Verb Sensitivity and Argument Realization in Three-Participant Constructions: A Crosslinguistic Perspective

Beth Levin
Stanford University

DATIVE VERBS: The subset of ditransitive verbs that take agent, recipient (possessional goal), and theme arguments, such as *give*, *send*, and *throw*; contrast the other major subset, verbs of putting.

• RH&L (2008) argue for a **verb sensitive** approach to argument realization for English dative verbs, which recognizes fine-grained semantic distinctions among these verbs.

• The challenge in English: dative verbs show two argument realizations: a DATIVE ALTERNATION.

(1) a. Terry gave Sam an apple. (double object construction; recipient–theme order)

   b. Terry gave an apple to Sam. (*to* construction; theme–recipient order)

• Concomitantly, RH&L reassess the English facts used to support a competing **uniform multiple meaning** approach, which takes all dative verbs to have two distinct meanings, each giving rise to its own argument realization, and show they are better understood from a verb sensitive perspective.

• The verb sensitive approach appeals to three types of representations:
 — a verb's core meaning (i.e. its root)
 — the event types this meaning can be associated with
 — the morphosyntactic frames that realize these event types

• The verb sensitive account factors the argument realization problem with dative verbs in two:
 — associations between verbs and event types: (core) verb (meaning) $\Rightarrow$ event type
 — associations between event types and morphosyntactic frames:
  event type $\Rightarrow$ morphosyntactic frame

The uniform multiple meaning approach, in contrast, does not adequately distinguish among these representations, taking the verb/event type and event type/morphosyntactic frame relations as trivial.

• This factorization suggests two loci of crosslinguistic variation:
— (i) in the associations between verb meanings and event types
— (ii) in the associations between event types and morphosyntactic frames

Goal of this talk: To explore crosslinguistic variation, primarily in (ii).

1 Starting point: The argument realization problem posed by dative verbs

1.1 Representations relevant to an account of dative verbs

• a verb's root—its core lexicalized meaning (e.g., Grimshaw 2005, Pesetsky 1995, RH&L 1998):

(2) *hand*$_V$: 'use the hand for transfer'

- the event types—and semantic roles—that this meaning can be associated with, giving rise to a "full" verb meaning:

(3)   a.   CAUSED POSSESSION: 'x act cause **y** to have z' → **y** is a RECIPIENT
              e.g., 'x act with the hand cause **y** to have z'

        b.   CAUSED MOTION: 'x act cause z to be at **y**' → **y** is a SPATIAL GOAL
              e.g., 'x act with the hand cause z to be at **y**'

- the morphosyntactic frames—or syntactic configurations—that realize these event types:

(4)   a.   Double object construction: NP V NP NP (e.g., *Smith handed Jones the medal.*)

        b.   *to* construction: NP V NP *to* NP (e.g., *Smith handed the medal to Jones.*)

1.2   The two parts of the argument realization problem with dative verbs

- associations of verbs and event types: (core) verb (meaning) ⇒ event type

- associations of event types and morphosyntactic frames: event type ⇒ morphosyntactic frame

As mentioned, each constitutes a potential locus of crosslinguistic variation.

2   The verb sensitive approach introduced via English (RH&L 2008; also Jackendoff 1990

2.1   The lexicalized meanings of dative verbs

(5)   a.   *give*-type verbs: *assign, give, lend, loan, offer, promise, rent, sell, …*

        b.   *send*-type verbs: *forward, hand, mail, send, ship, …*; includes *throw*-type verbs: *fling, flip, kick, lob, slap, shoot, throw, toss, …*

        (Will ignore verbs involving communication of a message/transfer of information.)

- CORE DATIVE VERBS or, henceforth, *give*-TYPE VERBS:
    lexicalize causing a change of possession, i.e. lexically select a **recipient**: e.g., (3a).

Their meanings could be schematized as in (6), assuming a primitive HAVE, inherently signifying possession, whether stative (e.g., English *have, own*) or not (e.g., English *give, sell*); the verb's root elaborates on the form of possession specific to that verb (indicated by 'poss-type' in (6)).

(6)   [[x ACT] CAUSE [BECOME [y HAVE$_{<POSS-TYPE>}$ z]]]

— *give:* This verb's root does not contribute anything beyond what is already encoded in the caused possession event type in (6) (Goldberg 1995, 2006).

— OTHER VERBS OF GIVING: Their roots refine on the nature of the caused possession:
    e.g., *rent* and *lend* specify that the possession is temporary in some sense.
    e.g., *promise*, a verb of future having, contributes a modal operator (Koenig & Davis 2001:85).

• NONCORE DATIVE VERBS or, henceforth, *send*-TYPE VERBS:
   do not lexicalize caused possession; many are said to lexically select a **spatial goal**, e.g., (3b).

— (core) *send*-TYPE VERBS: They inherently describe causing a theme to move to a spatial goal.

(7)   [[x ACT$_{<SEND>}$] CAUSE [y GO [PATH z]]]

— *throw*-TYPE VERBS: They basically describe two-participant events in which one entity instantaneously imparts a force on a second entity, the force recipient. They differ in the manner in which the force is imparted or in the instrument used to impart the force.

(8)   [x ACT$_{<THROW>}$]

NOTE: As *send*- and *throw*-type verbs largely pattern together, they are taken to represent one type.

2.2   Dative verb ⇒ event type in English

• *give*-type roots are inherently associated with the caused possession event type; they are **not** associated with the caused motion event type, contra other work (e.g., Goldberg 1995, Harley 2003).

• *send*-type roots are inherently associated with the caused motion event type, as in (7).

• *throw*-type roots are associatable with the caused motion event type because events of imparting a force may cause the force recipient to move along a path to a goal.

(9)   [[x ACT$_{<THROW>}$] CAUSE [y GO [PATH z]]]

• The roots of *send*- and *throw*-type verbs may also be associated with the caused possession event type in English (Jackendoff 1990, RH&L 2008) and beyond (Croft et al. 2001, Levin 2008a) as they describe activities that provide the means to effect caused possession.

(10)   [[x ACT$_{<SEND/THROW>}$] CAUSE [y HAVE z]]

2.3   Event type ⇒ morphosyntactic frame in English

• Caused motion event type ⇒ *to* construction **only**; that is, spatial goals are marked by *to*.

• Caused possession event type ⇒ double object construction **or** *to* construction;
   that is, recipients meet the semantic characterizations for two syntactic realizations:

— FIRST OF TWO OBJECTS: It is dedicated to the expression of a "projected possessor"
   (Goldsmith 1980:429; also Goldberg 1995, Green 1974, Oehrle 1976, Pinker 1989).

— OBJECT OF *to*: It indicates various argument types, broadly falling under semantic notions covered by dative or allative cases of other languages (Haspelmath 2003): spatial goals, recipients, and some with less clear characterizations (e.g., *yield/submit/surrender/subject to*). Open to recipients as they qualify as a kind of goal by the Localist Hypothesis (Gruber 1965, Jackendoff 1983).

2.4 A summary of the verb sensitive approach to English dative verbs

• VERB ⇒ EVENT TYPE IN ENGLISH:
— *give*-type verbs: caused possession event type **only**.
— *send*-type verbs: caused motion **and** (for some argument choices) caused possession.

• EVENT TYPE ⇒ MORPHOSYNTACTIC FRAME IN ENGLISH:
— CAUSED POSSESSION: double object construction **and** *to* construction;
    recipient realized as first object or object of *to*.
— CAUSED MOTION: *to* construction **only**; spatial goal realized as object of *to*.

Noteworthy properties of the verb sensitive approach to English dative verbs.
• The association of verbs with event types is not uniform across all verbs.
• The pairing of event types with morphosyntactic frames is not one-to-one.

2.5 Comparison with the uniform multiple meaning approach
    (e.g., Beck & Johnson 2004, Harley 2003, Krifka 1999, 2004, Oehrle 1976, Pinker 1989)

On this approach, each verb has two distinct meanings, each with its own morphosyntactic frame.

• VERB ⇒ EVENT TYPE IN ENGLISH:
— **all** dative verbs: caused motion **and** caused possession event types;
    thus, all dative verbs can take spatial goals and recipients.

• EVENT TYPE ⇒ MORPHOSYNTACTIC FRAME IN ENGLISH:
— CAUSED POSSESSION: double object construction **only**.
— CAUSED MOTION: *to* construction **only**.

2.6 Evidence for the verb sensitive approach

• Evidence for the verb sensitive approach should come from the distribution of spatial goals.

WHY? Spatial goals are participants in the caused motion event type only, and this approach posits that *send-* and not *give*-type verbs are associated with the caused motion event type; concomitantly, spatial goals should be found with *send-* but not *give*-type verbs.

• This prediction can be verified by examining *to* phrases, which proponents of the uniform multiple meaning approach argue introduce spatial goals even with *give*-type verbs.

• *send*-type verbs in the *to* construction show certain properties that *give*-type verbs lack
    (Jackendoff 1990, Levinson 2005, RH&L 2008).

(11)   (In)ability to question the *to*-phrase with *where* (Levinson 2005):

        a.   To whom/where did you throw/send the ball?

        b.   To whom/*where did you give/offer the ball?

(12)   (In)ability to select spatial prepositions beside *to*:

        a.   Fred threw/kicked/sent the ball under the porch/behind the tree/over the fence.

        b.   ∗ Fred gave/offered the ball at/behind/over Mary.

(13)   (In)ability to take a source phrase (even in conjunction with a *to* phrase):

      a.   Jill threw/kicked/sent the ball from home plate to third base.

      b.   ∗ Josie gave/offered the tickets from Marla to Bill.

• These properties follow if *send-* but not *give-*type verbs take spatial goals.

• Thus, the presence of a *to* phrase is not on its own evidence that *give-*type verbs are associated with the caused motion event type, contra the uniform multiple meaning approach.

• Other types of evidence are presented in RH&L (2008): distributional asymmetries involving idioms, abstract themes, and the so-called "successful transfer inference" (Green 1974).

3   Crosslinguistic variation in 'event type ⇒ morphosyntactic frame'

3.1   A simplifying assumption underlying the survey of attested patterns

• THE ASSUMPTION: All languages show the same associations of verb types with event types:
— *give-*type verbs: caused possession **only**.
— *send-*type verbs: caused motion **and** caused possession.

• This assumption receives support from studies of Hebrew, Korean, Japanese, and Russian, which reveal that they parallel English in 'verb type ⇒ event type' (Francez 2006, Levin 2008a, 2010).

• Why this assumption is an idealization: there is crosslinguistic variation as to whether *send-*type verbs and, particularly, their *throw-*type verb subclass, are associated with the caused possession event type in all languages (Levin 2008b; see also section 5 and Malchukov's talk).

3.2   One morphosyntactic frame for the caused possession event type and a second open to both event types

THE MORPHOSYNTACTIC PATTERN:
— One morphosyntactic frame for the caused possession event type only.
— A second morphosyntactic frame used for either event type.
KEY CHARACTERISTIC: A marker dedicated to a recipient, but none dedicated to a spatial goal.

PROPOSAL: English exemplifies such a language.
— The first object expresses recipients in the caused possession event type.
— The preposition *to* introduces spatial goals in the caused motion event type and
    recipients in the caused possession event type.

3.3   Distinct morphosyntactic frames for the two event types

THE MORPHOSYNTACTIC PATTERN:
— One morphosyntactic frame for the caused motion event type.
— A second morphosyntactic frame for the caused possession event type.
KEY CHARACTERISTIC: Distinct markers for spatial goal and recipient.

PROPOSAL: Russian exemplifies such a language.
— The dative case marks recipients of the caused possession event type.
— The allative preposition *k* marks animate goals of the caused motion event type.
    (Other prepositions may also indicate spatial goal-like notions, particularly with inanimates.)

• *give*-type verbs may express their recipient using the dative case, but not with another case marker or preposition, such as the preposition *k*, used elsewhere with animates as spatial goals.

(14) Ja   dal   Ivanu   knigu.
      I.NOM   gave   Ivan.DAT   book.ACC
      'I gave Ivan a book.'

(15) ∗Ja   dal   knigu   k   Ivanu.
      I.NOM   gave   book.ACC   K   Ivan.DAT
      'I gave a book to Ivan.' (intended meaning)

As such verbs are only associated with the caused possession event type, this suggests that the dative case is used to express recipients, but *k* is not.

• Although *k* is found with animates, it is a marker of spatial goals and NOT recipients.

EVIDENCE: Animate goals that are not also recipients are introduced by *k* and not by dative case.

BACKGROUND: When *send* or a translation equivalent takes an animate theme, it is associated with the caused motion event type as there is no relation of possession between the theme and the other non-agent argument; thus, this argument is a spatial goal and not a recipient.

AN EXAMPLE: If a teacher sends some children to the principal, the principal does not, as a result, have the children, while if someone sends the principal a letter, he does, as a result, have the letter.

(16) a.   The teacher sent the children to the principal.
      b.   # The teacher sent the principal the children.
      c.   # The principal got the children.

(17) a.   The teacher sent the letter to the principal.
      b.   The teacher sent the principal the letter.
      c.   The principal got the letter.

The unavailability of (16b) in English shows that *the principal* is a spatial goal and not a recipient; clear spatial goals show precisely the same pattern, as illustrated by the much-cited (18):

(18) a.   We sent the package to the boarder/border.
      b.   We sent the boarder/#border the package.
      c.   The boarder/#border got the package.

— Turning back to Russian, the dative is not found when *poslat'* 'send' takes an animate theme.

(19) ∗Ja   poslal   učenikov   direktoru.
      I.NOM   sent   students.ACC   director.DAT
      'I sent the children to the director.'

— The intended meaning is conveyed using *k*, consistent with the proposal that a caused motion event, which has a spatial goal and not a recipient, is involved.

(20) Ja   poslal   učenikov   k   direktoru.
      I.NOM   sent   students.ACC   K   director.DAT
      'I sent the children to the director.'

• Russian counterparts of *throw*, such as *brosit'* and *kinut'*, could be associated with both caused motion and caused possession event types, and their argument realization options confirm this.

— They may take a spatial goal PP, as expected if associated with the caused motion event type.

(21) Ja   kinul   mjač   v   korzinku.
      I.NOM   threw   ball.ACC in   basket.ACC
      'I threw the ball into the basket.'

— They may occur with a dative animate NP expressing a recipient, as expected given their association with the caused possession event type.

(22) Ja   kinul   mjač   Ivanu.
      I.NOM   threw   ball.ACC Ivan.DAT
      'I threw Ivan a ball.'

— They would also be expected to be found with *k* plus an animate, instantiating caused motion; however, such examples are not always felicitous, especially when taken out of context.

(23) #Ja   kinul   mjač   k   Ivanu.
      I.NOM   threw.PST ball.ACC K   Ivan.DAT
      'I threw Ivan a ball.'

— The infelicity of (23) has an independent explanation: a physical object is usually thrown to a person in a transfer of control, so such events are invariably also caused possession events. This may explain the strong preference for the dative case over *k* in the description of such events.

— In a context where it is unlikely that caused possession is intended in a throwing event with an animate non-agent, non-theme argument, then *k* is felicitous.

(24) vdrug   žongler   kinul   etot mjačik   k nam   v publiku
      suddenly   juggler.NOM   threw   this.ACC ball.ACC K we.DAT   in audience.ACC
      '... suddenly, the juggler threw this ball to us in the audience ...'
      (from Denis Dragunsky, *Deniskiny rasskazy*; Russian National Corpus)

• SUMMARY: EVENT TYPE ⇒ MORPHOSYNTACTIC FRAME IN RUSSIAN:
— CAUSED POSSESSION: recipient expressed with dative case.
— CAUSED MOTION: spatial goal expressed as object of the preposition *k*.

3.4 One morphosyntactic frame for the caused motion event type and a second open to both event types

THE MORPHOSYNTACTIC PATTERN: A language that is the "mirror image" of English, with:
— One morphosyntactic frame dedicated to the caused motion event type.
— A second morphosyntactic frame used for either event type.
KEY CHARACTERISTIC: A marker dedicated to a spatial goal, but none dedicated to a recipient.

PROPOSAL: Japanese exemplifies such a language (as does Korean).
(This discussion draws on Levin 2010, which cites Kishimoto 2001, Miyagawa & Tsujioka 2004.)
— The case marker –*ni* marks recipients **and** spatial goals.
— The case marker –*e* marks spatial goals of the caused motion event type **only**.
    (Other case markers may also indicate spatial goal-like notions, particularly with inanimates.)

NOTE: In cited data, glosses and transliterations have sometimes been modified for consistency; –*ni* is glossed 'DATive', as is usual in the literature on ditransitives, though it is a locative marker too.

• The dative case marker –*ni* can appear with *give*-type verbs, which have the caused possession event type only, and thus select only recipients and not spatial goals.

(25)	John-wa	Mary-ni	hon-o	atae-ta.
	John-TOP	Mary-DAT	book-ACC	give-PST
	'John gave a book to Mary.'			

• It can appear with motion verbs, which may take spatial goals, but not recipients.

(26)	Taro-wa	eki-ni	it-ta.
	Taro-TOP	station-DAT	go-PST
	'Taro went to the station.'		

• Motion verbs can also be found with the goal marker –*e* replacing –*ni*; it "designates an 'intended destination'" (Kishimoto 2001:42).

(27)	Taro-wa	eki-e	it-ta.
	Taro-TOP	station-ALL	go-PST
	'Taro went to the station.'		

• –*e* may replace –*ni* with the verbs *okuru* 'send' and *yuusoo-suru* 'mail'.

(28)	a.	John-wa	Mary-ni	tegami-o	okut-ta/yuusoo-si-ta.
		John-TOP	Mary-DAT	letter-ACC	send-PST/mail-PST
		'John sent a letter to Mary.'			
	b.	John-wa	Mary-e	tegami-o	okut-ta/yuusoo-si-ta.
		John-TOP	Mary-ALL	letter-ACC	send-PST/mail-PST
		'John sent a letter to Mary.' (Kishimoto 2001:42, (9))			

• With *ataeru* 'give', –*e* cannot replace –*ni*.

(29) ??John-wa   Mary-e   zyoohoo-o   atae-ta/teikyoo-si-ta.
        John-TOP   Mary-ALL   information-ACC   give-PST/offer-do-PST
        'John gave/offered information to Mary.' (Kishimoto 2001:42, (10))

• *okuru* 'send' can take a "place" argument, *ataeru* 'give' cannot, as expected if *give*-type verbs only take recipients (Kishimoto 2001:48, Miyagawa & Tsujioka 2004:9).

(30)   Taroo-ga   Tokyo-ni   nimotu-o   okut-ta.
          Taroo-NOM   Tokyo-DAT   package-ACC   send-PST
          'Taro sent a package to Tokyo.' (Miyagawa & Tsujioka 2004:9, (20b))

(31)   *Taroo-ga   Tokyo-ni   nimotu-o   atae-ta.
          Taroo-NOM   Tokyo-DAT   package-ACC   give-PST
          'Taro gave a package to Tokyo.' (intended)

• These observations support the more general proposal that Japanese distinguishes *give*- from *send*-type verbs; for further evidence see Ito (2007), Kishimoto (2001), and Matsuoka (2003).

• SUMMARY: EVENT TYPE ⇒ MORPHOSYNTACTIC FRAME IN JAPANESE:
— CAUSED POSSESSION: recipient expressed with *–ni* **only**.
— CAUSED MOTION: spatial goal expressed with *–ni* **or** *–e*.

NOTE: Korean also instantiates this pattern, though it distinguishes animate from inanimate recipients and spatial goals; see Levin (2010).

3.5   A hybrid option: A split in the treatment of pronominals

THE MORPHOSYNTACTIC PATTERN:
— Pronominals show the Russian pattern.
— Nonpronominals show the Japanese pattern, i.e., the "mirror image" of the English pattern.

PROPOSAL: This option is instantiated by Hebrew.
(This discussion draws on Botwinik-Rotem 2003, Francez 2002, 2006.)

• Hebrew has a clitic *le–*, sometimes called a dative marker, with the following distribution:
— it can appear with *give*-type verbs, which have the caused possession event type only, and,
        thus, select only recipients and not spatial goals,
— it can appear with motion verbs, which select spatial goals, but not recipients.

NOTE: *le–* and a second marker, the preposition *el*, are glossed as LE and EL, respectively.

(32)   Yosef   natan   tapuax   le-dana.
          Yosef   gave   apple   LE-Dana
          'Yosef gave an apple to Dana.'

(33)   Yosef   halax   la-xeder.
          Yosef   walked   LE.the-room
          'Yosef walked into the room.'

• Based on its distribution, Hebrew *le–* might seem comparable to English *to*, but the facts are more complicated: its "pronominal" form has a distribution like the English first object or Russian dative.

In Hebrew when the object of *le–* is pronominal, it occurs in an "inflected" form, e.g.:
  — *le–* takes the form *lo* with a third person masculine singular object.
  — *le–* takes the form *la* with a third person feminine singular object.

Crucially, the pronominal form of *le–* is only found with recipients and not with spatial goals:
  it is found with a *give*-type verb, but not a motion verb.

(34)   Yosef   natan   la   tapuax.
        Yosef   gave   LE.3.f.sg   apple
        'Yosef gave her an apple.' (*give*-type verb—recipient)

(35)   * ha-xeder$_i$ Se   Yosef   halax   lo$_i$
          the-room   that   Yosef   walked   LE.3.m.sg
          'the room that Yosef walked into.' (motion verb—spatial goal)

• There is a way of expressing the intended meaning of (35). Motion verbs can also be found with the preposition *el* replacing *le–*, without a change in meaning: compare (33) and (36).

(36)   Yosef   halax   el   ha-xeder.
        Yosef   walked   EL   the-room.
        'Yosef walked into the room.'

• Returning to (35), its intended meaning is expressible using the pronominal form of *el*.

(37)   ha-xeder$_i$ Se   Yosef   halax   elav$_i$
        the-room   that   Yosef   walked   EL.3.m.sg
        'the room that Yosef walked into'

• *el*, however, cannot replace *le–* with a *give*-type verb, nor is pronominal *el* found with such verbs.

(38)   * Yosef   natan   el   Dana   tapuax.
          Yosef   gave   EL   Dana   apple
          'Yosef gave Dana an apple.'

(39)   * Yosef   natan   eleha   tapuax.
          Yosef   gave   EL.3.f.sg   apple
          'Yosef gave her an apple.'

• In an instance of the caused motion event type, the non-agent, non-theme argument is a spatial goal and not a recipient; thus, if pronominal, *el* is expected and *le–* should not occur.

This prediction is confirmed using Hebrew *Salax* 'send' with an animate theme (see section 3.3).

(40)   Dan   Salax   et   ha-yeladim   le-/el   Rina.
        Dan   sent   ACC   the-children   LE/EL   Rina
        'Dan sent the children to Rina.' (Botwinik-Rotem 2003:95, (26a))

The pronominal counterpart of this sentence must use *el* and not *le–*.

(41) Dan Salax otam   eleha.
    Dan sent   ACC.3.m.pl EL.3.f.sg
    'Dan sent them to her.' (Botwinik-Rotem 2003:95, (26c))

(42) *Dan Salax la   otam   /otam   la.
     Dan sent   LE.3.f.sg   ACC.3.m.pl /ACC.3.m.pl LE.3.f.sg
     'Dan sent them to her.' (Botwinik-Rotem 2003:95, (26d))

• As in Russian, in a context with an animate non-agent, non-theme pronominal argument where caused motion can be distinguished from caused possession, *el* is used, as in the translation of (24).

(43) pitom   hu   zarak et   ha-kadur elenu.
    suddenly he   threw ACC   the-ball   EL.1.pl
    'Suddenly he threw the ball to us.'

• These observations support the more general proposal that *give*-type verbs take recipients, but not spatial goals.

THE DISTRIBUTIONAL GENERALIZATIONS FOR HEBREW:
— *le–* marks both recipients and spatial goals, while *el* is exclusively a marker of spatial goals.
— Only recipient uses of *le–* can be pronominalized; spatial goal uses cannot be.

• SUMMARY: EVENT TYPE ⇒ MORPHOSYNTACTIC FRAME IN HEBREW:
— CAUSED POSSESSION: recipient expressed with *le–* **only**.
— CAUSED MOTION: spatial goal expressed with *el* **or** if nonpronominal *le–*.

3.6 A single morphosyntactic frame expresses both event types

THE MORPHOSYNTACTIC PATTERN: A language has a single morphosyntactic frame for the two event types as a consequence of having a single realization for both spatial goal and recipient.

EXAMPLE: There do not seem to be any clear instances of this option.

3.7 The attested options for the expression of recipient and spatial goal summarized

	RUSSIAN	ENGLISH	JAPANESE	HEBREW PRONOMINALS	HEBREW NONPRONOMINALS
RECIPIENT:	dative	first object, *to*	*–ni*	*le–*	*le–*
SPATIAL GOAL:	*k*	*to*	*–ni*, *–e*	*el*	*le–*, *el*

4 Reflections on crosslinguistic variation in 'event type ⇒ morphosyntactic frame'

THE SOURCE OF VARIATION: Morphosyntactic options available for realizing recipients and goals.

• Variation in case and adposition inventories, including the "semantic domains" (or "semantic maps") of cases or adpositions expressing recipients and spatial goals (Blansitt 1988).

EXAMPLE: English *to* covers both recipients and spatial goals, while the Russian preposition *k* is reserved for certain spatial goals, with the dative case being used for recipients. The result is that in Russian, the caused motion event type always has a morphosyntactic realization distinct from that of caused possession, contrasting with English, where it does not.

• The availability of a double object construction.

EXAMPLE: English has such a construction, which is dedicated to expressing caused possession.

NOTE: Levin (2006) argues that dative case-marked NPs are comparable to the first object in a double object construction, drawing on Siewierska (1998) and Gerdts (1993). This approach is consistent with observations that despite surface similarities with direct objects, recipients in the double object construction lack many object properties (e.g., Baker 1997, Hudson 1992, Maling 2001, Marantz 1993, Polinsky 1996, Ziv & Sheintuch 1979).

4.1 'Dative alternations' revisited

• Studies of dative verbs, particularly English dative verbs, have tried to understand the availability of two argument realization options: a DATIVE ALTERNATION.

(44) a. RECIPIENT–THEME ORDER: Terry gave Sam an apple.

b. THEME–RECIPIENT ORDER: Terry gave an apple to Sam.

• From the verb sensitive perspective, dative alternations can have two sources:
— A verb may be associated with two event types, each with its own morphosyntactic realization
   (e.g., Russian, where they necessarily have a distinct expression)
— An argument type specific to an event type may have two realizations
   (e.g., the recipient in English caused possession events)

A language may have one or both forms of the alternation: English has both; Russian only the first.

WHY DO ENGLISH AND RUSSIAN DIFFER?
Specifically, why does English have alternate expressions for the recipient?

• English surface word order has two functions: encoding argument realization and encoding information structure, with given information preceding new information.

THE CONSEQUENCE: English needs two constructions: one with recipient–theme order and with theme–recipient order. The double object and *to* constructions fill this need.

Studies of texts confirm the distribution of the constructions is largely governed by information structure and heaviness considerations (e.g., Davidse 1996, Erteschik-Shir 1979, Givón 1984, Polinsky 1996, Ransom 1979, Snyder 2003, Thompson 1990, 1995, Wasow 1997)

• As Russian, unlike English, has fairly free word order, it allows either order of recipient and theme NPs without needing two realizations of the recipient.

4.2 Further reflections

• It is probably not an accident that when a language treats full NPs and pronominals distinctly, as Hebrew does, the pronominals pattern like Russian.

Even in English, pronominals show a distribution that is reminiscent of the Russian pattern: pronominal recipients are overwhelmingly realized as first objects rather than as the objects of *to* (Thompson 1990, among others).

WHY? A recipient is most likely to take a special form when pronominal because recipients tend to be given in a discourse and pronouns also tend to express given material. So a recipient will probably be expressed as a pronoun more frequently and, following Haspelmath (2004), frequency contributes to the rise of special forms.

• The apparently unattested single-marker pattern (section 3.6) may be unavailable due to an apparent dispreference for having a single marker for both animate goals and animate recipients.

5 Crosslinguistic variation in 'dative verb ⇒ event type' (Levin (2008)

• A review of primary and secondary data suggests this also is a locus of crosslinguistic variation.

• Based on data from English, Icelandic, German, Dutch, Croft et al. (2001) propose a ditransitivity hierarchy involving three verbs chosen from major dative verb classes.

(45)   Ditransitivity Hierarchy: 'give' < 'send' < 'throw'
        (i) If there are constraints on the distribution of a ditransitive [= double object or dative] construction the construction will be associated with the higher end of the Ditransitivity Hierarchy;
        (ii) If there are constraints on the distribution of an oblique construction, especially a spatial oblique construction, the construction will be associated with the lower end of a Ditransitivity Hierarchy.
        (Croft et al. 2001:2)

• This hierarchy suggests that there is constrained crosslinguistic variation in 'verb ⇒ event type', assuming that a verb's occurrence in the double object or dative construction is a proxy for its being associated with the caused possession event type.

• Levin (2008b) offers data from more languages that confirms (45) and begins to fill out the picture.

• THE QUESTION: Why does the variation take the form of an implicational hierarchy?
PROPOSAL: The ordering of semantic verb classes in this hierarchy reflects how naturally the particular semantic verb type can be associated with the caused possession event type.

6 Conclusions

• The verb sensitive approach leads to a factorization of the argument realization problem for dative verbs into two parts: 'verb ⇒ event type' and 'event type ⇒ morphosyntactic frame'.

• Thus, the meaning of a dative verb contributes to the morphosyntactic realization of its arguments, but its contribution is mediated by the associations of its semantic verb class with event types.

• This factorization illuminates the diverse morphosyntactic patterns observed across languages, allowing for a better understanding of the attested range of crosslinguistic variation.

• For the future: further delineating the space of morphosyntactic options found across languages for expressing caused motion and caused possession events and recipients and spatial goals: e.g., serial verbs, verb-verb compounds, preverb/noun–light verb combinations, applicative morphemes.

• Also necessary are investigations of the interactions of animacy with the morphosyntactic realization of the event types. Recipients are typically animate and spatial goal inanimate, and these correlations will play a part in understanding the morphosyntactic patterns and their origins (cf. Aristar (1996) on the development of datives from locatives).

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