

Dative verbs: A crosslinguistic perspective*

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In some languages, including English, verbs such as *give*, *send*, and *throw*, which can be used to describe events of transfer, show two options for expressing their arguments, jointly referred to as the dative alternation, illustrated in (1)-(3) with English data.

- (1) a. *Terry gave Sam an apple*
b. *Terry gave an apple to Sam*
- (2) a. *Martha sent Myrna a package*
b. *Martha sent a package to Myrna*
- (3) a. *Leigh threw Lane the ball*
b. *Leigh threw the ball to Lane*

In a recent paper, M. Rappaport Hovav and B. Levin (2008) challenge the 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. S. Beck and K. Johnson 2004, G. Green 1974, K. Hale and S.J. Keyser 2002, H. Harley 2003, M. Krifka 1999, 2001, R. Oehrle 1976, S. Pinker 1989). On this accepted view, the first meaning, a caused possession meaning, schematized in (4a), is said to be realized by the double object variant (the (a) sentences in (1)-(3)), while the second meaning, a caused motion meaning, schematized in (4b), is said to be realized by the *to* variant (the (b) sentences).

- (4) a. *Caused possession schema: 'x cause y to have z'*
b. *Caused motion schema: 'x cause z to be at y'*

This approach, which I refer to as the uniform multiple meaning approach, is summarized in (5).

- (5) *The uniform multiple meaning approach:*

	<i>to</i> variant	double object variant
all dative verbs:	caused motion	caused possession

In contrast, M. Rappaport Hovav and B. Levin, following R. Jackendoff (1990), propose that individual verbs differ in their association with the two meanings or event schemas—the term I use to refer to a meaning that corresponds

to a possible event type. They argue that *give* and verbs like it have only a caused possession schema, while *throw* and *send* and verbs like them have both caused motion and caused possession schemas. In arguing for this verb-sensitive approach, M. Rappaport Hovav and B. Levin also show that in English the relation between these two event schemas and their (morpho)syntactic expression is more complex than the uniform multiple meaning approach takes it to be: the caused possession schema may be realized by both the double object and *to* variants, while the caused motion schema is realized only by the *to* variant. The assumptions of this approach are summarized in (6).¹

(6) *The verb-sensitive approach:*

	<i>to</i> variant	double object variant
<i>give</i> -type verbs:	caused possession	caused possession
<i>throw</i> -type verbs:	caused motion or caused possession	caused possession
<i>send</i> -type verbs:	caused motion or caused possession	caused possession

This paper looks at the consequences of the verb-sensitive approach for understanding the argument realization options of the counterparts of *give*, *send*, and *throw* and the verb classes they represent in other languages. This approach factors the argument realization “problem” with dative verbs into two parts: i) the possible associations of these verbs with certain event schemas and ii) the possible syntactic realizations available to these event schemas. As I now elaborate, the first part of the argument realization problem, then, involves general issues regarding the nature of verb meanings, while the second part of the problem is typological in nature.

M. Rappaport Hovav and B. Levin (2008) identify differences in the meanings of the English verbs *give*, *send*, and *throw* that they correlate with the distinct verb-event schema associations of the verb-sensitive approach. These distinct associations should carry over to their translation equivalents in other languages, leading to the expectation that verb-event schema associations, since they reflect a verb’s core meaning, should be constant across languages. Languages, however, differ in the morphosyntactic devices that they have available for expressing arguments, so that crosslinguistic differences might be expected in the syntactic realization of the event schemas. Specifically, the schemas under consideration involve three participants, so something more than a transitive syntactic frame is required, and languages differ with respect to the options they make available in such instances. As a result, the actual manifestations of the two event schemas—and, indirectly, the verbs associated with them—may not be exactly the same across languages.

This paper will focus on the crosslinguistic manifestation of the event schema–argument realization associations with dative verbs and illustrate some of

the attested crosslinguistic variation, using data from English, Hebrew, and Russian; at the same time it will confirm the hypothesized constancy in the verb-event schema mapping. The paper, then, has two goals, related to the two parts of the argument realization problem. It will show that the event schemas distribute as expected across the three verb types in several languages. Specifically, the distinction between *give*-type verbs and *throw*- and *send*-type verbs in terms of their association with distinct event schemas hold in Russian and Hebrew. In addition, this paper will show that the actual argument realizations attested in English, Hebrew, and Russian for each verb type are not exactly the same because the morphosyntactic resources of these languages differ. For example, Hebrew and Russian, unlike English, each have an argument realization option devoted exclusively to the caused motion schema. This option, then, will not be attested with *give*-type verbs in Hebrew and Russian, contrasting with English, where verbs of all three types show the same options.

In §1, I elaborate on the semantic associations of the different types of dative verbs with event schemas, simultaneously setting out the assumptions I make about verb meaning. In §2, I set out the associations of the event schemas with syntactic realizations in English, summarizing the discussion in M. Rappaport Hovav and B. Levin (2008). In §3, I discuss the comparable facts in Russian and Hebrew, showing that the associations of *give*- and *throw*-type verbs with event schemas is the same, but the patterns of argument realization varies depending on the morphosyntactic resources of the language. In §4, I focus on the verb *send*, as its association with event schemas depends on the animacy of its non-agent arguments, and I show that the associations of event schemas and syntactic realizations are as predicted for the different argument choices. §5 concludes the study.

1. The association of dative verbs with event schemas

This study is built on the now widespread assumption that verb meanings are bipartite: they consist of an association between one of a small inventory of event schemas, each representing a possible event type (possibly defined in terms of primitive predicates), and one of an open set of “roots” representing a verb’s core lexicalized meaning (e.g. J. Grimshaw 2005, K. Hale and S.J. Keyser 2002, R. Jackendoff 1983, 1990, T. Mohanan and K.P. Mohanan 1999, D. Pesetsky 1995, S. Pinker 1989, M. Rappaport Hovav and B. Levin 1998). (This association could be viewed as lexical or constructional in nature (cf. B. Levin and M. Rappaport Hovav 2005:189-193); I remain agnostic on this issue here.)

A verb’s root, then, encodes or “lexicalizes” those components of meaning that are entailed in all uses of a verb, regardless of context. In general, analyses of the English dative alternation agree that for a particular verb a single root is associated with both variants (e.g. A. Goldberg 1995, H. Harley 2003, M. Krifka

1999, 2001, S. Pinker 1998). Analyses also agree that the caused motion and caused possession meanings represent distinct event schema, describable as in (4), repeated in (7).

- (7) a. *Caused possession schema*: ‘x cause y to have z’
b. *Caused motion schema*: ‘x cause z to be at y’

Event schemas represent basic event types, and the caused possession and caused motion schemas 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 (J.S. Gruber 1965, R. Jackendoff 1972, 1983). Since both event schemas could be said to involve agent and theme arguments, the x and z arguments, respectively, in (7), the essence of the distinction between them is embodied in the “semantic role” of the y arguments: in the schema in (7a) this argument is a recipient, generally an animate entity capable of possession, while in the schema in (7b) this argument is a spatial goal. For this reason, the discussion of the syntactic realization options that languages make available for these two schemas will center around the expression of the recipient and spatial goal, which indeed turns out to be the major locus of crosslinguistic variation.

One way in which analyses of the English dative alternation diverge is in the way in which these two event schemas are taken to be associated with verb roots. The currently prevalent uniform multiple meaning approach to the dative alternation assumes that the alternating verbs all have two event schemas, as in (5); the verb-sensitive approach adopts these same two event schemas, but takes the relation of verbs, event schemas, and syntactic variants to be different and more complicated than the uniform multiple meaning approach suggests, as in (6). In supporting the verb-sensitive approach, M. Rappaport Hovav and B. Levin (2008) focus on three major classes recognized in detailed classifications of dative verbs, such as those presented by S. Pinker (1989:110-118) and B. Levin (1993:45-48). These three classes will be used in examining the crosslinguistic manifestation of the argument realization properties of the counterparts of the English dative verbs; they are named after central members: *give*, *throw*, and *send*—the three verbs mentioned in the introduction.²

- (8) a. *give*-type verbs: give, hand, lend, loan, rent, sell, . . . ; includes “verbs of future having”: allocate, allow, bequeath, forward, grant, offer, promise, . . .
b. *send*-type verbs: mail, send, ship, . . .
c. *throw*-type verbs: fling, flip, kick, lob, slap, shoot, throw, toss, . . .

These classes are significant because their members have roots which lexicalize distinct types of meaning. Therefore, they show different reasons for being

associated with the caused possession and caused motion schemas, thus supporting the verb-sensitive approach.

The *give*-type verbs are the prototypical dative verbs: they inherently lexicalize caused possession, and, concomitantly, they select a recipient, allowing them to be associated with the caused possession event schema. These verbs do not lexicalize caused motion: although caused possession of a physical object is typically effected by physically moving that object, it is possible to give a physical object without manipulating it. As A. Goldberg (1995, 2006) notes, *give* itself lexicalizes nothing more than caused possession, so that its meaning corresponds precisely to what is encoded in the caused possession schema. Other *give*-type verbs further specify facets of the event: for *rent* and *lend* the possession is limited in duration, while the “verb of future having” *promise* contributes a modal operator so that caused possession is entailed “in models in which the set of circumstances is restricted to those in which people honor their promises” (J.-P. Koenig and A.R. Davis 2001:85).

The *throw*-type verbs basically have another event schema—an activity event schema (B. Levin 1999, M. Rappaport Hovav and B. Levin 1998). They describe events in which one entity instantaneously imparts a force on another—the force recipient—and differ with respect to the instrument and manner used in imparting the force (R. Jackendoff 1990, Pinker 1989). These verbs entail that the force recipient moves, and although they do not lexicalize that the force recipient moves along a path to a goal, their roots can be naturally associated with a caused motion schema because events of imparting force may cause the force recipient to move to a goal. This association is available because, as A. Goldberg (1997:393) proposes, verb roots may be associated with event schemas when they bear a force-dynamic relation (W. Croft 1991, L. Talmy 1988) to it; these verbs naturally show such an association as they lexicalize notions of instrument and manner.

Finally, the *send*-type verbs basically lexicalize caused motion, making them compatible with the caused motion schema, but unlike the *throw*-type verbs they do not lexicalize a manner or an instrument related to this caused motion. Thus, both *throw*- and *send*-type verbs are associated with the caused motion schema and select a spatial goal. Neither *throw*-, nor *send*-type verbs lexicalize caused possession; however, many languages, including English, allow verbs of these two types also to be associated with the caused possession schema (Croft et al. 2001, B. Levin 2004). Again, this association is available because verb roots may be integrated into event schemas via a force-dynamic relation and caused motion can effect caused possession. One consequence of this association is that these verbs may be found in the English double object construction, which is one syntactic realization of the caused possession schema.

To summarize, on the verb-sensitive approach to the English dative alternation, the three types of verbs that are the focus of this study show the following associations with event schemas:

- (9) a. *give*-type verbs: caused possession only
 b. *throw*-type verbs: activity, caused motion, caused possession
 c. *send*-type verbs: caused motion, caused possession

It is worth stressing that on the verb-sensitive approach *give*-type verbs are only associated with the caused possession schema, even when found in the *to* variant, in stark contrast to the uniform multiple meaning approach, which takes *give*-type verbs to be associated with the caused motion schema in this variant. The next section reviews the reasons for this assumption in the context of a discussion of the associations of event schemas with their syntactic realizations in English.

2. The argument realization of English dative verbs

In this section, I review how the caused motion and caused possession schemas are associated with syntactic realizations in English, as a prelude to considering what these associations are in Russian and Hebrew and, thus, what they reveal about the morphosyntactic options for encoding these event schemas across languages more generally. Specifically, I draw on the proposal in M. Rappaport Hovav and B. Levin (2008) that English manifests the associations in (10).

- (10) a. *Caused possession schema*: double object variant, *to* variant
 b. *Caused motion schema*: *to* variant only

M. Rappaport Hovav and B. Levin, then, follow the uniform multiple meaning approach in assuming that the caused motion schema is associated with the *to* variant and the caused possession schema with the double object variant; they depart from this approach in arguing that the caused possession schema may also be associated with the *to* variant. In making this proposal, they are claiming that English *give*-type verbs are only associated with the caused possession schema, even when found in the *to*-variant. This claim might appear inconsistent with the expression of the recipient in a *to* phrase in the *to* variant. As the preposition *to* is taken to introduce a goal, the recipient is taken to be a goal of motion, most likely in an abstract possessional space or “field” along the lines suggested by the Localist Hypothesis (J. Gruber 1965, R. Jackendoff 1972, 1983), and this, in turn, is taken to be an indication that *give*-type verbs are associated with the caused motion schema in the *to* variant—an assumption prevalent in much work on the dative alternation.

M. Rappaport Hovav and B. Levin (2008) argue instead that *give*-type verbs do not select for a goal argument, even in the *to* variant. They provide empirical and conceptual reasons for taking this alternative perspective, which I sketch here. First, as noted by L. Levinson (2005), unlike a typical goal, the *to* phrase cannot be questioned by *where*; contrast *Where did you throw/kick the ball?* with **Where did*

you give/sell the ball? (cf. *To whom did you give/sell the ball?*).³ Furthermore, M. Rappaport Hovav and B. Levin point out that many uses of *give*-type verbs simply show a causation of possession meaning, even in the *to* variant. To illustrate this point, they note that if a court gives a parent visiting rights, the court simply confers these rights on the parent; it does not have these rights. In this example, then, all that is asserted is caused possession, as there is no possible source who transfers some entity to the recipient and, hence, it is not possible to posit a path of transfer, which would be a prerequisite for attributing a caused motion schema to a *give*-type verb. It is true that perhaps the prototypical conception of a giving event involves a physical object and involves the transfer of physical control over this object from one animate entity to a second because with physical objects possession involves physical control; furthermore, this transfer of control is often effected via physical manipulation, so that it actually has a motional instantiation. The transfer—whether effected abstractly or also physically—involves the real world instantiation of giving events with physical objects. With an abstract entity physical control is not possible, and there is no transfer. Given that *give*-type verbs can be used to describe such instances of caused possession as well, it is clear that these verbs all lexicalize caused possession and not caused motion in the form of a transfer of possession.

M. Rappaport Hovav and B. Levin (2008) acknowledge that the preposition *to* found in the *to* variant is used as an allative marker in English. They agree that allative adpositions may be extended to mark a recipient because a recipient may be analyzed as a type of abstract goal by the Localist Hypothesis. They contend, however, that just because the choice of preposition may be determined by metaphorical extension that alone does not mean that when a verb is found taking that preposition it has changed its semantic type and the event described should be analyzed in terms of caused motion. For instance, consider *I broke the mirror to smithereens*; here again there is a *to* phrase with a causative verb, yet there is no reason to think this sentence describes a caused motion event rather than a change of state event. For example, the verb *break* still shows the causative alternation in the presence of such a *to PP* (e.g. *The mirror broke to smithereens*), and this alternation is a hallmark of change of state verbs, but not caused motion verbs such as *send* (e.g. **The books sent to Tokyo*). Furthermore, as also pointed out by M. Rappaport Hovav and B. Levin (2008) when a locative metaphor is applied to possession events, this metaphor must encompass the entire event, requiring a verb of motion and not an allative or source preposition alone, as in *A large sum of money came to him from the insurance company* or *The court took those rights away from him*.

On the verb-sensitive approach, then, the verb *give* is found in the two syntactic variants that constitute the dative alternation for somewhat different reasons than the verbs *send* and *throw* are. All three verbs are associated with the caused possession schema, which has two syntactic realizations, the *to* variant and

the double object variant. In addition, the verbs *send* and *throw* are also found in the *to* variant because they are associated with the caused motion schema, which is realized by this variant; see (6). This approach, then, leads to a new perspective on why English *give*-type verbs, which are only associated with a caused possession schema, show the dative alternation. M. Rappaport Hovav and B. Levin (2008) propose that the dative alternation arises with these verbs due to the availability in English of two syntactic realizations compatible with the semantic notion of recipient (cf. J. Goldsmith 1980, D. Pesetsky 1995). One is as the first object in the double object construction, which is dedicated to the expression of a “projected possessor” (J. Goldsmith 1980:429; see also A. Goldberg 1995, G. Green 1974, R. Oehrle 1976, S. Pinker 1989), and a recipient, as a type of possessor, allows this expression. Second, a recipient may be realized in a *to*-PP because *to* indicates a wide range of argument types falling under semantic categories covered by what are typically labeled dative and allative cases in other languages, including recipients and spatial goals (e.g. M. Haspelmath 2003).

The related question is why English has the two distinct argument realization options which constitute the dative alternation. The reason according to M. Rappaport Hovav and B. Levin (2008) is that English surface word order encodes information structure, as well as argument realization. Since given information precedes new information, English needs two constructions for realizing the caused possession schema to meet information structure demands: one where recipients precede themes and one where themes precede recipients. The double object and *to* variants jointly fill this need. In fact, the distribution of the double object and *to* variants is largely governed by information structure considerations, interacting with heaviness considerations (e.g. K. Davidse 1996, N. Erteschik-Shir 1979, T. Givón 1984, E. Ransom 1979, W. Snyder 2003, S. Thompson 1990, 1995, T. Wasow 2002). A language with more flexible word order would be able to meet the information structure constraints without alternate argument realizations and, thus, would not need to have two realizations of the caused possession schema.

3. Beyond English: Dative verb parallels across languages

I have proposed that the argument realization problem in the dative alternation should be factored into two parts: the possible associations of dative verbs with event schemas, the topic of §1, and the possible associations of event schemas with syntactic realization options, discussed for English in §2. The same associations of dative verbs with event schemas would be expected across languages, and, specifically, this should be true of the distinct associations of *give*-, *send*-, and *throw*-type verbs with event schemas.⁴ However, the association of the event schemas with particular argument realizations are likely to differ in certain constrained ways across languages. The reason, as already stated, is that the

syntactic realizations of the caused motion and caused possession schemas depend on the morphosyntactic resources of particular languages. As these resources may differ, the actual manifestations of these schemas may not be exactly the same, with the potential differences likely to reside in the realization of the recipient in the caused possession schema and the goal in the caused motion schema.

Two related differences will be illustrated. First, languages show variation in their case and adposition inventories, as well as in the actual “semantic domain” of what might be taken to be comparable cases or adpositions across languages. As such elements are used to express recipients and spatial goals, variation would be expected in the expression of these notions (cf. A. Aristar 1996, E. Blansitt 1988). For example, English *to* covers both recipients and spatial goals, but there is no reason that a case marker or adposition could not be specialized to one or the other. In fact, in Russian the preposition *k* is reserved for certain spatial goals, while the dative case is used for recipients, but never for purely spatial goals. Second, some languages, including English, have a form of argument realization that is specialized to the caused possession schema: the double object construction, with the recipient expressed as the first object, while other languages use a dative case (or adposition) to express the recipient in the caused possession schema.

In the crosslinguistic investigations that follow, I begin by considering the Russian and Hebrew translation equivalents of English *give*-type and *throw*-type verbs in §3.2 and §3.3. The discussion of *throw*-type verbs in these languages also applies to the *send*-type verbs since they are associated with the same event schemas, as discussed in §1. For this reason, I do not discuss the *send*-type verbs as a group; however, I devote §4 to the translation equivalents of the English verb *send* itself since the behavior of this specific verb is complicated in ways that ultimately strongly support the larger points being made in the paper. Before turning to the Russian and Hebrew data, I elaborate on two of the syntactic frames available to languages for expressing the caused possession schema.

3.1. Preliminaries: Double object and dative constructions

Typological studies of the realization of the arguments of the counterparts of English dative verbs, specifically the *give*-type verbs, typically point to two options that languages provide for expressing a recipient: as the so-called first object in a double object construction and as a dative(-marked) NP.

Typically, the English first object in a double object construction is taken to be a core (i.e. nonadjunct) grammatical relation used to express a recipient, often assimilated to the grammatical relation object, as the name “first object” implies. Languages which lack a double object construction still have a core grammatical relation used to express a recipient; specifically, they have a dative case (or adposition)⁵ and use the dative(-marked) NP as the basic realization of recipients in the caused possession schema, as in the Russian example in (11).

- (11) *Ja dal Ivanu knigu*
 I.NOM gave Ivan.DAT book.ACC
 (I gave Ivan a book)

Recipients may be expressed as dative NPs because they are potential possessors and the dative is the basic realization of possessors. First objects in the double object construction differ from dative NPs in that they realize a semantically more restricted range of arguments, largely because the double object construction is necessarily associated with causative events. (I leave a full exploration of the precise semantic domains associated with first object and dative NP for future work.)

What matters is that first objects and dative NPs both serve as realizations of recipients (and not spatial goals). Yet, implicit in the label “first object” and other labels applied to the same notion such as “primary object” (M. Dryer 1986) or “inner object” is an assumption that the first object in the double object construction is an object, an assumption further supported by the immediately postverbal position and passivizability of the first object.

- (12) a. *The witch gave Sam an apple*
 b. *Sam was given an apple*

The dative NP of languages with a dative case is usually not taken to be comparable to the first object, due to these properties of the first object. However, B. Levin (2006) argues that the first object in the English double object construction is not like the direct object of a transitive verb, but rather more like a dative NP in languages with such NPs. As support, she points out the repeated observations that despite surface similarities with direct objects, recipients in the double object construction do not show all direct object properties (M. Baker 1997, R. Hudson 1992, J. Maling 2001, A. Marantz 1993, M. Polinsky 1996, Y. Ziv and G. Sheintuch 1979). Furthermore, based on a study of approximately 260 languages, A. Siewierska (1998) finds that no language which has a “true” dative case (i.e. use of a marker which is distinct from allative or locative markers) has a double object construction or a related construction in which the recipient and theme receive the same encoding. If the dative alternation were really about “objecthood”—as the name “double object” suggests—or its semantic determinants, Siewierska’s generalization would be unexpected. Rather, her observation suggests that crosslinguistically dative NPs and first objects—and thus the dative construction and double object construction—are in complementary distribution. Supporting this view are observations made in D. Gerdts (1993): a variety of phenomena that involve first objects in a double object construction in languages with such a construction are in complementary distribution with phenomena that involve dative NPs in dative constructions in languages with such a construction. For example, in addition to an oblique realization, benefactives can

be realized either as first objects or as dative NPs; similarly, “raised” possessors can be realized either as first objects or as dative NPs. The complementary distribution of these and other phenomena further supports Siewierska’s proposal that first objects and dative NPs are in complementary distribution and suggests both realize the same set of semantic notions: recipient, as well as inalienable possessor and “low” benefactive à la L. Pyłkkänen (2000).

There is then good reason to consider the double object and dative constructions to be similar at an abstract level: they represent different morphosyntactic realizations of the caused possession schema that reflect the varying resources available to languages and would be expected to be found with *give*- and *throw*-type verbs. With this background, I turn to the realization of the arguments of *give*- and *throw*-type verbs in two languages said to have a dative marker, Russian and Hebrew.

3.2. Giving and throwing in Russian

Russian exemplifies a language in which the dative case is used as the basic realization of recipients in the caused possession schema, as I now show. I assume that *give*-type verbs in Russian, as in English, are only associated with the caused possession schema. Furthermore, in Russian these verbs express their recipient using the dative case, as shown with the verb *dat* ‘give’ in (13). (This and other Russian verbs are cited in their perfective form.) Russian has fairly free word order and (13), as well as other Russian examples, allow alternative word orders, without any effect on their acceptability.

- (13) *Ja dal Ivanu knigu*
 I.NOM gave Ivan.DAT book.ACC
 (I gave Ivan a book)

However, *give*-type verbs may not express their recipient using another case marker or adposition. For example, the allative preposition *k* (glossed K), used elsewhere with spatial goals, including animates, as shown in the motion verb sentences in (15) and (16), is not found with *give*-type verbs, as shown in (14).

- (14) **Ja dal knigu k Ivanu*
 I.NOM gave book.ACC K Ivan.DAT
 (I gave a book to Ivan; intended meaning)

- (15) *Podojdite k dveri učitel'nice!*
 come.up.IMPER K door.DAT /teacher.DAT
 (Go up to the door/teacher!)

- (16) *Sobaka podbežala k nam, viljaja xvostom*
 dog.NOM ran.up K we.DAT wagging tail.INST
 (The dog ran up to us, wagging its tail)

This pattern of data, then, is as expected if *give*-type verbs in Russian are only associated with the caused possession schema and the dative case is the basic realization of the recipient.

In contrast, Russian *throw*-type verbs, such as *brosit'* 'throw' and *kinut'* 'throw', like their English counterparts, should be associated with both the caused motion and caused possession schemas. And, indeed, Russian *throw*-type verbs may occur with a dative NP expressing a recipient, as expected given their association with the caused possession schema.

- (17) *Ja kinul mjač Ivanu*
 I.NOM threw ball.ACC Ivan.DAT
 (I threw Ivan a ball)

However, due to their association with the caused motion schema, these verbs would be expected to show a wider range of argument realization options than the Russian *give*-type verbs. In fact, they may occur with a *PP* expressing a spatial goal, as in (18). The caused motion schema cannot be illustrated with *k* because inanimate locations as goals are expressed using a preposition with more semantic content than *k*; compare English, where *to* alone is also not used in describing such events, e.g. *I threw the ball into/??to the basket*.

- (18) *Ja kinul mjač v korzinku*
 I.NOM threw ball.ACC in basket.ACC
 (I threw the ball into the basket)

On the verb-sensitive approach, *throw*-type verbs would also be expected to be found with *k* plus an animate, instantiating caused motion, as in *I threw the ball to Ivan*; however, such examples are not always felicitous, especially when taken out of context.

- (19) #*Ja kinul mjač k Ivanu*
 I.NOM threw ball.ACC K Ivan.DAT
 (I threw a ball to Ivan)

There are independent reasons for why such examples tend to be infelicitous. A physical object is usually thrown to a person in order to transfer control over it, so such throwing events are invariably also caused possession events. This fact about the world may result in a strong preference for the dative case, which indicates caused possession. The result is a preference for a sentence like (17) over one like (19). When the context makes it unlikely that a throwing event involves caused possession, then *k* may be used, as in (20), which I. Mirto brought to my attention.⁶

- (20) *I vdruk žongler kinul etot mjačik k nam v publiku*
 (And suddenly, the juggler threw this ball to us in the audience;
 from Denis Dragunsky, *Deniskiny rasskazy*; Russian National Corpus)

Another reason that *k* may be dispreferred with a *throw*-type verbs is that when followed by an animate NP, *k* can be used to express the equivalent of French *chez*—that is, to indicate someone’s home. There seems to be a strong preference for giving *k* plus animate NP sequences this interpretation, which might result in a *k* plus animate NP sequence being dispreferred when this interpretation is not intended.

- (21) *On prinēs ko mne knigi*
 he took K I.DAT books.ACC
 (He brought the books to my place)

Not only does Russian exemplify a language in which the dative case is used as the basic realization of recipients in the caused possession schema, but it is also a language in which the morphosyntactic expression of recipients and spatial goals does not overlap. The constellation of facts presented in this section suggests that in Russian the dative case is dedicated to expressing possessors, including recipients, while the adposition *k* simply has allative uses (setting the *chez* use aside).

- (22) *A summary of the Russian data:*

	dative case	<i>k</i>
<i>give</i> -type verbs:	caused possession	—
<i>throw</i> -type verbs:	caused possession	caused motion

Russian, then, lacks a marker comparable to English *to* which can indicate either recipients or spatial goals. As a consequence, Russian *give*-type verbs show a single realization of their arguments and do not show a “dative alternation” as they do in English. I argued in §2 that in English the alternation with *give*-type verbs reflects the availability of distinct argument realizations for the caused possession schema, most likely needed to meet information structure ordering constraints. Russian, however, has much freer word order, which most likely relates to its fairly rich system of morphological case, so unlike English it can meet information structure constraints without recourse to a second syntactic variant. Russian *throw*-type verbs, in contrast, do show a form of “dative alternation”, but only as a consequence of being associated with both caused motion and caused possession schemas. Russian, then, provides further evidence for M. Rappaport Hovav and B. Levin’s (2008) contention that *give*-type verbs are not associated with the caused motion schema precisely because in this language such verbs are not found with the realization of arguments that is solely associated with this schema.

3.3. Giving and throwing in Hebrew

Like Russian, Hebrew has a marker which simply indicates spatial goals, the preposition *el* (glossed EL), and like English, it has a marker, the clitic *le-* (glossed

LE), which can indicate both recipients and spatial goals. However, there is an additional wrinkle: *le-* can indicate both only in its nonpronominal form; in its pronominal form it is exclusively a marker of recipients. I now elaborate on the Hebrew data, drawing heavily on the discussion in I. Botwinik-Rotem (2003) and I. Francez (2002, 2006).

Hebrew has a clitic *le-*, sometimes called a dative marker, with a distribution that overlaps with English *to*. (*le-* also has other uses marking experiencers, which may be why it has been called a “dative” marker.) First, it can appear with *give*-type verbs, which have the caused possession schema only, and, thus, select only recipients and not spatial goals. Second, it can appear with motion verbs, which select spatial goals, but not recipients.

(23) *Yosef natan tapuax le-dana*
 Yosef gave apple LE-Dana
 (Yosef gave an apple to Dana)

(24) *Yosef halax la-xeder*
 Yosef walked LE.the-room
 (Yosef walked into the room)

The distributional properties of Hebrew *le-* might seem reminiscent of English *to*, but the facts are actually more complicated: the distribution of the special “pronominal” form of *le-* is different and reminiscent of the English first object. In Hebrew when the object of *le-* is pronominal, it occurs in an “inflected” form, as do other Hebrew clitics and adpositions. For example, *le-* takes the form *lo* with a third person masculine singular object, while it 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, as in (25), but not a motion verb, as in (26).

(25) *Yosef natan la tapuax*
 Yosef gave LE.3.f.sg apple
 (Yosef gave her an apple)

(26) **ha-xeder_i Se Yosef halax lo_i*
 the-room that Yosef walked LE.3.m.sg
 (the room that Yosef walked into)

(26) and other examples to follow use a relative clause headed by the object of the clitic *le-* or the preposition *el* to illustrate the pronominal form of these items with inanimate objects because such clauses include a resumptive pronoun and thus provide a natural context for the occurrence of pronominal forms. There is a way of expressing the intended meaning of (26). Verbs of motion can also be found with the preposition *el* replacing *le-*, without a change in meaning: compare (24) and (27).

- (27) *Yosef halax el ha-xeder*
 Yosef walked EL the-room
 (Yosef walked into the room)

Returning to (26), its intended meaning is expressible using the pronominal forms of *el*.

- (28) *ha-xeder_i Se Yosef halax elav_i*
 the-room that Yosef walked EL.3.m.sg
 (the room that Yosef walked into)

The preposition *el*, however, can never replace *le-* with a *give*-type verb; in fact, the pronominal form of *el* is not found with *give*-type verbs either.⁷

- (29) **Yosef natan el Dana tapuax*
 Yosef gave EL Dana apple
 (Yosef gave Dana an apple)

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

The Hebrew *throw*-type verbs contrast with the *give*-type verbs in showing a wider range of syntactic realizations, as expected given that they should be associated with both the caused motion and caused possession schemas.⁸ When they are found with an inanimate NP that can only be understood as a spatial goal and not as a recipient, they should only be associated with the caused motion schema and, thus, would be expected to be found with either *le-* or *el*, as they are.⁹

- (31) *Yosef zarak et ha-kadur la-sal*
 Yosef threw ACC the-ball LE.the-basket
 (Yosef threw the ball to the basket)

- (32) ?*Yosef zarak et ha-kadur el ha-sal*
 Yosef threw ACC the-ball EL the-basket
 (Yosef threw the ball to the basket)

Further evidence that these indeed exemplify caused motion uses is that these examples only have pronominal counterparts with *el* and not with *le-*.

- (33) *ha-sal_i Se zarakti et ha-kadur elav_i*
 the-basket that threw.1s ACC the-ball EL.3.m.sg
 (the basket that I threw the ball to)

- (34) **ha-sal_i Se zarakti et ha-kadur lo_i*
 the-basket that threw.1s ACC the-ball LE.3.m.sg
 (the basket that I threw the ball to)

An animate NP with a *throw*-type verb could be understood as a recipient in the caused possession schema or a goal in the caused motion schema. Given this, such an argument should be found with both pronominal and nonpronominal *el* and *le-*. This expectation is borne out, as the following examples show.

(35) *Yosef zarakti le- /el Rina et ha-kadur*
 Yosef threw LE /EL Rina ACC the-ball
 (Yosef threw the ball to Rina)

(36) *Yosef zarak la /eleha et ha-kadur*
 Yosef threw LE.3.f.sg /EL.3.f.sg ACC the-ball
 (Yosef threw the ball to her)

Pulling these observations together, the distributional generalization is that Hebrew *le-* marks both recipients and spatial goals, while *el*, like Russian *k*, is exclusively a marker of spatial goals. The distribution of these elements also supports the proposal that *give*-type verbs take recipients, but not spatial goals; if they did take spatial goals, then they would be expected to take *el* as well. The Hebrew data, then, provides further support for the proposal that *give*-type verbs are found only in the caused possession schema. Furthermore, there is a second distributional generalization involving *le-*: only the recipient uses of *le-* can be pronominalized; spatial goal uses cannot be. The pronominal uses of *le-*, then, show the same distribution as the first object in the English double object construction.

(37) *A summary of the Hebrew data:*

	pronominal <i>le-</i>	nonpronominal <i>le-</i>	all uses of <i>el</i>
<i>give</i> -type verbs:	caused possession	caused possession	—
<i>throw</i> -type verbs:	caused possession	caused motion or caused possession	caused motion

4. The English verb *send* and its translation equivalents

The English verb *send* and its translation equivalents in Russian and Hebrew make a strong case that individual verbs show specific associations with event schemas. The language-specific argument realization patterns of *send* and its counterparts emphasize that languages differ in the morphosyntactic resources they make available for expressing recipients and spatial goals, as well as in the semantic domains covered by their case markers or adpositions.

4.1. The basic properties of a sending event

The basic properties of the English verb *send* and its translation equivalents can be illustrated using this English verb which, like *throw*, shows two event schemas: caused motion and caused possession. What makes this specific verb stand out is that it shows an interaction between the animacy of its two non-agent arguments and the availability of specific event schemas. Presumably, this interaction reflects distinct senses of this verb, which are reflected in animacy constraints on its non-agent arguments. As I show, this same interaction is observed in all three languages under study, though its manifestation is different in each language because of the different associations of event schemas and argument realizations. Still, the associations are what they would be expected to be, confirming the picture laid out in the previous sections.

I begin by laying out the argument realization options for English *send*, showing how they interact with the animacy of the theme. First, with an inanimate theme and a purely spatial goal, only the *to* variant is available, suggesting that only the caused motion schema is available.

- (38) a. *We sent the package to the border*
b. **We sent the border the package*

With an inanimate theme and an animate third argument, as I will refer to the non-theme, non-agent argument in this section, both argument realizations are available, as in (39), suggesting that both event schemas are available in principle, though the caused possession sense is preferred, perhaps reflecting a preference for taking an animate to be a recipient rather than simply a goal. (This example and the previous one are from J. Gropen et al. (1989:207), who attribute it to Joan Bresnan.)

- (39) a. *We sent the package to the boarder*
b. *We sent the boarder the package*

Interestingly, the verb *send* can take an animate theme, as in (40). In most instances, when the theme is animate and the third argument is also animate, there is no possessive relation between them. Given this, only the caused motion schema should be possible, and this prediction is substantiated in that only the *to* variant is available. For example, if a teacher sends some children to the principal, the principal does not, as a result, have the children; this contrasts with a situation where a teacher sends the principal a note, in which case he does, as a result, have the note.

- (40) a. *The teacher sent the children to the principal*
b. **The teacher sent the principal the children*

- (41) a. *The teacher sent the note to the principal*

- b. *The teacher sent the principal the note*
- (42) a. #*The principal got the children*
- b. *The principal got the note*

As discussed in M. Rappaport Hovav and B. Levin (2008), there is further corroboration that animate theme uses involve the caused motion schema from the idiom *send to the devil*, which involves an animate third argument. This idiom, which combines with an animate theme, does not show the dative alternation while retaining its nonliteral meaning.

- (43) a. *He sent his boss to the devil*
- b. **He sent the devil his boss*

However, very occasionally, there can be a relation of “possession” between two animates, for example, between professors and graduate students, and, as expected, in such instances, the double object construction is possible, as in *I sent her my best graduate student*.

The revised picture that emerges for English once *send* is taken into account is summarized in (44).

(44) *A summary of the English data (revised):*

	<i>to</i> variant	double object variant
<i>give</i> -type verbs:	caused possession	caused possession
<i>throw</i> -type verbs:	caused motion or caused possession	caused possession
<i>send</i> (inanimate theme):	caused motion or caused possession	caused possession
<i>send</i> (animate theme):	caused motion	—

This summary highlights how an individual verb may show distinct patterns of argument realization for different argument choices because the argument choice affects the verb’s association with event schemas and, thus, the available expressions of its arguments. This point will now be reinforced with data from Russian and Hebrew.

4.2. The Russian verb *poslat’* ‘send’

I turn now to *send*’s Russian counterpart, the verb *poslat’*. The expectation would be that in Russian, as a language with a dative case used to express a recipient, the argument choices that preclude the double object construction for English *send* should also preclude the dative construction for Russian *poslat’*. This expectation is borne out.

First, in Russian, the dative construction is never found when *poslat'* 'send' takes an inanimate theme and a purely spatial goal. (The preposition *k* is not used with cities.)

(45) **Ja poslal knigu Moskve*
 I.NOM sent book.ACC Moscow.DAT
 (I sent the book to Moscow)

(46) *Ja poslal knigu v Moskvu*
 I.NOM sent book.ACC in Moscow.ACC
 (I sent the book to Moscow)

Nor is the dative construction found when *poslat'* takes an animate theme; rather, the allative preposition *k* is used to express the intended meaning, consistent with the proposal that in such instances there is only a caused motion sense.¹⁰

(47) **Ja poslal učenikov direktoru*
 I.NOM sent students.ACC principal.DAT
 (I sent the children to the principal)

(48) *Ja poslal učenikov k direktoru*
 I.NOM sent students.ACC K principal.DAT
 (I sent the children to the principal)

A translation equivalent of the idiom *send to the devil* is found in Russian, and interestingly it uses the preposition *k* for the third argument, just as other examples with animate themes do.

(49) *Ja poslal Ivana k čěrtu*
 I send Ivan.ACC K devil.DAT
 (I sent Ivan to the devil)

However, a dative NP may be found with *poslat'* when it does describe a caused possession event, as in (50) with an inanimate theme and an animate third argument, which qualifies as a recipient.

(50) *Ja poslal Ivanu knigu*
 I.NOM sent Ivan.DAT book.ACC
 (I sent Ivan a book)

The distributional properties of Russian *poslat'* once again show that the meanings of verbs influence the associated event schemas, which in turn affect their syntactic realization options. Furthermore, the argument realization options shown by *poslat'* are the ones already illustrated with the Russian counterparts of *give-* and *throw-*type verbs: when *send* expresses caused possession, it takes a dative NP, expressing a recipient, but it is found with the allative preposition *k* when it expresses caused motion and takes a goal. In a sense, then, *poslat'*, like the Russian *throw-*type verbs, shows a kind of "dative alternation".

(51) *A summary of the Russian data (revised):*

	dative case	<i>k</i>
<i>give</i> -type verbs:	caused possession	—
<i>throw</i> -type verbs:	caused possession	caused motion
<i>send</i> (inanimate theme):	caused possession	caused motion
<i>send</i> (animate theme):	—	caused motion

4.3. The Hebrew verb *Salax* ‘send’

I turn next to the Hebrew counterpart of English *send*, the verb *Salax*. I do not review the entire paradigm for this verb, but only focus on the key uses: those with an animate theme, which should only involve the caused motion schema; a fuller description is available in I. Francez (2006). There is evidence that like its English and Russian counterparts, with an animate theme, the Hebrew verb *Salax* has only the caused motion schema. As discussed in §3.3, this is demonstrated by the availability of *el*, which is found only with this schema, as well as *le-*, which is found with nonpronominal objects with both schemas.

(52) *Dan Salax et ha-yeladim le-lel Rina*
 Dan sent ACC the-children LE/EL Rina
 (Dan sent the children to Rina; I. Botwinik-Rotem 2003:95, (26a))

As support for the proposal that this example involves caused motion rather than caused possession, I. Francez (2006) points out that (52) does not result in a relation of possession between Rina and the children. That is, (53) cannot describe the result of (52).

(53) ??*yeS le Rina et ha-yeladim*
 be LE Rina ACC the-children
 (Rina has the children; I. Francez 2006:11, (26c))

Still further support for the claim that only the caused motion schema is available to uses with animate themes comes from pronominal uses of the markers *le-* and *el*. There is no counterpart of sentence (52) with pronominal *le-*, as expected since this form of *le-* is found only with the recipient in a caused possession use (I. Botwinik-Rotem 2003:95).

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

Instead, the only pronominal counterpart to (52) is formed with the allative preposition *el*, as in (55).

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

Once again, then, Hebrew shows the same association of verbs with event schemas as English and Russian, with the appropriate surface realizations of the event schemas following from these associations.

- (56) *A summary of the Hebrew data (revised):*

	pronominal <i>le-</i>	nonpronominal <i>le-</i>	all uses of <i>el</i>
<i>give</i> -type verbs:	caused possession	caused possession	—
<i>throw</i> -type verbs:	caused possession	caused motion or caused possession	caused motion
<i>send</i> (inanimate theme):	caused possession	caused motion or caused possession	caused motion
<i>send</i> (animate theme):	—	caused motion	caused motion

5. Conclusions

This paper provides a window into the crosslinguistic manifestation of the argument realization options available to dative verbs through case studies of three languages. Taking M. Rappaport Hovav and B. Levin’s (2008) verb-sensitive approach to the English dative alternation as my starting point, I noted that the argument realization problem with dative verbs has two components: i) the possible associations of these verbs with certain event schemas and ii) the possible syntactic realizations available to these event schemas. In this paper, I considered each part of this problem from a crosslinguistic perspective. Specifically, I supported the proposal that the caused motion and caused possession schemas should distribute across the *give*-, *throw*-, and *send*-type verbs in the same way across English, Hebrew, and Russian, but that the actual argument realizations attested in these three languages for each event schema—and, indirectly, each verb type—are not exactly the same due to differences in the morphosyntactic resources available to each language.

The verb-sensitive approach to the English dative alternation contends that the inherent meaning of an individual dative verb has a greater contribution to make to the syntactic expression of their arguments than other current accounts typically assume. Specifically, due to their distinct lexicalized meanings, not all verbs—or, more precisely, verb roots—show the same associations with event schemas. M. Rappaport Hovav and B. Levin (2008) argue that English *give*-type verbs are associated only with a caused possession schema, while *throw*- and *send*-type verbs are associated with both caused motion and caused possession schemas. In

this paper, I showed that these semantic classes of verbs have, as might be expected, the same associations with these two event schemas in Hebrew and Russian as well. These crosslinguistic similarities in verb–event schema associations may not always be immediately apparent because of differences in the morphosyntactic realization of these schemas across languages; for instance, Hebrew and Russian, unlike English, have adpositions found only with the caused motion schema.

This is where the second goal of the paper comes in. With respect to this goal, I showed that there are differences in the resources that languages bring to bear for expressing the caused motion and caused possession event schemas. For example, in supporting their verb-sensitive approach, M. Rappaport Hovav and B. Levin argue that the English *to*-variant may express both caused motion and caused possession schemas—a property they attribute to the semantic range of English *to*. In contrast, although Hebrew *el* might seem comparable to English *to*, it is used purely to express a spatial goal, and it is the Hebrew clitic *le-* in its nonpronominal use which shows the same distribution as English *to*. Hebrew and Russian, unlike English, have adpositions that can express spatial goals but not recipients, so these adpositions are not found with the caused possession schema. The Russian dative case and Hebrew pronominal *le-* pattern with the English first object of the double object construction in being used for recipients and not spatial goals.

This investigation raises a host of typological questions. The most fundamental is: Precisely what range of morphosyntactic options are found across languages for expressing the caused motion and caused possession schemas, in general, and the notions recipient and goal, in particular? The studies of the three languages reported here give some indication of the options available, but these options clearly do not exhaust the space of possibilities. For example, there are languages where the dative and locative cases fall together, such as Japanese. Delineating this space is essential, and E. Blansitt's (1988) typological study of possible syncretisms involving dative, locative, and allative case markers might provide a productive starting point for doing this.

Even once the typological space is delineated, further questions are bound to arise concerning why the space is what it is and what factors determine the particular argument realization options attested in a given language. Word order, morphological case, and agreement are all “coding” devices in the sense of E. Keenan (1976) that languages use for argument realization. There are clearly interactions between the devices a language uses and the possible syntactic expressions it uses for the caused motion and caused possession schemas, and these will need to be uncovered. For instance, as noted in §2, the availability of two distinct syntactic realizations for the caused possession schema in English was ascribed to information structure considerations interacting with its fixed word order. Furthermore, it is likely that the inventory and domain of case markers and adpositions in a given language reflect diachronic factors, as suggested by

A. Aristar's (1996) study of dative and locative case syncretisms across languages. These also must be recognized in order to understand why the space of argument realization options is what it is. This paper, then, reiterates the importance for continued, synthetic crosslinguistic investigation of dative verbs, while underscoring the importance of including fine-grained studies of individual dative verbs in such explorations.

Notes

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1. For more detailed discussion of the verb-sensitive approach, see M. Rappaport Hovav and B. Levin (2008). They reexamine the evidence said to favor the uniform multiple meaning approach, including inference patterns and verb–argument combinations (both idioms and collocations), and show that the verb-sensitive approach allows a more insightful explanation of the data, while having wider coverage.

2. A major reason for focusing on these verb classes is that their members can describe the caused possession of physical objects (though they can also describe certain abstract forms of caused possession). Some of these verbs also have “support” verb uses; these are not discussed here, though English idioms and collocations involving dative verbs receive some discussion in M. Rappaport Hovav and B. Levin (2008). Verbs involving communicative acts, such as *teach* and *tell*, and verbs found in the double object construction with a “benefactive” first object, such as *bake* and *build*, are also ignored here.

3. Although the prototypical recipient is animate, these facts cannot be attributed to animacy. Some instances of the caused possession schema involve a relation of possession between two inanimates, as in *Kelly gave the kitchen wall a coat of paint/a coat of paint to the kitchen wall*, yet *where* questions are still not appropriate for such examples. See A. McIntyre (2006) and M. Rappaport Hovav and B. Levin (2008) for more discussion and disentangling of animacy/recipient confusions.

4. Throughout the paper, I assume that each type of dative verb shows the same associations with event schemas across languages, but this assumption actually needs refinement. There is constrained crosslinguistic variation in these associations that emerges from a crosslinguistic survey of the argument realization

options of these and other dative verb types (W. Croft et al. 2001, I. Francez 2006, B. Levin 2004). I believe that this variation arises because different semantic classes of dative verbs are associated with the caused possession schema for different reasons (see §2), so there might be some differences across languages in the availability of this association across verb classes. I leave this as a topic for further research, simply noting that such variation provides further evidence for a verb-sensitive approach.

5. Referring to a dative case is a simplification, as in some languages there may be some other oblique case marker or adposition whose uses include those that usually fall under the label “dative”, e.g. the Greek genitive case (E. Anagnostopoulou 1999:42) and the Japanese postposition *ni*, which has both locative and dative uses (K. Sadakane and M. Koizumi 1995); see also A. Aristar (1996) and E. Blansitt (1988). Ultimately, these patterns should also be taken into account in delineating the space of morphosyntactic resources available crosslinguistically for expressing recipients, but laying out such a typology goes beyond the scope of this paper.

6. Although I have translated Russian *k* with English *to* in (19) and (20), English *towards* may better capture its sense as the ball need not reach the goal in these examples. However, in sentences with certain other verbs, such as *prinesti* ‘bring’, *k* is best translated as *to*. Apparently, the interpretation of *k* depends on whether the verb itself entails that the goal is reached. The facts, then, are reminiscent of M. Rappaport Hovav and B. Levin’s (2008:145-146) discussion of goal attainment with English *to*. I leave a fuller investigation of this question to future work.

7. The restriction against *el* with *give*-type verbs cannot be attributed to the animacy of the recipient, as *el* can be found with animates that are not recipients as in (35) and (52).

8. The examples here are inspired by the work of I. Francez (2006), which initially collapses the *send*- and *throw*-type verbs and illustrates their properties with *Salax*, the Hebrew counterpart of *send*, only later separating out the special uses that set *Salax* apart. Due to these special uses, I leave a discussion of this verb until §4.3 and make the basic points in this section with the more straightforward verb *zarak* ‘throw’.

9. The use with *el* plus NP as in (32) is dispreferred for reasons that need further investigation. Such uses of nonpronominal *el* seem to carry a nuance of ‘in the direction of’. Interestingly, it is felicitous in the Hebrew counterpart of *Yosef kicked the ball to the goal*, which uses a different *kick*-type verb.

10. Maria Polinsky points out that a dative NP cooccurring with an animate theme is marginally acceptable if the theme can be interpreted as “less animate”, as in the sentence *General poslal novyx soldat polkovniku* ‘The general sent new soldiers to the colonel’, where ‘new soldiers’ refers to reinforcements. In such instances, a caused possession interpretation should be possible, as reflected in the dative NP.

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Summary

This paper investigates the argument realization options shown by dative verbs across languages through case studies of English, Hebrew, and Russian. Its starting point is M. Rappaport Hovav and B. Levin's (2008) verb-sensitive approach to the English dative alternation, which factors the problem in two: i) the possible associations of individual verbs with event schemas and ii) the possible morphosyntactic realizations available to each event schema. M. Rappaport Hovav and B. Levin distinguish three major subtypes of dative verbs, represented by English *give*, *send*, and *throw*, and two event schemas, caused motion and caused possession. This paper shows that these two event schemas show the same distribution across the three verb types in English, Hebrew, and Russian. However, the argument realizations attested in these three languages for each event schema—and, indirectly, each verb type—are shown to differ as the morphosyntactic resources of languages differ; the primary differences reside in the realization of the recipient in the caused possession schema and of the goal in the caused motion schema.

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