and take spatial or possessional goals. Thus, the evidence from the (in)ability to take a purely spatial goal provides support for the monosemy view of the Korean *give*-type verbs summarized in (6a).

2.2. *Representing the core meanings of verb types*

Current approaches to verb meaning posit a distinction between the core meaning of a verb and a verb's meaning in specific syntactic context (e.g. Pesetsky 1995, Rappaport Hovav & Levin 2008, Levin 2010, Beavers 2011). A verb's core meanings refer to meaning components entailed in all uses of the verb, regardless of context, whereas its meaning in specific syntactic context arises from combinations with a particular type of argument.[9] This section provides representations of the core meanings of the verbs discussed in Section 2.1.

2.2.1. *Pure caused possession verbs*

Among caused possession verbs, we can distinguish those that lexicalize just caused possession and those that lexicalize transfer of possession. Following Beavers (2011), I refer to the former type as PURE CAUSED POSSESSION VERBS and the latter as TRANSFER OF POSSESSION VERBS. Pure caused possession verbs (e.g. *cwu-* 'give', *ceykongha-* 'offer', *cikupha-* 'pay; grant', *pwuyeha-* 'grant', *sunginha-* 'grant', *yaksokha-* 'promise', etc.) encode events of caused possession that do

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[9] Pesetsky (1995) refers to the core meaning of a verb as its root, and Levin (2010) as its lexicalized meaning, i.e. the meaning lexicalized by the root.

not necessarily involve transfer of possession from one possessor to another. This point is illustrated in examples in (20) discussed by Levin (2010).

(20) (a) Pepwon-i Minswu-eykey ku   ai-uy   yangyukkwen-ul
          court-NOM Minsoo-DAT that child-GEN custody-ACC
          cwu-ess-ta/cwu-ess-ta/pwuyehay-ss-ta.
          give-PST-DECL/give-PST-DECL/grant-PST-DECL
          'The court gave/granted Minsoo custody of the child.'

                                            (Levin 2010: ex. (47), modified)

     (b) John-i   Mary-eykey huymang/casinkam-ul   cwu-ess-ta.
         John-NOM Mary-DAT   hope/self.confidence-ACC give-PST-DECL
         'John gave Mary hope/self-confidence.'

                                            (Levin 2010: ex. (49))

Example (20a) describes caused possession that is not spatially instantiated and does not involve transfer: when a court gives or grants a parent custody of a child, the court is not the initial possessor of that right; it simply causes the parent to have the right. There is no transfer of possession, but simply caused possession. Similarly, abstract entities such as hope or self-confidence in the example (20b) need not be possessed by the giver or even exist prior to the event. On the basis of this use of *cwu-* 'give', Levin (2010) argues that transfer of possession is conceptually distinct from caused possession and is not part of the meaning of the verb *cwu-* 'give'. Comparable examples with other caused possession verbs are given in (21).

(21) (a) Cengpwu-ka   chengnyen-tul-eykey ilcali-lul ceykonghay-ss-ta.
          government-NOM   young.people-PL-DAT job-ACC offer-PST-DECL
          'The government offered a job to young people.'

     (b) Sangsa-ka cikwon-tul-eykey   hyuka-lul   cikuphay-ss-ta.
         boss-NOM employee-PL-DAT   vacation-ACC pay-PST-DECL
         'The boss granted vacation to employees.'

Caused possession verbs have been given explicit event decompositional representations in Pinker (1989), Krifka (1999, 2004), Levin (2004, 2008a), Rappaport Hovav & Levin (2008), and Beavers (2011). Following Tham (2004) and Levin (2010), I assume a primitive predicate HAVE and an additional ontological type, 'possession-type', which indicates the type of possession involved. Adopting the neo-Davidsonian representations proposed by Krifka (1999, 2004), the core meanings of the verb *cwu-* 'give' can be schematized as in (22), where I represent CAUSE as a relation between a causing event and a possessive result state. As made explicit in Pinker (1989) and Goldberg (1995), this verb's root does not contribute anything beyond what is already encoded in the caused possession event type in (8a).

(22) $\exists e \exists s [\text{AGENT}(e, x) \wedge \text{CAUSE}(e, s) \wedge s: \text{HAVE}_{<POSS\text{-}TYPE>}(y, z)]$
     'There is an event e, with x the agent of e, such that e causes a state s, where s is a state of y having z.'

47

The result encoded by *cwu-* 'give' is actual possession. This is evidenced by the oddness of denying possession meaning as in (23).

(23) (a) #Nay-ka   John-eykey sopho-lul   cwu-ess-ta.
           I-NOM   John-DAT   package-ACC give-PST-DECL
           kulena   sopho-ka   ku-eykey   an   ka-ss-ta.
           but   package-NOM he-DAT   not   go-PST-DECL
           'I gave a package to John, but it did not go to him.'

(23) (b) #Mary-ka   John-eykey ton-ul   cwu-ess-ta.
           Mary-NOM John-DAT   money-ACC   give-PST-DECL
           kulena John-un   ton-ul   mos   pat-ass-ta.
           but   John-TOP   money-ACC not   receive-PST-DECL
           'Mary gave money to John, but he did not receive it.'

Other pure caused possession verbs (e.g. *ceykongha-* 'offer', *cikupha-* 'pay; grant', *sunginha-* 'grant', *yaksokha-* 'promise', etc.) do not strictly entail possession, and encode possession that is prospective and need not obtain:

(24) (a) Hoysa-ka   John-eykey   welcup-ul   cikuphay-ss-ta.
           company-NOM John-DAT   monthly.salary-ACC pay-PST-DECL
           kulena ku-nun   welcup-lul   mot   pat-ass-ta.
           but   he-TOP   monthly.salary-ACC not   receive-PST-DECL
           'The company paid monthly salary to John, but he did not receive it.'

(24) (b) Sangsa-ka Mary-eykey ton-ul   yaksokhay-ss-ta.
           boss-NOM   Mary-DAT   money-ACC   promise-PST-DECL
           kulena ton-un   Mary-eykey   an   ka-ss-ta.
           but   money-NOM Mary-DAT   not   go-PST-DECL
           'The boss promised money to Mary, but money did not go to her.'

Following Koenig & Davis (2001), Rappaport Hovav & Levin (2008) and Beavers (2011), the prospective nature of possession can be accommodated by assuming a sublexical modality. In particular, Beavers (2011: 10) proposes that the possessive relationship is modified by Koenig & Davis's sublexical modality, requiring only that possession be achieved in some possible worlds, not in all. I adopt this account here, associating to the lexical semantic representation of pure caused possession verbs encoding prospective possession a modal or temporal operator '◇', which restricts the possible worlds in which possession holds, as in (25). Thus, all caused possession verbs entail at least prospective control, and some have the stronger entailment, i.e. actual possession.

(25) $\exists e \exists s[\text{AGENT}(e, x) \wedge \text{THEME}(e, z) \wedge \text{CAUSE}(e, s) \wedge s: \Diamond \text{HAVE}_{<POSS\text{-}TYPE>}(y, z)]$
     'There is an event e, with x the agent of e, such that e causes a state s, where s is a state of y prospectively having z.'

48

2.2.2. *Transfer of possession verbs*

Give-type verbs in Levin's (2010) classification of Korean dative verbs in (6a) also include verbs such as *kennay-* 'hand', *namki-* 'bequeath', *phal-* 'sell', and *swuyeha-* 'award'. These verbs differ from pure caused possession verbs in that their meanings necessarily involve a transfer of possession from an original possessor to a new possessor. For these verbs, not only does the recipient come to receive the theme but the causer is the initial possessor and loses the theme. Following Beavers (2011), I assume that transfer of possession verbs lexicalize two result states: loss of possession by the causer as well as possession by the recipient. As argued by Beavers (2011) for transfer of possession verbs in English, these verbs encode neither actual loss nor receiving; both are prospective and need not occur. This is illustrated with the felicity of examples in (26), which deny change of possession meaning.

(26) (a) Mary-ka   ttal-eykey   cip-ul   namki-ess-ta.   kulena
           Mary-NOM daughter-DAT house-ACC leave-PST-DECL but
           ttal-i   cip-uy   soyukwen-ul   kac-ki-cen-ey
           daughter-NOM house-GEN ownership-ACC have-NS-before
           cwuk-ess-ta.
           die-PST-DECL
           'Mary left a house to her daughter. But her daughter died before she has possession of the house.'

      (b) Mary-ka   John-eykey cha-lul phal-ass-ta.   kulena
           Mary-NOM John-DAT   car-ACC sell-PST-DECL but
           John-i   cha-lul   soyuha-ki-cen-ey cwuk-ess-ta.
           John-NOM   car-ACC   own-NS-before   die-PST-DECL
           'Mary sold a car to John. But he died before he takes possession of the car.'

We can thus assume that transfer of possession verbs encode a meaning that entails prospective loss of possession by the causer and prospective possession by the recipient and give these verbs a meaning such as (27), where I represent CAUSE as a relation between a causing event and two result states: a state of there being a prospective loss and another state of there being a prospective possession.[10]

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[10] Transfer of possession verbs typically describe events of caused possession that can but do not necessarily involve ownership. This point is illustrated in (i), where the subject, the agent of transfer, had temporary control of the object but did not own it.

(i) Apun emma-lul   taysinhayse Mina-ka   Minswu-eykey cha-lul
     sick   mother-ACC on.behalf.of Mina-NOM Minsoo-DAT   car-ACC
     phal-ass-ta.
     sell-PST-DECL
     'On behalf of her sick mother, Mina sold a/the/her car to Minsoo.'

As I will discuss in Section 3.2, what the possessive relation described in (i) and ownership have in common is that both relations involve physical control, of which ownership is a special kind. Under this broad notion of control possession, the subject in (i) can be considered a type of possessor.

(27) $\exists e \exists s \exists s'[\text{AGENT}(e, x) \wedge \text{THEME}(e, z) \wedge \text{CAUSE}(e, (s \wedge s')) \wedge$
$s: \diamond\neg\text{HAVE}_{<POSS\text{-}TYPE>}(x, z) \wedge s': \diamond\text{HAVE}_{<POSS\text{-}TYPE>}(y, z)]$
'There is an event e, with x the agent of e, such that e causes a state s and a state s', where s is a state of x prospectively not having z and s' is a state of y prospectively having z.'

Krifka (2004) suggests that transfer of possession can be conceptualized as an abstract movement event in a possessional field from the possession of a giver to the possession of a recipient and, concomitantly, the meaning of transfer of possession verbs in English (in the prepositional dative construction) can be represented as movement of objects in possession spaces as in (28), in a way analogous to the meaning of caused motion verbs.

(28) $\exists e \exists e' \ [\text{AGENT}(e, x) \wedge \text{CAUSE}(e, e') \wedge \text{MOVE}_{\text{POSS}}(e') \wedge \text{THEME}(e', z) \wedge$
$\text{GOAL}(e', y)]$

However, the proposal that transfer of possession verbs in Korean have a caused motion meaning is problematic because they do not consistently pattern with verbs that lexicalize a caused motion meaning. Evidence for this can be found in -*lo* suffixation. As mentioned in Section 2.1 above, speakers' judgments on -*lo* suffixation to transfer of possession verbs show considerable variability: verbs such as *kennay*- 'hand' and *nemki* 'pass', which lexicalize or strongly imply a change in physical location, allow the addition of -*lo* to the dative recipient, as in (13), whereas verbs such as *phal*- 'sell' and *swuyeha*- 'award' do not allow it, as in (12b) and (12c), repeated here as (29a) and (29b), respectively.

(29) (a) *Nay-ka haksayng-tul-eykey-lo sang-ul   swuyehay-ss-ta.
I-NOM student-PL-DAT-DIR   prize-ACC award-PST-DECL
'I awarded students a prize.'
(b) *Mina-ka Swuni-eykey-lo cha-lul phal-ass-ta.
Mina-NOM Sooni-DAT-DIR   car-ACC sell-PST-DECL
'Mina sold a car to Sooni.'

If the transfer of possession verbs are associated with a caused motion meaning and involve a path of motion, then the addition of -*lo* should be fully acceptable. However, the contrast between these verbs and *send-/throw*-type verbs illustrated in (10), (11) and (29) strongly suggests that conceptualization of events should be separated from linguistic representation of the core meaning of verbs describing the events and that caused possession and caused motion should be represented differently.

2.2.3. *Caused motion verbs*

The core meanings of caused motion verbs are associated with the caused motion event type; therefore, by their very nature they entail change of location but not

change of possession (Rappaport Hovav & Levin 2008: 135). This entailment is reflected in the oddness of denying change of location meaning, as in (30).

(30) (a) #Mina-ka   Swuni-eykey sopho-lul   ponay-ss-ta.
         Mina-NOM   Sooni-DAT   package-ACC   send-PST-DECL
         kulena   sopho-ka   Swuni-eykey-lo itongha-ci anh-ass-ta.
         but   package-NOM   Sooni-DAT-DIR   move-VS   neg-PST-DECL
         'Mina sent a package to Sooni. But the package did not move toward Sooni.'

    (b) #Mina-ka   Swuni-eykey kong-ul tenci-ess-ta.
         Mina-NOM   Sooni-DAT   ball-ACC throw-PST-DECL
         kulena   kong-i   Swuni-eykey-lo itongha-ci anh-ass-ta.
         but   ball-NOM Sooni-DAT-DIR   move-VS   neg-PST-DECL
         'Mina threw a ball to Sooni. But the ball did not move toward Sooni.'

These examples show that change of location is a necessary part of the meaning of *ponay-* 'send' and *tenci-* 'throw'. Thus, following Krifka (1999, 2004), the lexicalized meanings of these verbs, i.e. caused motion meaning, can be schematized as in (31) (I represent only the shared meaning components of the *send-* and *throw-* type verbs, ignoring differences between them); the verb's root also has an additional semantic field 'movement-field', which indicates the semantic field of motion involved.

(31) $\exists e \exists e'[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, e') \wedge \text{MOVE}_{<\text{MOTION-FIELD}>}(e') \wedge \text{THEME}(e', z) \wedge \text{GOAL}(e', y)]$
      'There is an event e, with x the agent of e, such that e causes another event e', where e' is a movement event with z being the theme and y being the goal.'

When caused motion verbs describe events of caused motion to a spatial goal, the event schema associated with such events can be represented as movement of an entity in spatial field as in (32a); when they describe events of caused motion to a possessional goal, the event schema associated with such events can be represented as movement of an entity in possessional field as in (32b).

(32) (a) $\exists e \exists e'[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, e') \wedge \text{MOVE}_{<\text{SPATIAL}>}(e') \wedge \text{THEME}(e', z) \wedge \text{GOAL}(e', y)]$

    (b) $\exists e \exists e' [\text{AGENT}(e, x) \wedge \text{CAUSE}(e, e') \wedge \text{MOVE}_{<\text{POSS}>}(e') \wedge \text{THEME}(e', z) \wedge \text{GOAL}(e', y)]$

The classification of Korean dative verbs I have proposed in this section is shown in Table 1. In summary, I have discussed evidence from the (in)ability to take a purely spatial goal and inference patterns that provides support for the monosemy view of the Korean caused possession verbs. Based on this evidence, I have argued that the core meanings of these verbs are associated only with the caused possession event schema and that the core meanings of caused motion verbs are associated with the caused motion event schema. This analysis of the association of verb meaning with

51

Caused possession verbs	Pure caused possession verbs	*cwu-* 'give', *kaluchi-* 'teach' and future having verbs (*ceykongha-* 'offer', *cikupha-* 'pay', *kwenha-* 'offer', *mathki-* 'entrust', *pwuyeha-* 'grant', *sunginha-* 'grant', *yaksokha-* 'promise', …)
	Transfer of possession verbs	*kennay-* 'hand', *nemki-* 'pass', *phal-* 'sell', yucungha- 'bequeath', *swuyeha-* 'award', …
Caused motion Verbs		*send*-type verbs (*centalha-* 'forward', *pannapha-* 'return', *paysongha-* 'ship', *paytalha-*'deliver', *ponay-* 'send', *pwuchi-* 'mail', …) and *throw*-type verbs (*cha-* 'kick', *chi-* 'hit', *ponay-* 'pass', *tenci-* 'throw', …)

Table 1
Semantic classes of Korean dative verbs.

event types resembles Levin's (2010) in that it takes the monosemy view of *give*-type verbs but differs from Levin's (2010), which takes *send*-type verbs to have two meanings, as summarized in (6b). The evidence for the monosemy view of the Korean caused possession verbs I have presented in this section does not provide conclusive evidence for the polysemy of the caused motion verbs. Hence, I leave this as an open issue.

3. THE MEANINGS OF THE TWO FRAMES OF KOREAN DATIVE VERBS

This section analyzes the meanings of the two frames of Korean dative verbs. On the basis of a careful examination of the events described by the DAT-ACC and ACC-ACC frames of the verbs discussed in Section 2, I argue that the DAT-ACC frame expresses a superset of the events described by the ACC-ACC construction.

Ditransitive constructions in many languages have been shown to express some notion of possession.[11] It is well-known that there are various types of conceptual relations that come under the general rubric of possession (e.g. Miller & Johnson-Laird 1976, Taylor 1996, Tham 2004). Below I argue that what the ACC-ACC frame in Korean typically encodes is particular subtypes of possessive relation which involve *physical control* of an entity (Vikner & Jensen 2002, Tham 2004), of which ownership is a special kind.

It has been assumed in the literature on the English dative alternation that the notion of possession encoded in caused possession predicates is the same as that

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[11] Ditransitive is used here to refer to three-argument constructions across languages whether a double object construction, as in English, or other morphosyntactically comparable constructions: usually, subject, object and a dative NP, as in Japanese (Miyagawa & Tsujioka 2004) and Russian (Levin 2008a), but an NP marked with accusative or genitive case, as in Korean and Greek (Anagnostopoulou 2002), respectively.

encoded by the verb *have* (e.g. Harley 2002, Beavers, Ponvert & Wechsler 2009, Beavers 2011, Harley & Jung 2015). Evidence for this comes from the systematic polysemy of *have* discussed by Tham (2004). She argues that *have* can express at least four relations, illustrated in (33a–d).

(33) (a) John has a daughter.   (inalienable possession)
      (b) John has a car.   (alienable possession – ownership)
      (c) John has the car (for the weekend). (control possession)
      (d) John has the cars (to deliver). (focus possession)
      (e) John has hope/self-confidence.   (abstract possession)

These include inalienable possession, as in (33a), and alienable possession, as in (33b). She also identifies two other uses of *have*, which she refers to as a 'control' use, where the subject has temporary control of the object but does not necessarily alienably possess or own it, as in (33c), and a 'focus' use, where the relationship between the arguments is determined by a rich context, as in (33d), in a context of people being assigned things to deliver. She shows that these four relation types have a privileged status in being the most likely interpretations of constructions typically recognized as being possessive. These relations can thus be treated as representative of a class of possessive relations. *Have* can also describe relations that do not involve physical control, as in (33e).

Caused possession predicates in English can allow the same meanings, as shown in (34) (Rappaport Hovav & Levin 2008, Beavers et al. 2009, Beavers 2011) (although this does not mean that all caused possession predicates allow all of these meanings; some may encode only a subset).

(34) (a) John gave his wife a daughter.   (inalienable possession)
      (b) John gave his wife a car.   (alienable possession – ownership)
      (c) John gave his wife the car (for the weekend). (control possession)
      (d) John gave his wife the cars (to deliver).   (focus possession)
      (e) John gave his wife hope/self-confidence.   (abstract possession)

The DAT-ACC frame of Korean caused possession verbs can express all of the possessive relations expressed by the English double object frame illustrated in (35), although individual verbs may differ in the types of possessive relations that they can express:

(35) (a) John-i   anay-eykey ttal-ul   namki-ess-ta./?cwu-ess-ta.
           John-NOM wife-DAT   daughter-ACC leave-PST-DECL/give-PST-DECL
           'John left/gave his wife a daughter.'
           (Intended: 'John impregnated his wife.')
                                                    (inalienable possession)
      (b) John-i   anay-eykey cha-lul   cwu-ess-ta.
           John-NOM wife-DAT   car-ACC   give-PST-DECL
           'John gave his wife a car.'
                                            (alienable possession – ownership)

53

(c) John-i   (cwumal dongan) anay-eykey cha-lul cwu-ess-ta.
   John-NOM   weekend for   wife-DAT   car-ACC give-PST-DECL
   'John gave his wife the car (for the weekend).'

(control possession)

(d) John-i   anay-eykey (paysongha-l) cha-tul-lul   cwu-ess-ta.
   John-NOM   wife-DAT   deliver-PROSP car-PL-ACC   give-PST-DECL
   'John gave his wife the cars (to deliver).'

(focus possession)

(e) John-i   Mary-eykey huymang/casinkam-ul   cwu-ess-ta.
   John-NOM   Mary-DAT   hope/self.confidence-ACC give-PST-DECL
   'John gave Mary hope/self-confidence.'

(abstract possession)

In contrast, the ACC-ACC frame may felicitously express only subsets of the possessive relations described by the DAT-ACC frame. This is illustrated with the infelicity of the sentences in (36a, d, e), describing inalienable possession, focus possession and abstract possession, respectively. These sentences are judged infelicitous even by speakers who accept accusative case-marking of the recipients of transfer of concrete possession uses of caused possession verbs. Notice that the same sentences become felicitous when used to describe alienable or control possession, as shown in (36b) and (36c).

(36) (a) *John-i   anay-lul ttal-ul   cwu-ess-ta.
        John-NOM   wife-ACC daughter-ACC give-PST-DECL
        'John gave his wife a daughter.'
        (Intended: 'John impregnated his wife.')

(inalienable possession)

   (b) John-i   anay-lul cha-lul   cwu-ess-ta.
      John-NOM   wife-ACC car-ACC give-PST-DECL
      'John gave his wife a car.'

(alienable possession – ownership)

   (c) John-i   (cwumal dongan)   anay-lul cha-lul cwu-ess-ta.
      John-NOM   weekend for   wife-ACC car-ACC give-PST-DECL
      'John gave his wife the car (for the weekend).'

(control possession)

   (d) ??/*John-i   anay-lul (paysongha-l) cha-tul-lul   cwu-ess-ta.
        John-NOM wife-ACC deliver-MOD   car-PL-ACC   give-PST-DECL
        'John gave his wife the cars (to deliver).'

(focus possession)

   (e) ??/*John-i   Mary-lul   huymang/casinkam-ul
        John-NOM   Mary-ACC hope/self.confidence-ACC
        cwu-ess-ta.
        give-PST-DECL
        'John gave Mary hope/self-confidence.'

(abstract possession)

54

Thus, the ACC-ACC frame in Korean can express only the possessive relations that involve alienable or control possession of the theme, indicating that it is semantically more restricted than the DAT-ACC frame and the double object construction in English.

Hong (1991) and Jung & Miyagawa (2004) discuss some examples of felicitous ACC-ACC sentences that do not clearly involve alienable or control possession. Such examples include the ditransitive use of verbs of communicated messages and information illustrated in (37).[12]

(37) Yenghi-ka   haksayng-tul-eykey/-ul swuhak-ul kaluchi-ess-ta.
     Younghi-NOM student-PL-ACC   math-ACC   teach-PST-DECL
     'Younghi taught math to students.'

Goldberg (1995) argues that the ditransitive use of English verbs of communicated messages and information may be licensed via metaphors. Following this idea, I suggest that a metaphor relevant to the example of the ACC-ACC frame of *kaluchi-* 'teach' in (37) involves understanding communicated messages or information as being concrete objects. We can title this metaphor 'possession of communicated messages or information as concrete possession'. The source domain of this metaphor is 'X CAUSE Y TO HAVE$_{A/C}$ Z' (for convenience, I notate the possession relation that involves alienable or control possession as the predicate HAVE$_{A/C}$), and the target domain is 'X CAUSE Y TO UNDERSTAND OR PERCEIVE INFORMATION DESIGNATED BY Z'. This metaphor is motivated by the fact that giving or causing possession prototypically involves physical entities. It allows the ACC-ACC frame to be used to encode possession of communicated messages or information, thus representing an extended use of the frame. And, as we might expect, the extended multiple accusative expressions are severely restricted in their use and infelicitous with most other verbs of communicated messages. Contrast (37) with (38):

(38) (a) Cinhi-ka   wuli-eykey/*-lul sosik-ul alli-ess-ta.
          Jinhi-NOM   us-DAT/-ACC   news-AC inform-PST-DECL
          'Jinhi informed us of the/a news.'
     (b) Minswu-ka   na-eykey/*-lul kil-ul   mul-ess-ta.
          Minsoo-NOM me-DAT/-ACC   way-ACC   ask-PST-DECL
          'Minsoo asked me the way.'

Given the present account these cases can be understood to be a prohibited extension of the basic meaning.

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[12] The dative recipient of *kaluchi-* 'teach' in (37) may be construed as referring either to different groups of students or to the same group of students, whereas the accusative recipient is preferably construed as referring to the same group of students. This difference is likely due to a well-known difference between -*eykey* and -(*l*)*ul* in their information structural function. -(*L*)*ul* is derived historically from 'emphatic' morphemes, and correlates with high individuation regardless of the topic/focus contrast although it signals focality in a majority of cases.

The associations that hold between verbs and the meanings available to them in the ACC-ACC frame can be summarized as in (39). Here, I notate the metaphoric possession relation that involves communicated messages or information as the predicate HAVE$_M$.

(39) *The meanings associated with the ACC-ACC frame*
    (a) *cwu-* 'give': $\exists e \exists s[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, s) \wedge s: \text{HAVE}_{A/C}(y, z)]$
        (causation of actual possession (alienable or control possession))
    (b) other pure caused possession verbs:
        $\exists e \exists s[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, s) \wedge s: \Diamond\text{HAVE}_{A/C}(y, z)]$
        (causation of prospective possession (alienable or control possession))
    (c) *kaluchi-* 'teach': $\exists e \exists s[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, s) \wedge s: \Diamond\text{HAVE}_M(y, z)]$
        (causation of metaphoric possession (possession of messages/information))

As noted above, the DAT-ACC frame describes a superset of the events described by the ACC-ACC frame. These events include (i) causation of the possession which can be understood as general 'have' relations including relations that do not belong to standard instances of possession (e.g. abstract possession of properties or emotions), (ii) causation of transfer of possession, and (iii) causation of motion to a goal. The associations that hold between verbs and the meanings available to them in the DAT-ACC frame are summarized in (40). Here, I notate the 'have' relations unspecified for the type of possession as HAVE to distinguish such general possessive relations from HAVE$_{A/C}$, i.e. the possessive relations that involve alienable or control possession.

(40) *The meanings associated with the DAT-ACC frame*
    (a) caused motion verbs:
        $\exists e \exists e'[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, e') \wedge \text{MOVE}(e')]$
        (causation of motion)
    (b) pure caused possession verbs:
        $\exists e \exists s[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, s) \wedge s: \text{HAVE}(y, z)]$
        (causation of actual possession) or
        $\exists e \exists s[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, s) \wedge s: \Diamond\text{HAVE}(y, z)]$
        (causation of prospective possession)
    (c) transfer of possession verbs:
        $\exists e \exists s \exists s'[\text{AGENT}(e, x) \wedge \text{CAUSE}(e, (s \wedge s')) \wedge s: \Diamond\neg\text{HAVE}(x, z) \wedge s': \Diamond\text{HAVE}(y, z)]$
        (causation of transfer of possession)

Thus, the two frames differ in the type of possessive or 'have' relations they encode. The difference amounts to increasing specification of 'have' relations: the DAT-ACC frame encodes general 'have' relations and the ACC-ACC frame encodes a stronger condition (alienable or control possession).

56

To summarize, on the basis of a careful examination of the events described by the two frames of Korean dative verbs, I have argued that both frames exhibit constructional polysemy: the ACC-ACC frame has causation of the possessive relations that involve alienable or control possession as the basic sense and causation of metaphorical possession (possession of information) as the extended sense, while the DAT-ACC frame has caused motion as the basic sense and causation of general 'have' relations and causation of transfer of possession as the extended senses, thus expressing a superset of the events described by the ACC-ACC frame.[13] I have also shown that this analysis provides a more insightful explanation of the data involving the unacceptability of accusative case on the recipient of abstract themes and other contrasts between the two frames that have been attributed to the meaning difference the verb shows in the syntactic frame in which it occurs.

4. ACCOUNTING FOR VERB DISTRIBUTION AND ARGUMENT REALIZATION IN THE TWO FRAMES

It has been observed that there is crosslinguistic variation in the distribution of semantic verb classes across the ditransitive construction, and thus, in their association with the caused possession event type (Croft et al. 2004; Levin 2004, 2008b; Kittilä 2006; Malchukov et al. 2010). Many languages with a ditransitive construction have been reported to have a closed class of dative verbs. In an extensive crosslinguistic investigation of patterns of argument realization of ditransitives in approximately 300 languages, Kittilä (2006) observes that if a language has only one dative verb that can be used ditransitively, it is 'give'. When a language has more dative verbs that can occur in a ditransitive construction, the ditransitive pattern extends to verbs that can express causation of prospective possession or transfer of possession. Such languages are in sharp contrast to English, which allows a wide range of dative verbs to occur in the ditransitive (double object) construction.

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[13] In this paper, I will take both frames of the Korean dative verbs to be instances of ditransitive constructions having a different basic meaning, though recipients in both frames lack direct object properties. Both dative-marked and accusative-marked recipients in these frames are comparable to restricted object (OBJ_θ). Evidence for this comes from the phrasal passive formed by the auxiliary *ci-* 'become', a classic test for objecthood in Korean (Hong 1991): while Korean allows *ci*-passivization of the theme, *ci*-passivization of both the dative-marked and the accusative-marked recipient is degraded or unacceptable (see Park & Whitman 2003, Jung & Miyagawa 2004), as shown in (i) and (ii).

(i) ??Mary-ka John-eyuyhay chaky-i cwu-e ci-ess-ta.
Mary- NOM John-by book-NOM give-VS PASS-PST-DECL
'Mary was given a book by John.'

(ii) *Mary-ka John-eyuyhay chaky-i ponay ci-ess-ta.
Mary-NOM John-by book-NOM sent PASS-PST-DECL
'Mary was sent a book by John.'

An exploratory study by Croft et al. (2001) suggests that the variation in verb distribution in ditransitives takes the form of an implicational hierarchy of dative verbs. Based on an examination of Dutch, English, German and Icelandic, they propose a ditransitivity hierarchy involving three verbs chosen from major dative verb classes in (41): a language only shows the double object construction with a verb at a given point on the hierarchy if it allows it for verbs to its left.

(41)   *Ditransitive hierarchy: 'give' < 'send' < 'throw'*
    (a)   If there are constraints on the distribution of a ditransitive construction, the construction will be associated with the higher end of the Ditransitive hierarchy.
    (b)   If there are constraints on the distribution of a spatial oblique construction, the construction will be associated with the lower end of the Ditransitive hierarchy.

<div align="right">(Croft et al. 2001: 2)</div>

As Croft et al. note, this hierarchy can be accounted for in terms of the nature of the events described by the verbs: that is, giving events necessarily involve transfer of possession, with change of location being incidental; in contrast, throwing is about change of location, which might incidentally be a transfer of possession; sending is both a change-of-possession and change-of-location event. Therefore, all languages allow verbs of giving to be expressed as change-of-possession verbs, but only some languages allow a verb like *throw* to be used as a transfer-of-possession verb.

A problem for this analysis is that it does not make correct predictions for the distribution of two subtypes of caused possession verbs in ditransitives. On Croft et al.'s account, the ordering of semantic verb classes in (41) reflects how naturally the particular semantic verb type can be associated with TRANSFER OF POSSESSION. Although Croft et al. (2001) do not distinguish between pure caused possession verbs and transfer of possession verbs, a satisfactory analysis of distribution patterns of verb classes in ditransitives requires a distinction between these two classes of verbs because pure caused possession verbs are consistently found in the ditransitive construction, while transfer of possession verbs show varying propensities for being found in this construction. Verb distribution in the ACC-ACC frame in Korean fits this general pattern; other languages that exemplify the same pattern include Fongbe (Lefebvre 1994) and Yaqui (Jelinek & Carnie 2003). For example, in Fongbe, 'give' occurs in the double object construction, whereas other verb types (e.g. transfer of possession verbs meaning 'pass', 'sell' and 'loan' and verbs of throwing) are not (Lefebvre 1994: 117–118). In Yaqui, verbs meaning 'give' are ditransitive (i.e. take double accusatives), while verbs of sending and throwing are not. Transfer of possession verbs and verbs of communicated messages seem to split across the constructions: verbs meaning 'lend', 'teach' and 'show' are found in the double accusative frame, while verbs meaning 'sell', 'pass/reach' and 'tell' are found only in the DAT-ACC frame (Jelinek & Carnie 2003: 273). Croft et al. (2001) predict that transfer of possession verbs will be most consistently found in

ditransitives because they denote giving events that necessarily involve change-of-possession and hence best fit the ditransitive prototype. However, this contradicts the previously observed distribution patterns of dative verbs within and across languages.

Levin (2004, 2008b) proposes an alternative analysis that solves this problem. In her view, the ordering of semantic verb classes in the hierarchy reflects how naturally the particular verb type can be associated with the caused possession event type, not with the transfer-of-possession event type. Building on this idea, I argue that the semantic classes of dative verbs form a refined implicational hierarchy which ranks verbs in terms of the degree of the compatibility with the caused possession event type as in (42) and that potential variation in and across languages may be modeled by the choice of the cut-off point on this hierarchy with respect to expression in the ditransitive construction.[14]

(42)   *Scale of increasing compatibility with the caused possession event type*
        'give' > other pure caused possession verbs > transfer of possession verbs > verbs of sending > verbs of throwing

The idea that verbs' occurrence in a particular construction is determined to a very large degree by their compatibility with the individual senses of the construction plays a central role in the analysis of argument realization in constructional approaches (Goldberg 1995, 1997; Michaelis & Ruppenhofer 2000, 2001; Yoon 2013; Yi 2016). In this section, I suggest three criteria for compatibility between verb meaning and constructional meaning and show that the analysis of verb–construction compatibility proposed here, when combined with an account of variation, provides a unified explanation for verb distribution patterns observed for ditransitive constructions within and across languages and the morphosyntactic expression of recipients of dative verbs in Korean.

The first criterion for compatibility between verb meaning and constructional meaning is whether a verb inherently entails the meaning of the construction. This criterion distinguishes caused possession verbs from other verbs: as discussed in Section 2 above, caused possession verbs, not caused motion verbs, lexicalize caused possession and thus inherently entail it. Therefore, caused possession verbs are naturally associated with the caused possession event type due to the very meaning they lexicalize, and concomitantly, they are more compatible with the ditransitive construction than other verbs.

The second criterion is the number of meaning components a verb elaborates or adds: the fewer meaning components a verb elaborates or adds beyond what is already encoded in the construction, the more compatible it is with the construction. Here, 'elaboration' means contributing additional information about what is encoded in the semantic representation of the construction, and 'addition' means

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[14] Like the verb hierarchy in (41), the hierarchy in (42) ranks the verbs in terms of their distance from the ditransitive prototype, but it differs from (41) in that it takes as a prototypical event type associated with ditransitives caused possession, not transfer of possession.

contributing additional meaning components which are not encoded in the semantic representation of the construction. According to this criterion, 'give' is most compatible with the ditransitive construction because as Goldberg (1995) and Levin (2004, 2008b) note, it simply instantiates the caused possession event type without contributing anything beyond what is already encoded in it. Other caused possession verbs contribute additional information by elaborating on the caused possession event type or adding further meaning components to it: pure caused possession verbs elaborate on the caused possession event type by contributing the component which specifies the kind of possession involved and the sublexical modality component which restricts the possible worlds in which the change of possession holds. In addition to specifying these components, transfer of possession verbs further add a result state that is not encoded in the caused possession event type, i.e. loss of possession by the causer (Beavers 2011). Thus, transfer of possession verbs both elaborate on the caused possession event type and add further meaning components to it. Caused motion verbs are similar to transfer of possession verbs in this respect, but differ from transfer of possession verbs in that the added meaning component is a caused event (a movement event), not a possessive result.

The criterion of the number of meaning components elaborated or added by a verb also distinguishes the two major subtypes of caused motion verbs, i.e. *send*-type verbs and *throw*-type verbs, explaining their placement on the verb class hierarchy. *Throw*-type verbs are below the *send*-type verbs in the verb class hierarchy as they lexicalize some manner of motion, i.e. the causer's instantaneous imparting of a force on an entity, and so add more meaning components that are not encoded in the caused possession event type, compared to the *send*-type verbs.[15] Thus, by the very nature of the meaning they lexicalize, *throw*-type verbs are less likely to focus on the possessive result.

This second criterion for compatibility between verb meaning and constructional meaning only concerns the number of meaning components a verb specifies beyond what is already encoded in the construction; it does not concern the nature of such meaning components, i.e, whether a verb simply elaborates on the constructional meaning or adds further meaning components to it. But this matters as it distinguishes pure caused possession verbs from other verbs and there are languages such as Korean and Yaqui in which the morphosyntactic expression of recipients is sensitive to this distinction. Hence, I suggest the nature of verbs' contribution, i.e. elaboration or addition, as a third criterion which determines compatibility between verb meaning and constructional meaning. According to this criterion, a verb class whose members only refine on what is encoded in the caused possession

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[15] As Levin (2008b) and Yoon (2013) suggest, *send*- and *throw*-type verbs also differ with respect to the number of arguments their members entail: three for *send*-type verbs and two for *throw*-type verbs. Although this criterion is not included among the criteria for verb–construction compatibility I suggest here, a verb must entail three arguments and be able to describe three-participant events in order to inherently entail the caused possession event type. Thus, the number of arguments members of a verb class entail can be viewed as a precondition for the first criterion for verb–construction compatibility, i.e. the entailment condition.

Verb or verb classes	Criteria for verb-construction compatibility		
	Entail caused possession or not	Number of meaning components members of the verb class contribute (beyond caused possession)	Nature of verbs' contribution
'give'	Yes	0	—
Other verbs of pure caused possession	Yes	More than 1	Elaboration
Transfer of possession verbs	Yes	More than 2	Addition (state)
Send-type verbs	No	More than 2	Addition (event)
Throw-type verbs	No	More than 3	Addition (event and manner)

Table 2
Summary of verbs in different degrees of compatibility with caused possession.

event type is more directly associated with the event type and so more compatible with the ditransitive construction than a verb class whose members contribute an additional event or state. This criterion captures the difference between pure caused possession verbs and transfer of possession verbs, explaining why the former verb class is higher than the latter in the verb class hierarchy.

Do all of these three criteria for verb–construction compatibility have equal status? Clearly not. That the verb must inherently entail the caused possession event type is the most important condition, and serves as a necessary condition in many languages which allow only a closed class of verbs to be used in the ditransitive construction. The reason for this might be that the entailment relationship between verbs and constructions is the most common and the most prototypical way in which verbs and constructions are related (Goldberg 1995, 1997). The other two criteria are less important, and serve to distinguish verb classes that are indistinguishable by the first criterion.

Given these criteria, we can characterize the different degrees of the compatibility of the semantic classes of verbs with the basic meaning of the ditransitive construction, i.e. the caused possession meaning, as in Table 2. In this table, the most compatible verb is 'give': it entails the caused possession event type without contributing anything beyond what is already encoded in it. The second most compatible verbs are other verbs of pure caused possession, verbs which entail the caused possession event type and elaborate on it. The third most compatible verbs are transfer of possession verbs: they are less compatible with the caused possession event type than verbs of pure caused possession as they contribute more meaning components and the nature of their contribution is addition, not elaboration. The fourth most compatible verbs are *send*-type verbs: these verbs do not meet the first criterion of compatibility and add a caused event which is not encoded in the

61

caused possession event type. The least compatible verbs are *throw*-type verbs as they do not meet the first criterion of compatibility and add a greater number of meaning components than *send*-type verbs.

Kittilä (2006) discusses languages in which only 'give' is found in a ditransitive construction. Examples of such languages include Walmatjari, Erromangan and Berbice Dutch Creole (Kittilä 2006). In Walmatjari and Berbice Dutch Creole, 'give' is the only genuinely ditransitive verb, and in Erromangan, there are three other verbs that pattern ditransitively. Kittilä (2006) observes that unlike 'give', these three ditransitive verbs permit their recipient to bear a marking distinct from the direct object. Further examples of languages with similar variation include Pitjantjatjara, Gurr-Goni, Nungali, and Martuthunira.

Languages differ as to the extent they extend the construction to other verbs. As Levin (2004, 2008b) suggests, this variation may be modeled by the choice of the cut-off point on the verb hierarchy with respect to expression in the ditransitive construction. Korean exemplifies a language in which only members of the verb class that is most compatible with the caused possession event type, i.e. pure caused possession verbs, are found in the ditransitive construction. On the present account, the limited productivity of the dative/accusative alternation in the Korean dative verbs is understood as resulting from choosing the cut-off point at the second highest end of the verb hierarchy in (51). Mandarin Chinese is an example of a language which extends the ditransitive (double object) construction to the next most compatible verb class, that is, transfer of possession verbs according to (Chung & Gordon 1998: 113). Dutch extends the double object construction further down on the hierarchy, admitting *send*-type verbs but not *throw*-type verbs (Croft et al. 2001). Languages such as English and Greek choose the cut-off point at the lowest end of the hierarchy, admitting the least compatible verb class, i.e. *throw*-type verbs, in the ditransitive construction.[16]

Croft et al. (2001) propose that the caused motion construction is associated with the lower end of a ditransitivity hierarchy. As discussed in Section 3, the DAT-ACC frame of Korean dative verbs has a caused motion meaning as the basic meaning, and thus, can be considered an instantiation of the caused motion construction. Again, the verbs that are found in this frame are determined by their compatibility with the individual meanings (basic or extended) of the frame. Caused motion verbs meet the first criterion of compatibility as they inherently entail the basic meaning of the DAT-ACC frame. Therefore, these verbs are naturally associated with the caused motion event type, and thus, with the caused motion construction.

In contrast, caused possession verbs do not entail the basic meaning of the DAT-ACC frame. These verbs can nevertheless occur in the frame as they inherently entail one of the extended meanings of the frame. Thus, verb distribution in both

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[16] An anonymous *JL* referee points out that there are native speakers of Mandarin Chinese who admit *send*-/*throw*-type verbs in the double object construction. Verb distribution in this variety of Mandarin Chinese can be described in a way analogous to verb distribution patterns found in the English double object construction and the Greek double accusative construction.

frames of Korean dative verbs can be captured in a uniform manner in terms of the entailment condition on the semantic compatibility of verbs with constructions. That is, in order for a verb to occur in a particular morphosyntactic frame, it must entail the basic or (one of) the extended meanings of the frame, and the realization of a verb's arguments in the ACC-ACC frame imposes a stronger requirement on compatibility, i.e. satisfaction of both the entailment condition and the condition that a verb must not add an event or a state which is not specified in the basic meaning of the frame.

In summary, I have argued that the semantic classes of dative verbs form a refined implicational hierarchy 'give> other verbs of pure caused possession > transfer of possession verbs > *send*-type verbs > *throw*-type verbs' which ranks verbs in terms of the degree of the compatibility with a caused possession event type. I have suggested three criteria for compatibility between verb meaning and constructional meaning and have shown that the analysis of verb–construction pairings proposed here, when combined with an account of variation, provides a unified explanation for verb distribution patterns observed for ditransitive constructions within and across languages and the morphosyntactic expression of recipients of dative verbs in Korean.

5. DITRANSITIVE ASYMMETRIES REVISITED: QUANTIFIER SCOPE INTERACTIONS

As we have seen in Section 3, the DAT-ACC and ACC-ACC frames differ in their basic meaning. This difference raises the question whether there are syntactic differences between them.
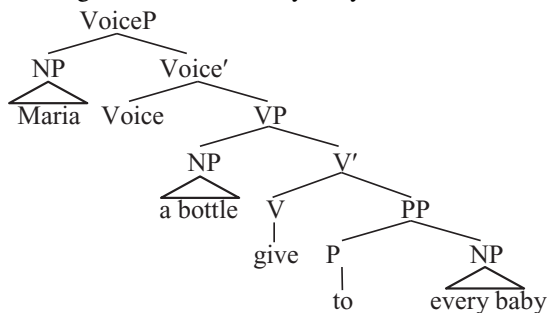
Despite free word order and the absence of an NP–PP alternation in Korean, the two frames of Korean dative verbs have been analyzed as syntactically and semantically analogous to the English dative alternation. In this section, I reassess evidence for the structurally parallel treatment of dative constructions in English and Korean adduced from quantifier scope and argue that the facts of quantifier scope in Korean are not compatible with such a treatment and can be better explained by an alternative theory, which posits the same structure for the ACC-ACC and DAT-ACC frames.

It is well known that double object constructions (DOCs) in English, in contrast with the prepositional dative constructions (PDCs), disallow inverse scope of the second object over the first. In the PDC, a universal quantifier in the recipient can take wide scope with respect to an existential quantifier in the theme, as in (43a). In contrast, in the DOC, scope is fixed to the surface order: an existential quantifier in the recipient must take wide scope with respect to a universal quantifier in the theme, as in (43b).
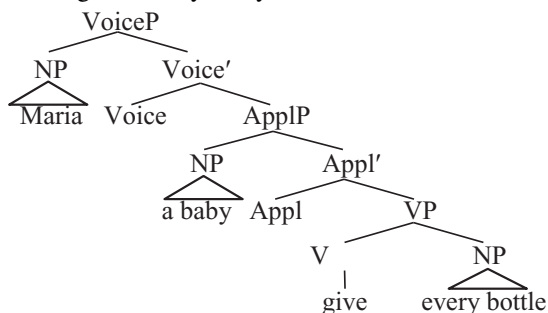
(43)   (a)   Maria gave a bottle to every baby.   ($\exists > \forall$, $\forall > \exists$)
       (b)   Maria gave a baby every bottle.   ($\exists > \forall$, *$\forall > \exists$)

Bruening (2001, 2010) argues that this difference between the DOC and the PDC receives a simple account in an asymmetric theory of the English dative constructions. In this theory, the DOC has the recipient NP introduced by an Appl(icative) head (Marantz 1993) that appears between the lexical V, which introduces the internal (theme) argument, and Voice, which introduces the external argument. In contrast, the PDC has a small clause structure, where the theme argument is the specifier of a PP headed by *to* (see Bruening 2001 for details). The structure that Bruening (2001, 2010) posits for the quantifier examples in (43a) and (43b) are (44) and (45), respectively.
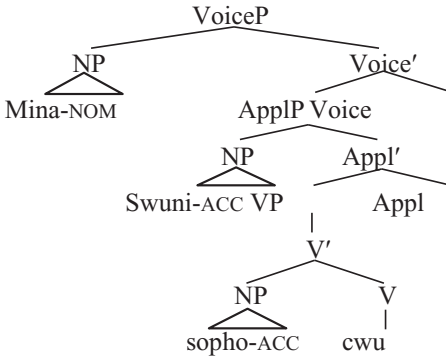
(44)   Maria gave a bottle to every baby.

```
                VoiceP
              /        \
           NP           Voice′
          /            /      \
      Maria        Voice       VP
                            /      \
                          NP        V′
                       a bottle   /    \
                                 V      PP
                                 |    /    \
                               give  P      NP
                                     |   every baby
                                     to
```

(45)   Maria gave a baby every bottle.

```
                VoiceP
              /        \
           NP           Voice′
          /            /      \
      Maria        Voice      ApplP
                            /        \
                          NP          Appl′
                        a baby      /        \
                                 Appl          VP
                                           /        \
                                          V          NP
                                          |      every bottle
                                        give
```
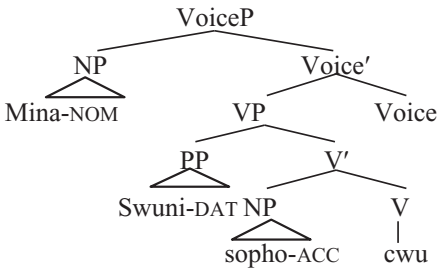
In (45), the first object asymmetrically m-commands the second. Hence, the second object will be unable to cross over the first in any scope-taking movement, given standard theories of the locality of movement. In contrast, in the prepositional dative structure in (44), the first NP and the PP m-command each other (they are both minimally contained within the same maximal projection) are equidistant for movement to higher positions to take scope. Hence, either the first NP moves first and takes higher scope, or the PP moves and takes scope higher than the first NP.

Building on ideas in Marantz (1993) and Bruening (2001, 2010), L. Kim (2015), proposes an asymmetric account of the Korean dative constructions, which posits a different structure for the ACC-ACC frame and the DAT-ACC frame, as illustrated in (46).

(46) (a) *Structure for the ACC-ACC frame in L. Kim's (2015) asymmetric account*

```
                        VoiceP
               ┌──────────┴──────────┐
              NP                    Voice′
           Mina-NOM          ┌────────┴────────┐
                          ApplP               Voice
                     ┌──────┴──────┐
                    NP           Appl′
               Swuni-ACC  VP  ┌────┴────┐
                              VP        Appl
                              │
                              V′
                         ┌────┴────┐
                        NP         V
                     sopho-ACC     │
                                  cwu
```

(b) *Structure for the DAT-ACC frame in L. Kim's (2015) asymmetric account*

```
                        VoiceP
               ┌──────────┴──────────┐
              NP                    Voice′
           Mina-NOM          ┌────────┴────────┐
                            VP               Voice
                     ┌──────┴──────┐
                    PP           V′
               Swuni-DAT  NP  ┌────┴────┐
                              NP        V
                           sopho-ACC    │
                                       cwu
```

On L. Kim's account, the ACC-ACC frame, like the English DOC in (45) above, has an additional layer of applicative structure with the meaning of possession above VP, seen in (46a), whereas the DAT-ACC frame, like the English PDC in (44) above, has a simpler structure, involving only VP, as seen in (46b).

L. Kim (2015) contends that the two dative constructions in Korean show a scope asymmetry, based on examples (47) and (48).

(47) *Quantifier scope in the DAT-ACC frame* (L. Kim 2015: 37)
   (a) [Recipient–Theme order]
        Hana-ka   etten ai-eykey motun chayk-ul   cwu-ess-ta.
        Hana-NOM some kid-DAT   every book-ACC   give-PST-DECL
        ∃ > ∀: 'Hana gave every book to a particular kid.'
        *∀ > ∃: 'For every book, Hana gave it to a different kid.'
   (b) [Theme–Recipient order]
        Hana-ka   motun chayk-ul etten   ai-eykey cwu-ess-ta.
        Hana-NOM every book-ACC some   kid-DAT   give-PST-DECL
        ∃ > ∀: 'Hana gave every book to a particular kid.'
        ∀ > ∃: 'For every book, Hana gave it to a different kid.'

65

    (c)   [Theme–Recipient order]

         Hana-ka   etten chayk-ul motun ai-eykey cwu-ess-ta.

         Hana-NOM some book-ACC every kid-DAT give-PST-DECL

         ∃ > ∀: 'There is a particular book that Hana gave to all the kids.'

         ∀ > ∃: 'For every kid, Hana gave a different book to him/her.'

The examples in (47), taken from L. Kim (2015), show that in the DAT-ACC frame, scope is fixed to the surface order in the canonical order in which the recipient precedes the theme, but flexible in the scrambled order. Thus, in (47a), the canonical order receives only the surface scope reading, in which an existential quantifier in the recipient takes wide scope with respect to a universal quantifier in the theme. This contrasts with the scrambled order in (47b) and (47c), where both the surface scope reading and the inverse scope are possible (in L. Kim's judgments).

    L. Kim (2015) claims that the ACC-ACC frame shows the same scope freezing in the canonical order seen in (48a).
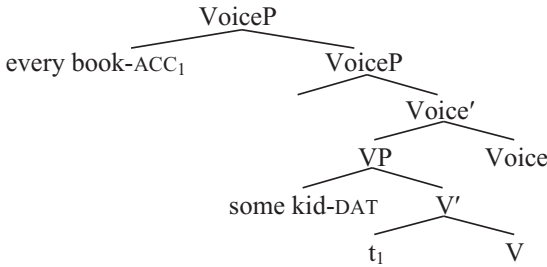
(48)   *Quantifier scope in the ACC-ACC frame* (L. Kim 2015: 37)

    (a)   [Recipient–Theme order]

         Hana-ka   etten ai-lul   motun chayk-ul cwu-ess-ta.

         Hana-NOM some kid-ACC   every book-ACC give-PST-DECL

         ∃ > ∀: 'Hana gave every book to a particular kid.'

         *∀ > ∃: 'For every book, Hana gave it to a different kid.'

    (b)   [Theme–Recipient order]

         Hana-ka   motun chayk-ul etten ai-lul   cwu-ess-ta.

         Hana-NOM all   book-ACC some kid-ACC   give-PST-DECL

         ∃ > ∀: 'Hana gave every book to a particular kid.'

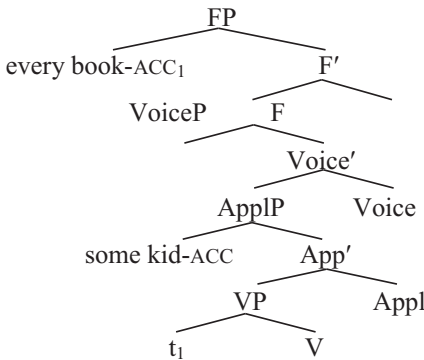   *∀ > ∃: 'For every book, Hana gave it to a different kid.'

She contends that unlike what we find in the scrambled order of the DAT-ACC frame, scope is frozen in the scrambled order of the ACC-ACC frame, seen in (48b), so that the surface scope reading is unavailable, and only the inverse reading, in which the recipient takes scope over the theme, is possible.

    L. Kim (2015) assumes that the scrambling of the theme across the recipient in the DAT-ACC frame is an instance of A-movement, whereas the scrambling of the theme across the recipient in the ACC-ACC frame is an instance of A′-movement (see L. Kim (2015: 38–40) for details), and proposes that the scope difference between the two frames follows from the asymmetric structures shown in (49): (49a) is the structure for the example in (47b) above, and (49b) is the structure for the example in (48b).

(46) (a) *Scrambled order of the DAT-ACC frame*

```
              VoiceP
         ┌──────┴──────┐
every book-ACC₁      VoiceP
                 ┌─────┴─────┐
                VP          Voice′
          ┌──────┴──────┐  ┌──┴──┐
     some kid-DAT      V′  VP   Voice
                      ┌─┴─┐
                     t₁   V
```

(b) *Scrambled order of the ACC-ACC frame*

```
                  FP
         ┌────────┴────────┐
every book-ACC₁           F′
     ┌──────┴──────┐  ┌────┴────┐
  VoiceP          F  VoiceP   Voice′
                        ┌────┴────┐
                     ApplP      Voice
                 ┌─────┴─────┐
           some kid-ACC    App′
                       ┌─────┴─────┐
                      VP          Appl
                   ┌───┴───┐
                  t₁       V
```

In L. Kim's (2015) asymmetric account, the two objects in the DAT-ACC frame (49a) reside within the same maximal domain, the VP, and so in the resulting structure either the recipient or the theme can undergo movement to check the feature associated with A-scrambling on Voice. This thus predicts that the scrambled order of the DAT-ACC frame will be ambiguous between the surface and the inverse scope readings. The same A-scrambling can take place in the ACC-ACC frame. However, the locality condition on movement results in the theme never being able to cross the higher object (recipient) in A-scrambling. As illustrated in the proposed asymmetric structure (49b), the objects in the ACC-ACC frame are not contained within the same maximal domain: the first object is introduced by Appl, while the second object stays inside the VP. This is why the theme is unable to cross the higher object (recipient) in a scope-taking movement, resulting in the inverse scope being unavailable in the ACC-ACC frame. Instead, the only way for the theme to move across the recipient is by A′-scrambling, meaning that the theme may A′-scramble to to some FP above VoiceP that would check the feature associated with A′-scrambling, as in (49b).

A closer look at the scope properties of the two frames, however, suggests that the Korean data are actually problematic for L. Kimhwith Ae same maximaShe does not thoroughly examine how scope possibilities change according to the quantifiers involved. Consider sentences below, in (50) (the DAT-ACC frame) and (51) (the

67

ACC-ACC frame), in which the recipient is modified by the universal quantifier *motun* 'all, every', and the theme by the existential quantifier *etten* 'some'.

(50) *Quantifier scope in the DAT-ACC frame*
    (a) [Recipient-Theme order]
        Hana-ka motun ai-eykey etten chayk-ul cwu-ess-ta.
        Hana-NOM every kid-DAT some book-ACC give-PST-DECL
        ∃ > ∀: 'There is a particular book that Hana gave to all the kids.'
        ∀ > ∃: 'For every kid, Hana gave a different book to him/her.'
    (b) [Theme-Recipient order]
        Hana-ka etten chayk-ul moten ai-eykey cwu-ess-ta.
        Hana-NOM some book-ACC every kid-DAT give-PST-DECL
        ∃ > ∀: 'There is a particular book that Hana gave to all the kids.'
        ∀ > ∃: 'For every kid, Hana gave a different book to him/her.'

(51) *Quantifier scope in the ACC-ACC frame*
    (a) [Recipient-Theme order]
        Hana-ka motun ai-lul etten chayk-ul cwu-ess-ta.
        Hana-NOM every kid-ACC some book-ACC give-PST-DECL
        ∃ > ∀: 'There is a particular book that Hana gave to all the kids.'
        ∀ > ∃: 'For every kid, Hana gave a different book to him/her.'
    (b) [Theme-Recipient order]
        Hana-ka etten chayk-ul moten ai-lul cwu-ess-ta.
        Hana-NOM some book-ACC every kid-ACC give-PST-DECL
        ∃ > ∀: 'There is a particular book that Hana gave to all the kids.'
        ∀ > ∃: 'For every kid, Hana gave a different book to him/her.'

Sentences in (50a) and (51a) are canonical order sentences of each frame, and sentences in (50b) and (51b) are scrambled order sentences. Native speakers that I have consulted accept the DAT-ACC and the ACC-ACC sentences in (50) and (51) under both the surface scope interpretation and the inverse scope interpretation in either the canonical or scrambled order. If the ACC-ACC frame were structurally parallel to the English DOC, sentences in (51) should show the same scope freezing that is observed in the English DOC regardless of the quantifiers involved.

Furthermore, the speakers that I have consulted do not agree with L. Kim's judgments of the example in (48b) above: they accept it under both the inverse scope interpretation and the surface scope interpretation. Whereas the surface scope interpretation is dispreferred in (48b), it is not completely unavailable.

The patterns of quantifier scope interaction discussed in this section are summarized in Table 3 and Table 4 ('Rec > Th' indicates the wide scope interpretation of the recipient, and 'Th > Rec' the wide scope interpretation of the theme). As shown in these two tables, the Korean data strongly suggest that the relative scope of quantified recipient and theme arguments does not show a sharp contrast in the two frames and is sensitive to the quantifiers involved. Thus, sentences of both frames with a universally quantified theme and an existentially quantified theme show

Word order	DAT-ACC frame		ACC-ACC frame	
	Rec > Th	Th > Rec	Rec > Th	Th > Rec
Canonical order [Rec–Th]	√	*	√	*
Scrambled order [Th–Rec]	√ (strongly preferred)	√	√ (strongly preferred)	√

Table 3
Patterns of quantifier scope interaction in the two frames (Recipient-∃, theme-∀).

Word order	DAT-ACC frame		ACC-ACC frame	
	Rec > Th	Th > Rec	Rec > Th	Th > Rec
Canonical order [Rec-Th]	√	√	√	√
Scrambled order [Th-Rec]	√	√	√	√

Table 4
Patterns of quantifier scope interaction in the two frames (Recipient-∀, theme-∃).

variable scope in either order. These sentences contrast with sentences with an existentially quantified recipient and a universally quantified theme, where only the wide scope interpretation of the recipient is available or strongly preferred. The absence of scope asymmetry in the DAT-ACC and the ACC-ACC frames supports the same structure for these two frames in which both the theme and the recipient are argument of V, as in L. Kim's (2015) structure for the DAT-ACC frame in (46b) (canonical order) and in (49a) (scrambled order). Thus, in both frames, the theme and the recipient m-command each other (they are both minimally contained within the same maximal projection) are equidistant for movement to higher positions to take scope. Hence, either the theme moves first and takes higher scope, or the recipient moves and takes scope higher than theme.[17]

In summary, I have reassessed evidence for the asymmetric account of the dative constructions in Korean adduced from quantifier scope and have demonstrated that the facts of quantifier scope in Korean are not compatible with L. Kim's (2015) asymmetric account and are better accounted for by an alternative theory which posits the same structure for the two frames. The fact that unlike the DOC and the PDC in English, the DAT-ACC and the ACC-ACC frames do not show an asymmetry in quantifier scope provides strong support to the conclusion that the dative constructions in the two languages are not parallel not only semantically but also syntactically. Whether other phenomena such as idiom formation and

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[17] The next question is why sentences with a recipient modified by the indefinite determiner *etten* 'some' and a theme modified by the universal quantifier *moten* 'every' show scope rigidity in both canonical and scrambled order. I will leave a full investigation of this question for future work.

nominalization that L. Kim (2015) takes as evidence in support of her asymmetric account require such an explanation I leave for future work.

6. CONCLUSION

In this paper, I have presented an analysis of the morphosyntactic expression of recipients of dative verbs which succeeds in accounting for the limited productivity of the dative/accusative alternation in dative verbs in Korean while simultaneously explaining patterns of verb distribution in ditransitive constructions within and across languages. I have suggested that in order to fully understand the alternation, one must recognize more fine-grained distinctions among caused possession verbs than have been recognized, i.e. 'give' vs. other verbs of pure caused possession vs. transfer of possession verbs. Semantic classes of dative verbs have been argued to form an implicational hierarchy which ranks verbs in terms of the degree of the compatibility with a caused possession event type. I have also suggested three criteria for compatibility between verb meaning and constructional meaning and have shown that the analysis of verb–construction pairings proposed here, when combined with an account of variation, provides a unified explanation for verb distribution patterns observed for ditransitive constructions within and across languages and the morphosyntactic expression of recipients of dative verbs in Korean. It accounts for the limited productivity of the dative/accusative alternation in dative verbs in Korean as a consequence of choosing the cut-off point at the second highest end of the verb hierarchy, thus explaining why only pure caused possession verbs may express their recipient argument using accusative case as well as dative case and why the ditransitive (multiple accusative) construction is not extended to other verb classes.

Nevertheless, the present study has an important theoretical limitation in that it allows for a considerable degree of redundancy between the meanings posited for the two frames of dative verbs and the meanings of the associated verbs. For example, the caused motion meaning, which is argued to be the basic meaning of the DAT-ACC frame, is present in the meanings of caused motion verbs; the two extended meanings of this frame, the transfer of possession meaning and the caused possession meaning, correspond to the transfer of possession verbs and the pure caused possession verbs. While some notion of compatibility between verb meaning and constructional meaning is clearly needed to explain the observed patterns of argument realization with dative verbs, more research is needed to investigate how reduction of meanings could be effected.

Final open questions are why some members of the class of transfer of possession verbs (e.g. *swuyeha-* 'award') trigger variable judgments about the acceptability of the ACC-ACC frame and why some members of the class of pure caused possession verbs (e.g. *cipwulha-* 'pay' and *yaksokha-* 'promise') are not found in the ACC-ACC frame and express their recipient argument using dative case only. A full explanation of the variability within the same semantic class of verbs would require a better understanding of the specific contribution of the idiosyncratic meaning of verbs and its interaction with verbs' structural meanings and constructions' meanings.

70

REFERENCES

Anagnostopoulou, Elena. 2002. *The syntax of ditransitives: Evidence from clitics*. Berlin: Mouton de Gruyter.

Beavers, John. 2011. An aspectual analysis of ditransitive verbs of caused possession in English. *Journal of Semantics* 28.1, 1–54.

Beavers, John & Chiyo Nishida. 2010. The Spanish dative alternation revisited. In Sonia Colina, Antxon Olarrea & Ana Maria Carvalho (eds.), *Romance Linguistics 2009: Selected papers from the 39th Linguistic Symposium on Romance Languages* (LSRL), 217–30. Amsterdam: John Benjamins.

Beavers, John, Elias Ponvert & Stephen Wechsler. 2009. Possession of a controlled substantive: *Have* and other verbs of possession. In Tova Friedman & Satoshi Ito (eds.), *Proceedings of Semantics and Linguistic Theory* (SALT XVIII), 108–125. Ithaca, NY: Cornell University.

Beck, Sigrid & Kyle Johnson. 2004. Double objects again. *Linguistic Inquiry* 35.1, 97–123.

Bruening, Benjamin. 2001. QR obeys superiority: Frozen scope and ACD. *Linguistic Inquiry* 32.2, 233–273.

Bruening, Benjamin. 2010. Ditransitive asymmetries and a theory of idiom formation. *Linguistic Inquiry* 41.4, 519–562.

Cho, Eun. 1996. Multiple feature checking and accusative case on the passives. In Hee-Don Ahn (ed.), *Morphosyntax in generative grammar*, 113–122. Seoul: Hankuk Publishing.

Chung, Ting Ting Rachel & Peter Gordon. 1998. The acquisition of Chinese dative constructions. *Proceedings of the 22nd Annual Boston University Conference on Child Language Development*, 109–120. Somerville, MA: Cascadilla Press.

Croft, William, Jóhanna Barddal, Willem Hollmann, Maike Nielsen, Violeta Sotirova & Chiaki Taoka. 2001. *Discriminating verb meanings: The case of transfer verbs*. Handout. LAGB Autumn Meeting, Reading.

Goldberg, Adele. 1995. *Constructions: A construction grammar approach to argument structure*. Chicago, IL: University of Chicago Press.

Goldberg, Adele. 1997. The relationships between verbs and constructions. In Marjolijn Verspoor, Ki-Dong Lee & Eve Sweetser (eds.), *Lexical and syntactical constructions and the construction of meaning*, 383–398. Amsterdam: John Benjamins.

Green, Georgia. 1974. *Semantics and syntactic regularity*. Bloomington, IN: Indiana University Press.

Gruber, Jeffrey. 1965. *Studies in lexical relations*. Ph.D. Dissertation, MIT.

Harley, Heidi. 2002. Possession and the double object construction. In Pierre Pica & John Rooryck (eds.), *Linguistic variation yearbook* 2, 31–70. Amsterdam: John Benjamins.

Harley, Heidi & Hyun Kyoung Jung. 2015. In support of the P$_{\text{HAVE}}$ analysis of the double object construction. *Linguistic Inquiry* 46.4, 703–730.

Haspelmath, Martin. 2005. Ditransitive constructions: The verb 'give'. In Martin Haspelmath, Matthew Dryer, David Gil & Bernard Comrie (eds.), *World atlas of language structures*, 426–429. Oxford: Oxford University Press.

Hong, Ki-Sun. 1991. *Argument selection and case marking in Korean*. Ph.D. dissertation, Stanford University.

Jackendoff, Ray. 1972. *Semantic interpretation in generative grammar*. Cambridge, MA: MIT Press.

Jackendoff, Ray. 1983. *Semantics and cognition*. Cambridge, MA: MIT Press.

Jelinek, Eloise & Andrew Carnie. 2003. Argument hierarchies and the mapping principle. In Andrew Carnie, Heidi Harley & MaryAnn Willie, (eds.), *Formal approaches to function in grammar*, 265–296. Amsterdam: John Benjamins.

Jung, Yeun-Jin & Shigeru Miyagawa. 2004. Decomposing ditransitive verbs. In *Proceedings of the 6th Seoul International Conference on Generative Grammar*, 101–120. Seoul: Hansung University.

Kim, Lan. 2015. Asymmetric ditransitive constructions: Evidence from Korean. *Lingua* 165, 28–69.

Kim, Youngjoo. 1990. *The syntax and semantics of Korean case: The interaction between lexical and syntactic levels of representation*. Ph.D. dissertation, Harvard University.

Kittilä, Seppo. 2006. The anomaly of the verb 'give' explained by its high (formal and semantic) transitivity. *Linguistics* 44.3, 569–612.

Koenig, Jean-Pierre & Anthony Davis. 2001. Sublexical modality and the structure of lexical semantic representations. *Linguistics and Philosophy* 24.1, 71–124.

Krifka, Manfred. 1999. Manner in dative alternation. In Sonya Bird, Andrew Carnie,. Jason Haugen & Peter Norquest (eds.), *Proceeding of the 18th West Coast Conference on Formal Linguistics* (WCCFL 18), 260–271. Somerville, MA: Cascadilla Press.

71

Krifka, Manfred. 2004. Semantic and pragmatic conditions for the dative alternation. *Korean Journal of English Language and Linguistics* 4, 1–32.

Lefebvre, Claire. 1994. New facts from Fongbe on the double object construction. *Lingua* 94.2–3, 69–123.

Levin, Beth. 2004. Verbs and constructions: Where next? Handout. Western Conference on Linguistics, University of Southern California, Los Angeles.

Levin, Beth. 2008a. Dative verbs: A crosslinguistic perspective. *Lingvisticæ Investigationes* 31.2, 285–312.

Levin, Beth. 2008b. *Dative verbs and dative alternations from a crosslinguistic perspective*. Handout. Department of Linguistics, Harvard University.

Levin, Beth. 2010. *The semantic bases of Japanese and Korean ditransitives*. Handout. The 20th Conference on Japanese/Korean Linguistics, Oxford.

Malchukov, Andrej, Martin Haspelmath & Bernard Comrie. 2010. Ditransitive constructions: A typological overview. In Andrej Malchukov, Martin Haspelmath & Bernard Comrie (eds.), *Studies in ditransitive constructions: A comparative handbook*, 1–64. Mouton: De Gruyter.

Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In Sam A. Mchombo (ed.), *Theoretical aspects of Bantu grammar*, 113–150. Stanford, CA: CSLI Publications.

Michaelis, Laura A. & Josef Ruppenhofer. 2000. Valence creation and the German applicative: The inherent semantics of linking patterns. *Journal of Semantics* 17.4, 335–395.

Michaelis, Laura A. & Josef Ruppenhofer. 2001. *Beyond alternations: A constructional model of the German applicative*. Stanford, CA: CSLI Publications.

Miller, George & Philip Johnson-Laird. 1976. *Language and perception*. Cambridge, MA: Harvard University Press.

Miyagawa, Shigeru & Takae Tsujioka 2004. Argument structure and ditransitive verbs in Japanese. *Journal of East Asian Linguistics* 13.1, 1–38.

Oehrle, Richard T. 1976. Review of Georgia M. Green, *Semantics and syntactic regularity*. *Language* 53.1, 198–208.

Park, Sang Doh & John Whitman. 2003. Direct movement passives in Korean and Japanese. *Japanese/ Korean Linguistics* 12, 307–321.

Pesetsky, David. 1995. *Zero syntax*. Cambridge, MA: MIT Press.

Pinker, Steven. 1989. *Learnability and cognition: The acquisition of argument structure*. Cambridge, MA: MIT Press.

Rappaport Hovav, Malka & Beth Levin. 2008. The English dative alternation: A case for verb sensitivity. *Journal of Linguistics* 44.1, 129–167.

Sohn, Ho-Min. 2001. *The Korean language*. Cambridge: Cambridge University Press.

Taylor, John. 1996. *Possessives in English*. Oxford: Oxford University Press.

Tham, Shiao Wei. 2004. *Representing possessive predication: Semantic dimensions and pragmatic bases*. Ph.D. dissertation, Stanford University.

Vikner, Carl & Per Anker Jensen. 2002. A semantic analysis of the English genitive: Interaction of lexical and formal semantics. *Studia Linguistica* 56.2, 191–226.

Yi, Eunkyung. 2016. *Exploring the cognitive underpinnings of the correspondence between verb meaning and syntax*. Ph.D. dissertation, The University of Buffalo, State University of New York.

Yoon, Soyeon. 2013. Correlation between semantic compatibility and frequency: A usage-based approach. *Linguistic Research* 30.2, 243–272.

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