1 A problem for determining semantic prominence and argument realization

A glance at proposed thematic hierarchies reveals controversy over the ranking of recipient/goal and theme (patient), and, specifically, the ranking of (goal as) recipient and theme.

(1) Agent > Experiencer > Goal/Source/Location > Theme (Grimshaw 1990)
(2) Agent > Theme > Goal > Oblique (Larson 1988)
(3) Agent > Benefactive > Recipient/Experiencer > Instrument > Theme/Patient > Location (Bresnan & Kanerva 1989)

A complication: Some researchers reserve the term “goal” for purely spatial goals; for others, it subsumes “abstract” goals, including recipients, benefactives, experiencers. In this lecture, the term “spatial goal” is used to indicate the goal in a change of location event and the term “recipient” is used to indicate the intended possessor in a transfer of possession event. (Recipients may be seen as goals by the Localist Hypothesis (Gruber 1965; Jackendoff 1972, 1983))

Sources of this controversy

• The dative alternation: There are two options available in many languages for the realization of the arguments of verbs used to describe transfer of possession events.

(4) a. Sandy gave a copy of the new grammar to Terry. (to variant)
   b. Sandy gave Terry a copy of the new grammar. (double object variant)

If the variants have distinct event structures, as many posit, then two different rankings might be expected based on depth of embedding of arguments, one for each event structure.

(5) a. Double object variant: change of possession (i.e., ‘cause to have’) meaning
   \[ vP \text{ Agent} \left[ v' \text{ CAUSE} \left[ PP \text{ Goal} \left[ P' \text{ HAVE} \left[ DP \text{ Theme} \right] \right] \right] \right] \]
   (Harley 2003:46, (21))
   b. Goal/Recipient > Theme

(6) a. to variant: change of location (i.e., ‘cause to be at’) meaning
   \[ vP \text{ Agent} \left[ v' \text{ CAUSE} \left[ PP \text{ Theme} \left[ P' \text{ LOC} \left[ PP \text{ to Goal} \right] \right] \right] \right] \]
   (Harley 2003:46, (23))
   b. Theme > Goal/Recipient
However, the evidence for assigning two event structures to *give* and verbs which, like it, inherently signify an act of giving, is not as strong as it has been taken to be (RH&L 2005; see section 5).

Rather, if one event structure underlies both argument realizations available to a dative verb, there should be a single ranking of arguments independent of their morphosyntactic realization. If the event structure is ‘cause to have’, then based on depth of embedding, the ranking would be:

Agent > Recipient > Theme

- **The status of “first object”:** The ranking of recipient with respect to theme in the double object variant is unclear, in part because the status of the first object as an object is unclear.

  — Barss-Lasnik (1986) asymmetries suggest the recipient is more prominent than the theme.

(7)  
<table>
<thead>
<tr>
<th></th>
<th>a. Susan sent every owner; his dog. (Harley 2003)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. *Susan sent his owner every dog.</td>
</tr>
</tbody>
</table>

— The recipient patterns like a transitive object with respect to passivization; this diagnostic also suggests the recipient has priority over the theme.

(8)  
<table>
<thead>
<tr>
<th></th>
<th>a. The package was sent to Terry by Sandy.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. Terry was sent the package by Sandy.</td>
</tr>
<tr>
<td></td>
<td>c. *The package was sent Terry by Sandy.</td>
</tr>
</tbody>
</table>

— Yet, the recipient does not pattern like a transitive direct object with respect to other purported object diagnostics (Baker 1997); with respect to these theme take precedence over recipient:

(9)  
<table>
<thead>
<tr>
<th></th>
<th>Compound formation in English:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. secret-telling (to spies), book-reading (to children)</td>
</tr>
<tr>
<td></td>
<td>b. *spy-telling (of secrets), *child-reading (of books)</td>
</tr>
</tbody>
</table>

These phenomena alone do not point unambiguously to specific prominence relations among roles:

**The ranking is ‘Agent > Theme > Recipient’** (Baker 1997):
Baker argues for this ranking, with the recipient taken to be a subtype of goal, across languages and independent of the realization of the arguments.

**Motivation:** The Uniformity of Theta Assignment Hypothesis (Baker 1988) and the assumption that the two dative alternation variants are “thematic paraphrases”.
Non-objectlike behavior of recipient stems from its being governed by a preposition at d-structure.

**The ranking is ‘Agent > Recipient > Theme’**:  
A possibility if the relevant phenomena involve the lowest ranked argument; more specifically, they could be said to be sensitive to order of composition of arguments with their verb, and, hence, their depth of embedding in the event structure.

2 **Another not-unrelated problem: The relation between the variants**

The controversy over semantic prominence relations arise at least in part from disagreements over the analysis of the relation between the variants. There are two major approaches to this relation.
AN (IMPLICIT) ASSUMPTION SHARED BY MOST CURRENT ANALYSES:
All the verbs participating in the dative alternation receive a UNIFORM analysis.

• THE UNIFORM MONOSEMY APPROACH: Dative verbs have a single meaning, giving rise to two derivationally-related syntactic structures. The two variants are taken not to differ in (truth-conditional) meaning. This approach tends to be syntactically motivated (e.g., for case reasons). (The approach has nonderivational instantiations, where one meaning gives rise to two argument realizations; e.g., Butt, Dalrymple & Frank 1997, Van Valin & LaPolla 1997, Wechsler 1995.)

— The to variant is basic (e.g., Baker 1988; Bresnan 1982; den Dikken 1995; Dowty 1979, 1982; Emonds 1972; Hall 1965; Larson 1988, 1990).

— The double object variant is basic (e.g., Aoun & Li 1989)

• THE UNIFORM POLYSEMY APPROACH: A nonderivational analysis that takes dative verbs to have two distinct meanings, each giving rise to its own realization of arguments (e.g., Beck & Johnson 2004; Green 1974; Hale & Keyser 2002; Harley 2003; Krifka 1999, 2001; Oehrle 1976; Pinker 1990). This approach also has a constructional instantiation (e.g., Goldberg 1995): dative verbs are monosemous, but compatible with two constructions. This approach tends to be motivated by lexical semantic considerations.

Alternating verbs have core meanings compatible with two event schemas.

(10) a. CAUSATION OF POSSESSION: ‘x cause y to have z’; double object variant source.
    b. CAUSED MOTION: ‘x cause z to be at y’; to variant source

The alternate argument realizations arise because DISTINCT arguments satisfy the semantic conditions for mapping to “direct object” in each variant: analyzability as “affected arguments” or “causees” (in bold in (10)).

<table>
<thead>
<tr>
<th>to Variant</th>
<th>Double Object Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>caused motion</td>
<td>causation of possession</td>
</tr>
</tbody>
</table>

This lecture abstracts away from the constructional (e.g., Goldberg 1995), neoconstructional (e.g., Borer 2005a,b; Harley 2003), lexical (e.g., Bresnan 1982) debate. All posit a distinction between a verb’s core meaning (or root) and a structural representation of meaning, be it an event structure, a construction, or a syntactic representation. All polysemy approaches assume that dative verbs are associated with a single root or core meaning, but assume that the alternation arises from the compatibility of such verbs with two event structures/constructions.

3 Goals of this lecture

• Reassess previous claims about the nature of the dative alternation and reevaluate their implications for semantic prominence and argument realization.

• Argue that the dative alternation has two sources (see also Jackendoff 1990):
  — Verbs that lexically select recipients—i.e., possessional goals—are monosemous: a single causation of possession event structure gives rise to two argument realizations.
  — Verbs that lexically select spatial goals and participate in the dative alternation are polysemous: the alternation reflects the existence of two event structures: caused motion and causation of possession.
Verbs that lexically select recipients (based on Gropen et al. 1989):

a. Verbs that inherently signify acts of giving: give, hand, lend, loan, rent, sell, ...

b. Verbs of future having: allocate, allow, bequeath, forward, grant, offer, promise, ...

c. Verbs of type of communicated message: tell, show, ask, teach, read, write, quote, cite, ... (take possessional goals via the Conduit Metaphor; Reddy 1979)

Verbs that select spatial goals and show the alternation (based on Gropen et al. 1989):

a. Verbs of sending: mail, send, ship, ...

b. Verbs of instantaneous causation of ballistic motion (throw verbs): fling, flip, kick, lob, slap, shoot, throw, toss, ...

c. Verbs of causing accompanied motion in a deictically specific direction: bring, take

• Argue that the relation between senses and variants is different and more complicated than the uniform polysemy approach suggests.

<table>
<thead>
<tr>
<th>to Variant</th>
<th>Double Object Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>give Verbs:</td>
<td>causation of possession</td>
</tr>
<tr>
<td>throw Verbs:</td>
<td>caused motion or</td>
</tr>
<tr>
<td></td>
<td>causation of possession</td>
</tr>
</tbody>
</table>

• Argue that the “first object” in the English double object construction is not like the direct object of a transitive verb, but rather like a dative NP in languages with such NPs.

4 Assumptions about the association of verbs with event structures

Core verb meanings—or roots—are associated with event structures via canonical realization rules (RH&L 1998), which ensure that the minimal elements of meaning lexicalized in a verb are expressed based on the root’s ontological classification; see Lecture Notes II.

4.1 Verbs of giving

Following Tham (2004) and others, we assume a primitive predicate HAVE, associated with verbs inherently signifying possession, such as English have, own, possess, and an additional ontological type, ‘possession-type’, which indicates the type of possession involved. These are paired via a canonical realization rule that gives rise to two-argument stative verbs of possession.

(13) possession-type → [ x HAVE_{POSS-TYPE} y ]

• Give: Its event structure arises from generalizing the externally caused change of state event structure, with the state represented by a primitive predicate HAVE.

(14) [ [ x ACT ] CAUSE [ BECOME [ y HAVE_{POSS-TYPE} z ] ] ]
NOTE: The notion “recipient” can be defined with respect to this event structure as the ‘y’ argument.

- OTHER VERBS OF GIVING: They have give’s event structure, but modify it in some way:
  — Verbs such as sell: Their roots specify a manner modifying the ACT in the causing event.
  — Verbs such as rent and lend: Their roots describe a more specific type of possession (e.g., temporary possession), encoded in the possession type which modifies HAVE.

- VERBS OF FUTURE HAVING: Their roots contribute a “sublexical modality” (Koenig & Davis 2001; also Croft 2003): a modal, negation, or temporal operator that modifies the “situational core” shared by certain verbs: i.e., the transfer of possession verb promise, where “a promise entails a transfer of possession in models in which the set of circumstances is restricted to those in which people honor their promises” (Koenig & Davis 2001:85).

4.2 Verbs which select spatial goals

These verbs are associated with two distinct event structures.

- They have roots that are naturally associated with a caused motion event structure:

  (15) \[ [ x \text{ACT}_{THROW}] \text{CAUSE} [ y \text{GO} [ \text{PATH} z ]] \]

- Such roots also may be associated with a causative change of possession event structure (Croft et. al. 2001; Jackendoff 1990; Levin 2004), and, hence, may be found in the double object construction or its equivalent in other languages.

  (16) \[ [ x \text{ACT}_{THROW}] \text{CAUSE} [ y \text{HAVE} z ] \]

This option is available because, as Goldberg (1997) proposes, verbs may be integrated into constructions via a force-dynamic relation (e.g., means, instrument, result). In this instance, this relation is a means or instrument relation.

4.3 Verbs of giving are not associated with a caused motion event structure

There is no evidence that English verbs of giving have a caused motion event structure as well as a causation of possession event structure, though uniform polysemy accounts assume the contrary.

The strongest argument for taking verbs of giving to have a caused motion event structure is their occurrence with a to phrase in the to variant.

However, verbs of giving do not select for a spatial goal argument, even when found in this variant. As shown by Jackendoff (1990) and RH&L (2005), in this construction, they lack certain basic properties of verbs like throw, which have a caused motion sense and, thus, select spatial goals.

(17) They cannot take a source phrase:

  a. *Josie gave/handed the ball from Marla to Bill.
  b. Jill threw/kicked the ball from home plate to third base.
(18) They cannot take any preposition beside to:
   a. *Fred gave the ball at/behind/over Mary.
   b. Fred threw/kicked the ball under the porch/behind the tree/over the fence.

(19) They cannot take path modifiers:
   a. *Susan gave the ball all the way/halfway to Bill.
   b. Jake threw/kicked the ball all the way/halfway to Bill.

(20) The to phrase cannot be questioned by locative where (Levinson 2005):
   a. To whom/*where did you give the ball?
   b. To whom/where did you throw the ball?

Consequences for the analysis of the dative alternation: Assuming that verbs of giving have a single event structure, any asymmetries in their distribution across dative alternation variants cannot be directly attributed to lexical semantic factors. Rather, other factors must govern their distribution across the variants (see section 6).

(Lexical semantics still plays a role, since semantic verb classes correlate naturally with the factors which do govern the distribution of the alternation.)

4.4 Why do verbs of giving show two argument realization options?

If verbs of giving only have a causation of possession event structure, then why do they show the dative alternation?

Proposal: The dative alternation is about the alternate realizations of recipients (i.e., possessional goals), where a recipient is a generally animate entity capable of possession.

Recipients may be realized in two ways in English, as they meet the semantic characterizations associated with two distinct syntactic realizations (cf. Goldsmith 1980):

- **The first object in the double object construction**: It is dedicated to the expression of a “projected possessor” (Goldsmith 1980:429; see also Goldberg 1995; Green 1974; Oehrle 1976; Pinker 1989). A recipient, as a type of possessor, can be expressed as the first object.

- **The object of to**: It is much less semantically restricted than the first object and indicates a wide range of argument types, broadly falling under semantic categories covered by the dative and allative cases in other languages, including recipients, spatial goals, and some arguments that are less clearly goals (e.g., yield to, submit to, surrender to, subject to).

Recipients may be realized as spatial goals are—i.e., as objects of to—since by the Localist Hypothesis (Gruber 1965; Jackendoff 1972, 1983) they may be seen as a kind of goal.

The dative alternation arises as often “the meaning of the dative [first object] position roughly coincides with the meaning of the preposition to” (Goldsmith 1980:424; Pesetsky 1995).

Consequence: The first object is compatible with a subset of argument types found with to.

However, since the meaning of to is less restricted than the meaning of the first object, arguments which can be realized in the first object position can appear as objects of to, but there are many instances in which the argument which can appear as the object of to cannot appear as a first object: e.g., a purely spatial goal, as in *We sent the package to the border/*We sent the border the package.
5 Evidence for a non-uniform approach to dative verbs

A PREDICTION OF THE UNIFORM POLYSEMY ACCOUNT: As verbs of giving have a caused motion meaning, which is associated with the to variant, they may select a path in this variant, but not in the double object variant.

EVIDENCE TAKEN TO SUPPORT THIS PREDICTION: A variety of asymmetries between the variants.

HOWEVER: Closer scrutiny of the relevant phenomena shows that when they are more accurately described, they turn out to support the non-uniform approach over the uniform polysemy approach.

5.1 Evidence from the distribution of verb-argument combinations

PROBLEMS WITH A UNIFORM POLYSEMY ACCOUNT OF SUCH COMBINATIONS
Goldberg (1992), Harley (2003), and Krifka (2003) argue that when give has a ‘come into existence’ reading, only the double object variant is available, since, in the absence of a source, there is no path constituent for the to phrase to denote.

(21) a. The kids gave me a headache.
b. ?? The kids gave a headache to me.

b. * Interviewing Nixon gave a book to Norman Mailer.

These data must receive another explanation: in other instances where a path constituent is lacking, the to variant is impeccable.

(23) a. We gave a fresh coat of paint to the house.
b. The music lent a festive air to the party.
c. This can give a headache even to a Tylenol.

AN ALTERNATIVE EXPLANATION
As already shown, give is always associated with a causation of possession event structure and NEVER takes a path phrase. A giving event will often appear to involve transfer of possession from a source to a recipient, because in the real world we assume that person A cannot cause person B to have possession of a physical object unless A has possession of it first. In contrast, person A does not need to have a headache to cause person B to have a headache.

CONCLUSION: The absence of a path phrase cannot account for the exclusion of certain verb-argument combinations from the to variant.

5.2 Evidence from idioms

A range of literature has noted asymmetries in the formation of idioms based on dative verbs. On the uniform polysemy approach, these asymmetries are attributed to difference in the relative semantic prominence of arguments in the two variants, as it reflects differences in their depth of embedding and, hence, in their order of composition with the verb.
Harley (2003:46) uses idiom facts to support the assignment of two distinct underlying syntactic structures to the variants, reflecting their distinct meanings. These structures assume “lexical decomposition” in the syntax, à la Hale & Keyser (2002), as well as preposition-raising to V.

(24) a. Double object variant: change of possession meaning
\[
[vP \text{Agent} [v' \text{CAUSE} [PP \text{Goal} [P' P_{\text{HAVE}} [DP \text{Theme}]])]]
\]

b. to variant: change of location meaning
\[
[vP \text{Agent} [v' \text{CAUSE} [PP \text{Theme} [P' P_{\text{LOC}} [PP \text{Goal}]])]]
\]

She assumes all fixed pieces of an idiom must form an underlying syntactic constituent (Marantz 1996; cf. Nunberg et al. 1994); thus, if an idiom has a single fixed NP, this NP must be the sister of the head of P’ in (24).

Harley, therefore, predicts the following idiom asymmetries:
— An idiom with a fixed theme should only appear in the double object variant.
— An idiom with a fixed goal should only appear in the to variant.
— No idiom with a single fixed NP should show both variants as each requires a distinct argument to be fixed, so one variant would not meet the constituency requirement.

Harley suggests attested idioms with dative verbs conform to these predictions:
— Idioms with fixed themes are restricted to the double object variant: (25).
— Idioms with fixed goals are restricted to the to variant: (26).

(25) a. read x the riot act
b. lend x an ear
c. show x the ropes
d. promise x the moon
e. give x the cold shoulder
f. give x the creeps
g. give x the boot
h. give x a headache

(26) a. send x to the showers
b. take x to the cleaners
c. push x to the edge
d. carry x to extremes
e. send x to the devil
f. throw x to the wolves

The actual distribution of the idiom data is not as predicted and reported

Fixed theme idioms are found in the to variant, contra Harley’s prediction. Harley acknowledges such idioms, but takes them to arise from “heavy NP-shift” (HNPS), writing that they “are prosodically manipulated cases of well-behaved idioms” (Harley 2003:47).

(27) a. Oscar will give the boot to any employee that shows up late (Harley 2003:43, (19c); based on Larson 1988:341, (11))
b. Even the Argentine president, known for his weakness for women, was giving the cold shoulder to the flamboyant American singer . . . (COBUILD)

c. “. . . You want to give a wide berth to political discussion.” (The Columbus Dispatch, October 23, 2001, p. 02B; Nexis)

Yet, such examples are more problematic than Harley takes them to be:
— Other instances of HNPS do not involve preposition insertion.
— The supposed output of HNPS can undergo HNPS itself, as in (28).
— The recipient does not have to be heavy for fixed theme idioms or verb-argument combinations to appear in the \textit{to} variant, as in (29).

(28) You want to lend \textit{[to the victims of the disaster]} \textit{[a most sympathetic ear]}.

(29) a. Gordie Gillespie still can give a piece of his mind to the umps . . . (Milwaukee Journal Sentinel, April 21, 1996, p. 1; Nexis)
b. He’s in there for one reason and that’s to give a headache to Mike White. (The Plain Dealer, December 13, 1992; Nexis.)
c. . . . Nevarez says that he has done more than simply give a fresh coat of paint to the site. (San Antonio Business Journal, March 29, 2004)

THE IDIOM FACTS ARE AS EXPECTED ON THE NON-UNIFORM ANALYSIS

• Why are fixed theme idioms as in (25) found in both variants?

These idioms have meanings that involve a causation of possession event. Their meaning involves a recipient, rather than a purely spatial goal. They alternate because their recipients, like any recipient, has two possible realizations.

• Why are fixed goal idioms as in (26) found only in the \textit{to} variant, though their verbs can alternate?

As O’Grady (1998) points out, these idioms involve spatial goals and not recipients. Spatial goals can be expressed in \textit{to} phrases, but not as first objects in the double object variant, so these idioms are found only in the \textit{to} variant.

— Even the examples in (26) with an animate NP in the \textit{to} phrase do not involve recipients. The verb \textit{send} in \textit{send to the devil} is comparable to the \textit{send} in (30), which does not alternate.

(30) a. The teacher sent the misbehaving student to the principal.
b. * The teacher sent the principal the misbehaving student.

— And NONE of the verbs in (26) is a verb of giving, just as predicted by our analysis.

5.3 Further types of evidence

• Evidence from inference patterns The double object variant is said to be associated with a “successful transfer inference”.

(31) a. Mary taught John linguistics.
b. Mary taught linguistics to John. (Green 1974:157, (2))
Green (1974:157) observes that “Sentence (2a) [= (31a)] implies or entails that John learned linguistics, while (2b) [= (31b)] merely states that he was a student of linguistics, and is neutral as to whether his teacher Mary had any success in her efforts”.

Although polysemy accounts assume that each variant is associated with its own inferences because each has its own meaning, deriving the successful transfer inference in this way is theoretically and empirically problematic (RH&L 2005; for data, Baker 1997; Davidse 1996; Oehrle 1977).

A closer look at the data shows that the lexical semantics of a verb’s root—not the variant that it appears in—accounts for how it patterns with respect to the successful transfer inference; thus, different verb subclasses show different patterns.

Due to their very meaning, successful transfer is entailed, not just implicated, for verbs of giving.

(32)  
\begin{enumerate}
\item # Kim gave Lee a book, but Lee never got it. (contradiction)
\item # Jones sold Smith a truck, but the truck was never Smith’s. (contradiction)
\end{enumerate}

In contrast, the inference is easily cancelled if a verb’s meaning doesn’t entail transfer of possession.

(33)  
\begin{enumerate}
\item I threw John the ball, but it didn’t reach him because of the strong wind. (Baker 1997:89, (20b))
\item When I took him his mail, I found that he had disappeared. (Oehrle 1977:206)
\item I wrote Molly a letter, but tore it up instead of sending it.
\end{enumerate}

Evidence from other languages: In some languages with a dative alternation, the double object construction or its analogue is found with fewer verbs than in English. The distribution of verbs can be described using an implicational scale of dative verb subclasses. Specifically, in the languages studied, verbs of giving always show the alternation, as expected since they inherently signify causing a change of possession, while verbs selecting spatial goals only show the alternation in some languages (Croft et. al. 2001; Levin 2004).

6 Choosing between semantically equivalent variants

If, as argued, verbs of giving never select a path, this property, cannot be used to explain variant choice, event though it has played an important part in previous accounts of variant choice—or, perhaps, of preferences for one variant over another. Instead, alternative factors can be appealed to.

Studies of texts show the distribution of the two variants is largely governed by information structure and heaviness considerations (e.g., Arnold et al. 2000; Davidse 1996; Erteschik-Shir 1979; Givón 1984; Polinsky 1996; Ransom 1979; Snyder 2003; Thompson 1990, 1995; Wasow 1997, 2002).

The choice is determined by the following interacting constraints:

- INFORMATION STRUCTURE: Given material comes before new material.
- HEAVINESS: Heavy material comes last.

CONSEQUENCE: For certain choices of theme and recipient it is difficult to get both variants.

- Since recipients are typically human and, therefore, likely to be given, they are more likely to linearly precede themes as in the double object variant, resulting in a preference for this variant. The double object variant preference may be overridden by heaviness considerations (see (34c)).
Most likely, in (34) the recipient, Mailer, is the topic of conversation and thus given, while the theme, an idea for a book, is new information. If there is a plausible scenario in which the notion of a book idea is given, the to variant is fine.

(35) A: It is very difficult to get book ideas simply from interviews.
B: Well, interviewing Nixon gave an idea for a book to Mailer.

• The theme in a verb-argument combination (e.g., a headache) or a fixed theme idiom (e.g., (25)) is “given” to a named individual, and, thus, less likely to be construed as given information. Thus, such combinations or idioms occur most often in the double object variant.

Yet, even verb-argument combinations or fixed theme idioms preferred in the double object variant can appear in the to variant, if the recipient is heavy enough or, when not that heavy, new.

(36) . . . it is unreadable, guaranteed to give a headache to anyone who looks hard at the small print. (*The Guardian*, September 17, 1992, p. 23; Nexis)

7 More on the first object as a realization of possessor: Parallels with dative NPs

A PERENNIAL QUESTION: What is the nature of the first object in the double object construction?

THE PROPOSAL: The “first object” in the English double object construction is not like the direct object of an English transitive verb, but rather like a dative NP in languages with such NPs.

Many languages which lack a double object construction still have a core (i.e., nonadjunct) grammatical relation, distinct from subject and object, used to express possessors. Specifically, many languages have a dative case and use the dative (case marked) NP as the basic realization of possessors, including recipients of verbs of transfer of possession.

(37) Ja dal Ivanu knigu.
   I,NOM give,PST Ivan,DAT book,ACC
   ‘I gave Ivan a book.’ (RUSSIAN; dative construction)

There are, then, two dedicated modes of expressing recipients:
— the first object in a double object construction
— a dative NP

CONSEQUENCE: The to NP in the English to variant is not comparable to a dative NP.

WHY? to primarily indicates spatial goals, but is also extended in English to other argument types, including recipients, since by the Localist Hypothesis (Gruber 1965; Jackendoff 1972, 1983) they may be seen as a kind of goal.
7.1 The morphosyntactic encoding of recipients across languages

Siewierska’s (1998) Generalization: Based on a study of approximately 260 languages, Siewierska 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 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, this observation suggests that crosslinguistically dative NPs and first objects—and thus the dative construction and double object construction—are in complementary distribution. Given this, they might be considered two sides of the same coin.

7.2 Evidence from the crosslinguistic distribution of various phenomena

Gerdts (1993) differentiates between direct object-centered languages, i.e., languages with a double object construction, and indirect object-centered languages, i.e., languages with a dative case.

Gerdts compares direct object-centered languages and indirect object-centered languages, showing that a range of constructions attested in one language type is not attested in the other.

There is a reason for the complementary distribution: certain phenomena are instantiated in distinct ways in the two language types. Essentially, they involve a first object (a ‘2’ in Relational Grammar terms) in the direct object-centered languages and a dative NP (a ‘3’) in the indirect object-centered languages. Gerdts takes these patterns to be signatures of the two language types.

<table>
<thead>
<tr>
<th>Halkomelem</th>
<th>Georgian</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Direct object-centered)</td>
<td>(Indirect object-centered)</td>
</tr>
<tr>
<td>3-to-2 advancement</td>
<td>initial 3 as final 3</td>
</tr>
<tr>
<td>benefactive-to-2 advancement</td>
<td>benefactive-to-3 advancement</td>
</tr>
<tr>
<td>other advancements to 2</td>
<td>other advancements to 3</td>
</tr>
<tr>
<td>possessor revalued to 2</td>
<td>possessor revalued to 3</td>
</tr>
<tr>
<td>causee-to-2 revaluation (transitives)</td>
<td>causee-to-3 revaluation (transitives)</td>
</tr>
</tbody>
</table>

Note: ‘1’ = subject, ‘2’ = direct object, ‘3’ = dative NP.

The complementary distribution of these pairs of 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, inalienable possessor, “low” benefactive à la Pylkkänen (2000), causee).

7.3 Evidence from syntactic domain asymmetries

In both the double object and dative constructions, the same structural relation holds between the recipient and theme: with respect to Barss/Lasnik (1986) asymmetries, the theme may be in the domain of the recipient, independent of its expression as a first object or a dative NP.

(38) Susan sent every owner₁ his₁ dog. (Harley 2003)  
(c.f. Susan sent every dog₁ to his₁ owner.)
8.1 Object properties associated with the theme

As illustrated by (41), with respect to nominalization, compound formation and secondary predication, the theme—and never the recipient—of dative verbs patterns like the object of a transitive verb (Baker 1996, 1997; Marantz 1997; Maling 2001).

(41) a. Nominalization:
   the giving of gifts to the homeless
   ∗ the giving of the homeless (of) gifts. (Fraser 1970:92)

b. Compound formation:
   secret-telling (to spies), book-reading (to children)
   ∗ spy-telling (of secrets), *child-reading (of books)

c. Secondary predication:
   I gave Mary the meat raw.
   ∗ I gave Mary the meat hungry.
   I gave the meat to Mary raw.

(based on Baker (1997:90-94))
Mohawk only has the equivalent of the English double object variant for dative verbs, as in (42a) and has nothing comparable to the English to variant, as shown in (42b); yet, even in Mohawk only the theme can incorporate, as in (43).

(42) a. O’neróhkwa’ y-a-hiy-at nyéht-‘ ne Shawátís. box TRANS-FACT-1sS/MsO-send-BEN-PUNC NE John ‘I sent John a box.’

b. * O’neróhkwa’ y-a-k-at yeht-e’ Shawátís-hne. box TRANS-FACT-1sS/NsO-send-PUNC Shawátís-LOC ‘I sent a box to John.’ (MOHAWK; Baker 1997:97, (44))

(43) a. Se’wáhr-a-nut ne êrhar. 2sS/MsO-meat-0-feed NE dog ‘Feed the (male) dog some meat!’ (theme incorporated)

b. * O’wáhr-u se-náshkw-a-nut. NsO-meat-nsf 2sS-pet-0-feed ‘Feed the pet some meat!’ (recipient incorporated) (MOHAWK; Baker 1997:100, (48))

This data is particularly striking when contrasted with the comparable locative alternation data: both the material and the location show the comparable “object” properties.

(44) a. Smith loaded hay on the truck. (locative variant)

b. Smith loaded the truck with hay. (with-variant)

(45) Nominalization:

a. the loading of the hay onto the truck

b. the loading of the truck with hay

(46) Compound formation in English:

a. hay-loading

b. truck-loading

(47) Secondary predication:

a. John loaded the hay into the wagon green.

b. John loaded the wagon full with hay. (Williams 1984:204, (2a,b)) (based on Baker (1997:90-94))

Maling (2001) proposes that the object properties that the recipient lacks have a semantic basis.

If she is correct, these properties always stick with the theme of a dative verb because in contrast to the locative alternation, the recipient is never eligible to be analyzed as a “theme” (RH&L 2005), some analyses of the dative alternation notwithstanding.

Furthermore, in languages with a dative NP, the recipient still does not show these properties (e.g., Maling (2001) on German), consistent with the proposal that they might have a semantic basis and consistent with the proposed first object/dative NP parallels.
Thus, the data in (41) and (43) provide evidence that in the double object variant the recipient is an object in a rather superficial sense, supporting the proposed parallels between the English first object and the dative NP of other languages.

8.2 Object properties associated with the recipient in the double object variant

In languages with the double object variant the recipient often “usurps” from the theme — coding properties of objects, i.e., word order, case marking, agreement (Dryer 1986), — the ability to passivize, a coding property in an extended sense (cf. Aissen 1999). (The exact array of properties is language-dependent.)

An example: The English double object variant.
   The recipient is adjacent to the verb and is the subject of the corresponding passive.

(48)  
   a. Sandy sent Terry the package.  
   b. * Sandy sent the package Terry.

(49)  
   a. Terry was sent the package.  
   b. ?? The package was sent Terry.

(50)  
   a. Sandy sent the package yesterday.  
   b. The package was sent yesterday.

The surface coding of an argument in a language depends on the interactions of its semantic role—an event-based property of an argument—with properties of the NPs filling that argument position. Specifically, coding is often sensitive to animacy, with animate NPs more likely to receive explicit coding or with animates and inanimates having distinct treatment (e.g., differential object marking).

In some languages there is clear evidence that coding is particularly sensitive to animacy: with dative verbs not only recipients but also animate themes are singled out for coding. Sesotho is such a language (Morolong and Hyman 1977).

Properties of the Sesotho double object construction:
— when the verb has two animate or two inanimate nonagent arguments,  
   either can be the subject of a passive or can trigger object agreement  
— when the verb takes an inanimate beneficiary and an animate theme,  
   the animate theme is the subject of a passive and triggers object agreement

It is not surprising, then, that more generally in double object constructions coding properties choose the recipient, which is typically animate, over the theme, which is typically inanimate.

Relatedly, L&RH (2005a) suggest that event-based properties of arguments determine their basic grammatical relation, but filler-based properties of arguments are relevant to the morphosyntactic realization of these grammatical relations; see also Evans (1998) and Haspelmath (2004).
9 An implication: English revisited

- If verbs of giving were easily construable as verbs of caused motion, all languages might be expected to show the dative alternation, since all have a way of encoding caused motion.

- Although the locative alternation seems attested in almost all languages, many languages, even ones closely related to English (e.g., German), lack a dative alternation (Baker 1997; Dryer 1986)—that is, the availability of both double object and to constructions.

- Languages with a dative construction, such as Russian, which by definition have a dedicated dative case, usually lack a “dative alternation” in the sense of English.

- Such languages also tend to have freer word order than English, presumably due to the presence of morphological case. Rather, information structure demands on word order can be met independent of the surface coding of grammatical relations: the recipient may precede the theme, while maintaining its dative case.

\[
\begin{align*}
(51) & \quad \text{Ja dal Ivanu knigu.} \\
& \quad \text{I.NOM give.PST Ivan.DAT book.ACC} \\
& \quad \text{‘I gave Ivan a book.’ (RUSSIAN; recipient with dative case)}
\end{align*}
\]

\[
\begin{align*}
(52) & \quad \text{*Ja dal knigu k Ivanu.} \\
& \quad \text{I.NOM give.PST book.ACC K Ivan.DAT} \\
& \quad \text{‘I gave a book to Ivan.’ (RUSSIAN; recipient with allative case)}
\end{align*}
\]

- In such languages there is no information structure motivation for an alternate case assignment to recipients, explaining why recipients of verbs like give are expressed as dative NPs and not encoded as allatives, as in (52).

- If word order becomes fixed in a language which previously had free word order, the dative alternation might be expected to arise as it would provide a way to meet the demands that information structure and heaviness place on word order while using word order to encode argument realization. Precisely this seems to have happened in English, whose dative alternation seems to have arisen as the case system deteriorated and word order became fixed.

10 Conclusions

- Not all English verbs show the dative alternation for the same reason.

- With verbs of giving, the dative alternation is about alternate realizations of recipients and not about alternate realizations of distinct event structures.

- Variant choice is determined by several factors, including information structure and heaviness, with the meaning of individual verbs determining to some degree how they align with these factors.

- Differences among languages in the morphosyntactic options available for argument realization (e.g., double object vs. dative NP) can obscure similarities among them.

- There is much to be gained by considering the double object construction and the dative construction to be comparable.
References

Hall, B. (1965) *Subject and Object in English*, Doctoral dissertation, MIT, Cambridge, MA.
Marantz, A. (1996) “‘Cat’ as a Phrasal Idiom: Consequences of Late Insertion in Distributed Morphology”, unpublished ms., MIT, Cambridge, MA.