Ditransitive constructions

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1. Introduction

A DITRANSITIVE CONSTRUCTION is a construction with a verb denoting transfer of an entity (T) from an agent (A) to a recipient (R), such as *Kim gave Lee a box*. This is most often possessive transfer (concrete as in ‘give’, ‘lend’, ‘hand over’, ‘bequeath’, or more abstract as in ‘offer’ and ‘promise’), but cognitive transfer verbs (‘show’, ‘teach’) typically behave in much the same way and are therefore normally included in the ditransitive domain. In this overview, the focus will be on broadly cross-linguistic research on ditransitive constructions.

While the A argument (or subject) in a ditransitive construction is always treated in just the same way as the subject of a MONOTRANSITIVE CONSTRUCTION (i.e. a construction with an A and a P argument, with a transitive verb like ‘break’, ‘kill’ or another verb that behaves in the same way, Haspelmath 2011), the behavior of the two object arguments R and T is more variable, both within and across languages.

Within languages, it is not uncommon for the R and T arguments to show variable behavior, either ALTERNATIONS (where both patterns coexist, but with different usage patterns, §3), or SPLITS (where different patterns occur under different grammatical conditions, §4). Because of its prominence in English, the alternation of argument coding shown in (1a-b) is particularly well-known. Here we see a double-object construction in (1a) (with both objects coded alike, i.e. with no adposition or case-marker), and a construction with special coding (an oblique marker) for the R object (the dative preposition *to*) in (1b).

(1)  
(a) *Kim gave [Lee]R [a box]T.*  
(b) *Kim gave [a box]T [to Lee]R.*

Across languages, an even more common phenomenon is that of coding splits. For example, French normally uses a preverbal object index when the object is a person form, as in (2a-b). But when there are two person forms and the T is first or second person (locuphoric), the R must be expressed by a prepositional construction and a free personal pronoun (see 2c-d).

(2)  
(a) *Kim lui présentera Lee.*  
    *Kim her.DAT introduce.FUT.3SG Lee*  
    ‘Kim will introduce Lee to her.’
(b) *Kim le lui présentera.*  
    *Kim him.ACC her.DAT introduce.FUT.3SG*  
    ‘Kim will introduce him to her.’
c. *Kim me lui présentera.
   Kim me.ACC her.DAT introduce.FUT.3SG
   ‘Kim will introduce me to her.’

d. *Kim me présentera à elle.
   Kim me.ACC introduce.FUT.3SG to her
   ‘Kim will introduce me to her.’

In addition to the widespread concern with language-specific alternations and splits and the factors that govern them, syntacticians have also widely discussed cross-linguistic differences between different argument-coding types (or ALIGNMENT types, §2). Many languages primarily use constructions of the double-object type in (1a), while others primarily use constructions of the oblique-coding type in (1b). Here the main question is whether it is the T argument that behaves like the monotransitive object (P), as in (1b), or whether it is the R argument. This question can be asked both about argument coding (such as case or adpositional marking) and about argument behavior, e.g. in passive constructions or in relative-clause constructions. For example, in the double-object construction of the VOS language Kiribati, only the R argument can be passivized (see 3a), and the T argument cannot be passivized (see 3c).

(3) Kiribati (Austronesian; Sabel 2011: 41–42)
   a. A angan taan reirei te boki ataei.
      3PL give DET teacher DET book children
      ‘The children gave the teachers the book.’
   b. A angan-aki te boki taan reirei (irouia ataei).
      3PL give-PASS DET book DET teachers by children
      ‘The teachers were given the book (by the children).’
      3SG give-PASS DET teachers DET book by children
      ‘The book was given to the teachers (by the children).’

Finally, over the last two decades a lot of research has been devoted to the question of primacy of one object over another one with respect to a number of processes which characteristically show subject primacy over non-subject arguments (see §7). For example, only subjects (A arguments) can bind object (or P) reflexive pronouns (see 4a–b), and only A quantifiers can bind P pronouns (see 5a–b), but not vice versa.

(4) a. Kimi criticized himself.
   b. *Heself criticized Kim.
(5)  a.  [Every girl] lost her umbrella.
    b.  *Its owner found [every umbrella].

These asymmetries are traditionally described in terms of asymmetrical c-command relations. In constructions with two objects (a T and an R object), one can ask the question which of the two objects has primacy in this sense, and thus draw conclusions about c-command relations. In Modern Greek, for example, only the R object can bind dependent pronouns when quantified, as in (6a), and not the T object (see 6b) (Georgiafentis & Lascaratou 2007: 40).

(6)  a.  ἔστιλαν s-[τιν κάθε ζώγραφο], τὸν πίνακα τῖς.
    send.PST.3PL to-the every painter the painting.ACC her
    ‘They sent every painter her painting.’

    b.  *ἔστιλαν s-τι ζώγραφῳ τῷ τὸν κάθε πίνακα.
    send.PST.3PL to-the painter its the every painting.ACC
    (‘They sent every painting to its painter.’)

Another important issue in research on ditransitive constructions is the different behavior of different verb classes. English has a large class of verbs that behave like give, but a few others behave like provide (also supply, furnish, and a few others):

(7)  The bank provides [us]R [with fresh money]T.

In many languages, the class of basic ditransitive verbs is quite small, not extending far beyond verbs like ‘give’, ‘show’, ‘tell’. Derived verbs with two objects such as causative and applicative verbs derived from monotransitive verbs often behave similarly to basic ditransitive verbs, and they are often discussed in the same context. In this overview, I mostly limit myself to constructions with basic ditransitive verbs.

In order to understand the syntactic behavior of the two objects in ditransitive constructions, it is useful to bear in mind that the R is generally human (or at least animate), while the T is generally inanimate. There is also a strong tendency for the R to be definite and more topical, while the T tends to be indefinite and less topical (Givón 1979, Thompson 1990). In this respect, the relationship between R and T of a ditransitive clause is similar to the relationship between A and P of a monotransitive clause, where the A is typically animate, definite and topical, while the P is typically inanimate and non-topical, and often indefinite (for this parallel, see Dryer 1986:§10; Polinsky 1998).
2. Alignment

The most salient difference between languages with respect to ditransitive constructions concerns the alignment of the coding of the two object arguments, i.e. the question whether it is the R or the T of the ditransitive clause that is coded like the P of the monotransitive clause (Siewierska 2003; Haspelmath 2005a; Malchukov 2013). We have INDIRECTIVE ALIGNMENT when the R is treated in a special way, while the T is treated like the monotransitive P (as in 1b, *Kim gave a box to Lee*). We have SECUNDATIVE ALIGNMENT when the T is treated in a special way, while the R is treated like the monotransitive P (as in 7, *The bank provides us with fresh money*). Finally, we have NEUTRAL ALIGNMENT when R and T are treated in the same way (as in 1a, *Kim gave Lee the box*). The three types are schematized in Figure 1. All three types are found throughout the world, though indirective alignment seems to be particularly common in Eurasia (Haspelmath 2005b).

![Figure 1: The three major ditransitive alignment types](image)

With respect to argument flagging (case or adpositional marking), indirective alignment usually means that the R is coded by a special adposition (as in 1b, 6a) or case, while T is not coded by a special marker. Secundative alignment usually means that T is coded by a special adposition (as in 7). In neutral alignment, most of the time both arguments lack special flagging (as in 1a and 3a).

But the R and the T are also often signaled by PERSON INDEXING (Haspelmath 2013) on the verb. Thus, Yimas shows indirective indexing (with special R index forms such as the suffix *-mpn* in 8b), while Huichol shows secundative indexing, with prefixes such as *wa-* (3PL) for R and P, and no indexing of T.

(8) Yimas (Foley 1991: 193, 208)

   man.PL woman.SG 3SG.OBJ-3PL.SBJ-see
   ‘The men saw the woman.’

b. *Uraŋ k-mpu-tikam-r-mpn.*
   coconut 3SG.OBJ-3PL.SBJ-show-PFV-3DU.DAT
   ‘They showed them two the coconut.’
5

(9) Huichol (Comrie 1982: 99, 108)
   a. *Uukaraawiciizi *tiiri *me-wa-zeiya.*
      women children 3PL-3PL-see
      ‘The women see the children.’
   b. *Nee tumiini uukari ne-wa-ruzeiyasti.*
      I money girls 1SG-3PL-show
      ‘I showed the money to the girls.’

   The modern notion of alignment replaces the older notion of "grammatical relation" or "syntactic function". In the earlier literature (e.g. in Relational Grammar: Dryer 1986; Blake 1990), linguists often asked the question whether the R or the T is the "direct object" of the ditransitive construction. When the flagging was indirective (as in *Kim gave a box to Lee*), the T argument was automatically taken to be the direct object (and the R argument an oblique argument), but when the argument coding was neutral, further criteria were sought to identify the direct object. For example, in English only the R can be promoted to subject in the passive construction (*Lee was given a box vs. *A box was given Lee*), so one would say that this indicates that the R is the direct object.

   However, it became clear that not uncommonly different constructions point in different directions. Thus, while in English the passive construction points to the R as direct object, other constructions show the T behaving like the monotransitive P (Hudson 1992: 258, 263).

(10) question-word fronting of P and T (but not R)
   a. *Who/what did you see?*
   b. *What did Kim give Lee?*
   c. *Who did Kim give a box?*

(11) control of unexpressed object in purpose clause by P and T (but not R)
   a. *I bought it [to put Ø₁ on the table].*
   b. *He gave her it [to put Ø₁ on the table].*
   c. *He gave her it [to cheer Ø₁ up].*

   And we also find mismatches between the alignment of flagging and the alignment of person indexing on the verb. As noted by Comrie (2012: 27) Burushaski has indirective flagging (note the dative suffix -ər), but secundative indexing (the object prefix gu-) in (12).

(12) Burushaski
   *Ja do:l*at uyɔ:n u:ŋ-ər gu-či-am.
   L.ERG wealth whole you-DAT 2SG.OBJ-give-PST
   ‘I have given you all my wealth.’
It is thus not possible to arrive at a single grammatical relation to account for all coding patterns and syntactic behaviors of the objects. Alignment patterns may be different for different constructions (on the construction-specific nature of alignment, see also Croft 2001; Bickel 2011; Witzlack-Makarevich 2011). Thus, rather than identifying global grammatical relations for whole languages, syntacticians now tend to examine individual constructional properties and state the alignments separately.

When comparing alignments across languages, we find that certain kinds of constructions prefer certain kinds of alignments (Malchukov et al. 2010: §4). Flagging has a bias for indirective alignment, while indexing has a bias for secundative alignment (Haspelmath 2005a). This can be explained by the referential properties of R and T: Only R is commonly animate, so first and second person forms are usually R rather than T. Thus, person indexing of T is less useful than person indexing of R, so that it makes sense if languages have a secundative indexing pattern (with R indexed like P).

Relexivalization has a bias for indirective alignment (Malchukov et al. 2010: §4.6), as illustrated by the Jóola Banjal reflexive construction with the verbal suffix -oro in (13b–c).

(13) Jóola Banjal (Atlantic; Bassène 2010: 199–200)

a. *Aare aku na-sen-e fumangu aine aku.
   woman DEM 3SG-give-TAM mango man DEM
   ‘The woman gave a mango to the man.’

b. Aare aku na-sen-oro-e fumangu.
   woman DEM 3SG-give-REFL-TAM mango
   ‘The woman gave herself a mango.’

c. *Aare aku na-sen-oro-e aine aku.
   woman DEM 3SG-give-REFL-TAM man DEM
   ‘The woman gave herself to the man.’

Although the R and the T are coded neutrally (see 13a), only the R can be reflexivized with the -oro construction (see 13b). When the T is to be coreferential with the subject, this construction is impossible (see 13c), and a different construction with the reflexive pronoun fugo-ol (‘her head’) must be used. This bias is again due to the typical animacy of the R: Normally only animate arguments are coreferential with the subject.

In the majority of languages, some asymmetries between R and T with respect to various behavioral properties have been found, especially with respect to valency-changing operations (such as passivization), with respect to extraction, or less widely studied phenomena such as quantifier float, incorporation or nominalization (Malchukov et al. 2010). However, a number of languages have been reported where no asymmetry has been found ("symmetric" or fully neutral languages), e.g. Kinyarwanda (Gary & Keenan 1977), Bajau (Donohue 1996), and Cavineña (Guillaume 2008) (see Bresnan & Moshi for the notion of object symmetry for Bantu languages).
3. Alternations

Languages sometimes exhibit ditransitive alternations, i.e. competing ditransitive constructions that can be used with the same verb and roughly the same meaning. Some examples are given in (14)–(16).

(14) Mandarin Chinese
   a. wo song-le yi ping jiu gei ta
      I give-PFV one bottle wine to 3SG
      'I gave a bottle of wine to him.'
   b. wo song-le ta yi ping jiu
      I give-PFV 3SG one bottle wine
      'I gave him a bottle of wine.'

(15) Thai (Thepkanjana 2010: 415)
   a. Sômchaay pɔ̂n khâaw kɛ̀ɛ lûuk
      Somchaay spoonfeed rice to child
      'Somchaay fed his child some food.'
   b. Sômchaay pɔ̂n khâaw lûuk
      Somchaay spoonfeed rice child
      'Somchaay fed his child some food.'

(16) Serbo-Croatian (Zovko Dinković 2007)
   a. Lena je poslužila gost-ima čaj i keks-e.
      Lena AUX served guest-DAT.PL tea.ACC and biscuit-ACC.PL
      'Lena served tea and biscuits to the guests.'
   b. Lena je poslužila gost-e čaj-em i keks-ima.
      Lena AUX served guest-ACC.PL tea-INS and biscuit-INS.PL
      'Lena served the guests (with) tea and biscuits.'

The best-known example of a ditransitive alternation is of course the dative alternation in English, illustrated in (1a–b). There is a very large literature on English ditransitive constructions and especially on this alternation (e.g. Fillmore 1965, Larson 1988, Goldberg 1992, Harley 2002, Krifka 2004, Levin & Rappaport Hovav 2008), but cross-linguistically, alternations of this type are not particularly common. Siewierska (1998) finds such alternations only in 12 out of a sample of 219 languages (about 6%).

Ditransitive alternations can be classified by the alignment types of the preceding section. Limiting ourselves to the coding of argument, we can distinguish between indirective-neutral alternations (like the English, Mandarin and Thai alternations seen
above), secundative-neutral alternations, and indirective-secundative alternations (an example was given in (16a-b) above).

(17) Chamorro (Topping 1973)
   a. Ha na’-i i patgon leche.  
      3SG.NOM gave-APPL the child milk  
      ‘I gave the child milk.’
   b. Ha na’-i i patgon ni leche.  
      3SG.NOM gave-APPL the child OBL milk  
      ‘I gave the child (the) milk.’

The precise conditions under which the two alternants occur have been studied only for very few languages. The most important factors that have been discussed are meaning, information structure, the referential prominence of the arguments, and their length.

The two alternants have often been argued to have somewhat different meanings in English (e.g. Gropen et al. 1989, Goldberg 1992, Harley 2002, Krifka 2004). A widely made claim is that the English (neutrally aligned) double-object construction (Kim gave Lee a box) expresses caused possession (‘A causes R to have T’), while the (indirectly aligned) prepositional dative construction expresses caused motion (‘A causes T to move to R’). The two sentences in (1a-b) would then have slightly different meanings. This is argued to explain the contrast in (18), where Manila can be the goal of the caused-motion construction, but not the recipient of the caused-possession construction (unless Manila is understood metaphorically as an organization based in Manila).

(18)  
   a. She sent the money to her brother.  
      a.’ She sent her brother the money.  
   b. She sent the money to Manila.  
      b.’ *She sent Manila the money.

The different-meaning hypothesis is also argued to explain why ‘give’ can have a purely causal reading (implying no physical transfer of anything) in (19a), but not in (19b).

(19)  
   a. Beethoven gave the world the 9th symphony.  
   b. *Beethoven gave the 9th symphony to the world.

However, if give in Kim gave a box to Lee had a caused-motion sense and the same syntactic properties as send in (18a-b), one would expect that one can also say *Kim gave a box there (or similar). Thus, Rappaport Hovav & Levin (2008) argue that English verbs that denote transfer of possession like give, lend, offer etc. only have a caused-possession sense. It is only in send-type verbs that different constructions are associated with different meanings. In other languages, these verbs often have special constructions for spatial goals that are unrelated to ditransitive constructions, as seen in (20a-b) from Hebrew (Frencez 2006; see...
also Levin 2008). Here only (20a) has a possessive sense, while (20b) has a purely spatial sense. Presumably English (18a) is ambiguous between these two readings.

(20) Hebrew (Francez 2006: 142)

a. *Salaxti l-a et ba-sefer.
   I.sent DAT-her ACC DEF-book
   ‘I sent her the book.’

b. Salaxti el-eba et ba-sefer.
   I.sent ALL-her ACC DEF-book
   ‘I sent the book to her.’

The reason for the impossibility of (19b) seems to be that figurative meanings are often restricted to the most frequently occurring patterns.

While there is still a debate over the precise meanings of the two alternative constructions in English, there is no question that information structure, referential prominence and length play an important role in determining the choice between the two constructions in English. The double-object construction tends to be used when the R is topical and referentially prominent (definite, proper noun, etc.) (Ransom 1979; Thompson 1995; Bresnan & Nikitina 2009; among many others). Thus, (18a) is appropriate when construed as an answer to the question *Who did she send the money to?*, but hardly as an answer to the question *What did she send (to) her brother?*, i.e. when her brother is given information.

As was emphasized by Wasow (2002), length is also a relevant factor: When the R is longer than the T in English, the use of the prepositional dative construction becomes more likely (cf. also Thompson 1990). Length may also be relevant in languages where the alternation does not involve a word order different, for example in Thai. According to Thepkanjana (2010: 421), the neutral construction as in (21a) can be used when the T is short, but when it is a long noun phrase (e.g. with a relative clause modifier, as in 21b), this construction is not possible and the preposition *kê ‘to’* (as in 15a) must be used.

(21) a. Sômchaay cèek nāŋstûu dek.
   Somchaay gave book child
   ‘Somchaay gave books to children.’

b. *Sômchaay cèek nāŋstûu thî k hàw khân dek.
   Somchaay give book which he write child
   ‘Somchaay gave books which he wrote to children.’

An explanation for the role of length comes from Hawkins’s (1994; 2014) principle of Early Immediate Constituents (or Minimize Domains). In languages with postverbal objects, a shorter first object leads to shorter processing domains and is thus preferred by speakers
and by grammars. And when reordering is not possible (as in Thai), additional marking is required to aid parsing.

4. Grammatical splits

In many languages, different ditransitive constructions with different alignments of argument coding are employed under different grammatical conditions, in particular depending on the referential prominence of the R and the T. A first example is the contrast in English seen in (22).

(22) a. *Kim gave a box to Lee. / Kim gave Lee a box.
    b. *Kim gave it to Lee. / *Kim gave Lee it.

When the T is a personal pronoun and the R is a full nominal, only the directive prepositional dative construction can be used, while the neutral ditransitive construction is impossible (see 22b). While there is merely a preference for one of the two alternating patterns when both objects are full nominals (depending on their definiteness etc., as seen in the preceding section), one of the patterns is simply impossible when the T is a personal pronoun. This is called a grammatical ALIGNMENT SPLIT (Haspelmath 2007).

Splits are well-known from the domain of monotransitive alignment (split ergativity, e.g. DeLancey 1981; Dixon 1994), where we commonly find neutral or accusative alignment for referentially prominent arguments (personal pronouns, proper names) in languages that otherwise show ergative alignment. Even more frequently we observe referentially split object marking ("differential object marking"), i.e. a situation where only objects that are definite and/or animate and/or personal pronouns have special accusative marking, while others follow a neutral pattern (e.g. Bossong 1991, Sinnemäki 2014). In addition, the tense-aspect construction is also sometimes relevant for monotransitive alignment.

In ditransitive alignment, the only referential splits are attested, i.e. only splits which are determined by the REFERENTIAL PROMINENCE of R and T. In particular, the referential scales in (23) often play a role (see Heine & König 2010: 94).

(23) referential prominence scales
   a. animacy: human > animal > inanimate
   b. definiteness: definite > indefinite specific > non-specific
   c. anaphoricity: anaphoric pronoun or index > full nominal
   d. person: locuphoric (1st or 2nd person) > allophoric (3rd person)

As we saw, the T argument tends to be associated with lower referential prominence and the R argument tends to be associated with higher referential prominence. This means that R > T scenarios (i.e. scenarios where the R is referentially more prominent on the scales in (23)) are more common and more expected than T > R scenarios, with R = T scenarios in
between. For example, (24a) is more expected than (24c), and (25a) is more expected than (25c).

(24) definiteness
   a. ‘Kim gave a box to the girl.’ (R > T)
   b. ‘Kim gave the box to the girl.’ (R = T)
   c. ‘Kim gave the box to a girl.’ (T > R)

(25) person
   a. ‘Kim showed him to me.’ (R > T)
   b. ‘Kim showed him to her.’ (R = T)
   c. ‘Kim showed me to her.’ (T > R)

The following generalization seems to hold of all splits that are conditioned by the relation between the referential prominence of R and T:

(26) If in a ditransitive split, the choice of pattern depends on the referential prominence of both arguments, then R > T scenarios (where R is more prominent than T) tend to be coded with neutral alignment, while T > R (with less prominent R) scenarios tend to be coded with indirective or secundative alignment (and R = T scenarios behave in an intermediate way).

For definiteness, this can be illustrated by Wolof, which allows neutral alignment when the R is definite and the T is indefinite (27a), but not when it is the other way round (27b). In this case (the T > R scenario), the indirective construction with the preposition ci ‘to’ must be used.

(27) Wolof (Atlantic; Becher 2005: 19)
   a. Jox naa [xale bu jigéén ji] [benn velo].
      give 1SG child CL female DEF INDEF bicycle
      ‘I gave the girl a bicycle.’

   b. *Jox naa [benn xale bu jigéén] [velo bi].
      give 1SG INDEF child CL female bicycle DEF
      ‘I gave a girl the bicycle.’

   c. Jox naa [velo bi] [ci benn xale bu jigéén]
      give 1SG bicycle DEF to INDEF child CL female
      ‘I gave the bicycle to a girl.’

For anaphoricity, the generalization in (26) can be illustrated from Standard Arabic. When the R is an anaphoric pronoun and the T is a full nominal, the (neutrally aligned) double-accusative pattern can be used, as in (28a). But this is not possible when both
objects are pronouns (28b), let alone in the T > R scenario in (28d), where the R is a full nominal and the T is a pronoun. In the less expected scenarios, either a secundative pattern must be used (as in 28c, with the secundative T-marking preposition iyyaa-), or an indirective pattern, as in (28e), with the indirective R-matking preposition li-.

(28) Standard Arabic (Ryding 2005: 69–72, 308)

   NEG you.gave-1SG.ACC DEF-book-ACC  
   ‘You did not give me the book.’

b. *Lam tuṣṭi-nii-haa  
   neg you.gave-1SG.ACC-3SG.F.ACC  
   ‘You did not give it to me.’

c. Lam tuṣṭi-nii iyyaa-haa  
   NEG you.gave-1SG.ACC SEC-3SG.F  
   ‘You did not give it to me.’

d. *Lam tuṣṭi-haa Daawud-a  
   neg you.gave-3SG.F.ACC David-ACC  
   ‘You did not give it to David.’ (‘...*give David it’)

e. Lam tuṣṭi-haa li-Daawud-a  
   NEG you.gave-3SG.F.ACC to-David-ACC  
   ‘You did not give it to David.’

The effects of the regularity in (26) are particularly well-known for the case of person (cf. 23d): When the R is a locuphoric (speech-act participant) person and the T is an allophoric (3rd) person, we have an expected scenario and languages can use neutral alignment, as in (29a). But with the reverse scenario (T > R), as in (29b), the ordinary construction is impossible, and a special indirective construction must be used, as in (29c).

(29) Shambala (Bantu-G; Duranti 1979: 36)

   3SG.SUBJ-PST-3SG.T-1SG.R-bring-APPL  
   ‘S/he has brought him/her to me.’

   3SG.SUBJ-PST-1SG.T-3SG.R-bring-APPL  
   ‘S/he has brought me to him/her.’
This kind of ditransitive split is very widespread in the world’s languages (Haselmath 2004) and is also known from the Romance languages – we saw an example from French earlier in (2a-d). It is also known as the “person-case constraint” (Bonet 1991; Adger & Harbour 2007; among many others), although it is not directly related to case, but rather to the contrast between the roles R (which tends to be locuphoric) and T (which tends to be allophoric). The literature tends to treat it in isolation from the definiteness and anaphoricity splits, but from a broadly cross-linguistic and functional perspective, it clearly belongs together with these splits.

Even though English tends to be very prominent in the theoretical literature, there is little discussion of the contrast between *Kim gave it to Lee and *Kim gave Lee it that we saw in (22b) above. But it turns out that this is just a particular manifestation of the generalization in (26): Since this is a non-expected scenario, with a referentially less prominent R nominal and a referentially more prominent T pronoun, the neutral alignment is not allowed here, as in Arabic.

The interaction between the prominence of the T and the R may also be more complex, with different prominence scales being relevant at the same time. Thus, in Ewegbe, the standard double object construction (see 30a-b) cannot be used when the R is a personal pronoun and the T is indefinite (see 30c). In such cases, a serial verb construction with ‘take’ must be used (‘took them showed (to) a child’), i.e. a kind of secundative pattern with extra marking.

(30) Ewegbe (Kwa; Essegbey 2010: 179)

   Kosi show 3PL photograph everyone
   ‘Kosi showed his photograph to everyone.’

b. Kosi fiá wó Amí.
   Kosi show 3PL Ami
   ‘Kosi showed them to Ami.’

c. *Kosi fiá wó eví.
   Kosi show 3PL child
   ‘Kosi showed them to a child.’

The generalization in (26) can be explained by the general tendency for frequent and expected combinations to be coded with less marking and for rare and unexpected combinations to require more coding (Haselmath 2004; 2008; Hawkins 2014: §2.2).
5. Constituent order

A first generalization that can be formulated is that the R and the T show a strong tendency to occur on the same side of the verb, next to each other. Thus, Table 1 shows that corresponding to each of the dominant order types SVO, SOV, VSO and VOS, there are ditransitive order types with R-T order and T-R order (though for the least frequent order VOS, I do not know of a language with T-R order).

Table 1

<table>
<thead>
<tr>
<th>main order type</th>
<th>R-T order</th>
<th>example</th>
<th>T-R order</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVO</td>
<td>S V O_R O_T</td>
<td>Tswana</td>
<td>S V O_T O_R</td>
<td>Fongbe</td>
</tr>
<tr>
<td>SOV</td>
<td>S O_R O_T V</td>
<td>Uzbek</td>
<td>S O_T O_R V</td>
<td>Ijo</td>
</tr>
<tr>
<td>VSO</td>
<td>V S O_R O_T</td>
<td>So</td>
<td>V S O_T O_R</td>
<td>Tahitian</td>
</tr>
<tr>
<td>VOS</td>
<td>V O_R O_T S</td>
<td>Q’eqchi’</td>
<td>V O_T O_R S</td>
<td>?</td>
</tr>
</tbody>
</table>

There are very few languages with R and T on different sides of the verb, though this order occurs in Mande languages, which generally have S-O-V-Oblique order, and where one of the objects must be an oblique-marked object e.g.

(31) Mandinka (Mande; Creissels 2015)

Kew-ó ye [kód-óo]_T díi [mus-óo la]_R.
man-DEF PF.POS.TR money-DEF give woman-DEF OBL.
‘The man gave money to the woman.’

When the nominal objects occur after the verb and are not flagged (not coded by any adposition or case marker), the R most often precedes the T (as in 1a, 3a, 14b, 27a, etc.; see Heine & König 2010), although the opposite order also occurs (e.g. in Jóola Banjal and Thai, see xx above). This preferred order has been attributed to the general preference for placing animate and definite elements earlier in the clause than inanimate and indefinite elements. When there is no flagging, the order of the objects is typically quite rigid (as in English), but free ordering is also sometimes attested, e.g. in Bajau.

(32) Bajau (Austronesian; Donohue 1996: 787)

a. Ana’ iru m-unang badi’ aku.
child that AV-give machete 1SG
‘That child gave me a machete.’

b. Ana’ iru m-unang aku badi.
child that AV-give 1SG machete
‘That child gave me a machete.’
When the nominal objects occur after the verb and one of them is coded by a preposition (in a typical indirective construction such as 1b), the prepositional object is normally placed after the bare object. This order is found in (1b), (27c), (29c) and also in ... The R-T order in (6a) is unusual, and T-R is an alternative possibility (see 39a below). Quite generally, word order is less rigid when one or both of the objects are flagged, and Givón (1984: n. 19) notes that when the normal order is T-R, the alternative order R-T is normally possible as well (though Thai seems to be an exception, see ex. 15b). A striking example is Kiribati, where the order is rigidly R-T when there is no flag, but all permutations of R, T and A are possible when the R is flagged with the preposition nakon ‘to’, e.g.

(33) Kiribati (Sabel 2011: 40)

A anga taan reirei nakon Rui te boki.

3PL give DET teachers to Rui DET book

‘The teachers give the book to Rui.’

The preference for T-R order when the R is marked by a preposition can be explained by the Early Immediate Constituents (or Minimize Domains) principle of Hawkins (1994; 2014), which says that orders are preferred in which constituent recognition domains are shorter. In give the money to the man, the three constituents can be recognized with four words (give the money to), whereas in give to the man the money, five words (give to the man the) are needed.

When the two objects precede the verb, the word order is typically flexible, especially when both objects are flagged, as in Japanese and Chintang. As with unflagged postverbal objects, the order R-T seems to be the most common one.

(34) Japanese (Miyagawa & Tsujioka 2004: 5)

a. Taroo-ga Hanako-ni nimotu-o okut-ta.

Taro-NOM Hanako-DAT package-ACC send-PST

‘Taro sent Hanako a package.’

b. Taroo-ga nimotu-o Hanako-ni okut-ta.

Taro-NOM package-ACC Hanako-DAT send-PST

‘Taro sent a package to Hanako.’

(35) Chintang (Kiranti, Tiberto-Burman; Bickel et al. 2010: 396)


Joge-ERG all boy-PL[NOM] their-notebook[NOM] give-3PL.OBJ

‘Joge gave [every boy], his notebook.’

b. Joge-ŋa buni-kapi jamma duwacha-ce pid-uce.

Joge-ERG their-notebook[NOM] all boy-PL[NOM] give-3PL.OBJ

‘Joge gave his notebook to [every boy].’
Word order freezing is often observed when the two objects have the same animacy value, so that there is no other cue for determining their respective roles. Thus, in Jóola Banjal, the order T-R is rigid when both objects are animate, as in (36) (Bassène 2010: 193), while otherwise the alternative order R-T is also possible. This kind of freezing has also been described for Chintang (Bickel et al. 2010: 396).

(36) Na-sen-e sujúr-ol áine akumu.
    3SG.SBJ-give-TAM daughter-3SG.POSS man this
    ‘He gave his daughters to this man.’

In languages with flexible order of R and T, the order is typically affected by information structure. In a neutral context where all information is new and equally important, e.g. in an answer to the question ‘What happened?’, Czech only allows the order R-T (in 37a). The order T-R (in 37b) is only possible when the R is focused, e.g. in an answer to the question ‘Who did Karel send the letter to?’

(37) Dvořák (2010: ex. 3c-d)
   a. Karel poslal Marii dopis.
      Karel.NOM sent Maria.DAT letter.ACC
      ‘Karel sent Maria a/the letter.’
   b. Karel poslal dopis Marii.
      Karel.NOM sent letter.ACC Maria.DAT
      ‘Karel sent a/the letter TO MARIA.’

The Czech pattern is common in European languages. The mirror image of this is found in Malagasy, where the neutral order is T-R, and the focus position is the immediately postverbal position, so that R-T is possible only if R is focused (Sabel 2011: 34-35). This order seems to be very unusual.

Since in languages with postverbal objects, short objects tend to precede long objects, and topical objects tend to precede focal objects, personal pronoun objects often have a special earlier position. Thus, while Icelandic allows both R-T and T-R order when both are animate (e.g. in ‘The farmer gave the king the bear’), only the R-T order is possible when the R is a personal pronoun.

(38) Icelandic (Thráinsson 2007: 99)
   a. Bóndinn gaf bonom bjarndýrið.
      farmer.DEF.NOM gave him.DAT bear.DEF.ACC
      ‘The farmer gave him the bear.’
   b. *Bóndinn gaf bjarndýrið bonom.
      farmer.DEF.NOM gave bear.DEF.ACC him.DAT
      ‘The farmer gave the bear to him.’
6. Object-object primacy

While the notion of alignment (§3) captures similarities between the monotransitive P and either the ditransitive T (indirective alignment) or the ditransitive R (secundative alignment), another interesting question is whether the asymmetrical relationship between monotransitive A and P (with A generally having primacy over P) has a parallel in the relationship between R and T. As was mentioned in §1, A has primacy over P with respect to reflexive anaphor binding (*Heself criticized Kim) and quantifier-pronoun binding (*Its owner found every umbrella). Likewise, in many cases R has primacy over T, as one would expect in view of the semantic-pragmatic similarities between R and A on the one hand, and P and T on the other hand. For example, in Icelandic the R binds a T reflexive (see 39), and in Serbo-Croatian the R quantifier binds a T pronoun (see 40), but not vice versa (see also (6) from Modern Greek.

(39) Icelandic (Thráinsson 2007: 128)

a. Þú gafst eigandanum bundinn sín.
   thou gavest owner.DEF.DAT dog.DEF.ACC self's
   ‘You gave the owner his/her dog.’ (Lit. ‘... self’s dog’)

b. *Þú gafst eigandanum sínum bundinn.
   thou gavest owner.DEF.DAT self's dog.DEF.ACC
   (‘You gave self's owner the dog.’)

(40) Serbo-Croatian (Gračanin-Yuksek 2006: ex. 19a-b)

a. Ivan je svakom studentu dao njegovu knjigu.
   Ivan AUX every.DAT student.DAT given his.ACC book.ACC
   ‘Ivan gave [every student]i hisi book.’

b. *Ivan je njezinom vlasniku dao svaku knjigu.
   Ivan AUX her.DAT owner.DAT given every.ACC book.ACC
   (‘Ivan gave itsi owner [every book].’)

This is very much like the situation in the English double-object construction, as was first prominently observed by Barss & Lasnik (1986), not only with respect to reflexive and quantifier-pronoun binding (see 41-42), but also with respect to some other phenomena such as double question-word constructions (see 43) and negative polarity expressions (see 44).

(41) a. I showed Lee herself (in the mirror).
    b. *I showed herself Lee (in the mirror).

(42) a. I showed [every friend of mine]i hisi photograph.
    b. *I showed itsi trainer [every lion].
(43) a. Who did you give which book?
    b. *Which book did you give who?

(44) a. I gave no one anything.
    b. *I gave anyone nothing.

However, in the English prepositional dative construction, we get the reverse judgments (Larson 1988: 338):

(45) a. I showed Mary to herself.
    b. *I showed herself to Mary.

(46) a. I gave [every check] to its owner.
    b. *I gave his paycheck [to every worker].

(47) a. Which check did you send to who?
    b. *Whom did you send which check to?

(48) a. I sent no presents to any of the children.
    b. *I sent any of the packages to none of the children.

This shows clearly that in English, object-object primacy with respect to these properties is not determined simply by the difference between R and T. According to Barss & Lasnik (1986: 352) and Jackendoff (1990), linear precedence is a crucial factor: An object has primacy over another object if it precedes it (and perhaps additionally c-commands it). Precedence also accounts for the asymmetry in other languages such as Greek (in 6), Icelandic (in 39), and Serbo-Croatian (in 40). In those languages that have flexible word order, we typically observe that when the order is changed, the asymmetry changes, just as we saw it change in English. For example, in Serbo-Croatian, (40b) can easily be rescued by changing the order from R-T to T-R:

(49) Serbo-Croatian (Gračanin-Yuksek 2006: ex. 20a)
    Ivan je dao svaku knjigu njezinom vlasniku.
    Ivan AUX given every.ACC book.ACC her.DAT owner.DAT
    ‘Ivan gave [every book] to its owner.’

On the other hand, there are also some languages where a word order change is claimed not to give rise to different primacy relations. Thus, according to Georgiafentis & Lascaratou (2007: 51), Modern Greek allows (50a) but not (50b).
This is thus exactly the opposite from English. (See also 35b from Chintang above.) Here one could say that object-object primacy is determined exclusively by role (R has primacy over T, regardless of position). Alternatively, one could say that in the "underlying structure", R precedes and c-commands T, and that (39) shows a "surface" word order derived by scrambling, and that the binding relations are determined by the underlying structure. This perspective has been widely adopted in the generative literature (e.g. Larson 1988, Harley 2002, Miyagawa & Tsujioka 2004, Gračnin-Yuksek 2006, Dyakonova 2007, Bhattacharya & Simpson 2011), so that primacy of the R or the T has generally been interpreted in terms of underlying dominance (and thus c-command) relations.

But an alternative perspective would appeal to inherent topicality: Primacy with respect to properties such as reflexive binding and quantifier-pronoun binding is primarily associated with pragmatic presupposition and topicality (Polinsky 1998). In general, R is more topicworthy than T, so it tends to have primacy, and in some languages such as Modern Greek this may always be the case. But contextually, the T may be more topical, and in such cases, it is typically placed before the R (as we saw in §5). Since primacy is associated with topicality, it is not surprising that the primacy relations may be reversed, whether we have a construction with different argument coding as in English (34-37), or just a different word order as in (38).

Object-object primacy relations have been studied far less than the alignment of argument coding, and most of our data concern languages from Europe and East Asia. Moreover, the existing research rarely takes the relationship between primacy and topicality into account. Thus, it is not yet possible to make empirically justified claims about universal trends in this domain.

7. Lexical partitions

In many languages, different lexical classes of ditransitive verbs behave somewhat differently, in a manner that is reminiscent of the way in which different intransitive verbs with a single argument often behave differently in some languages ("semantic alignment", Wichmann & Donohue 2008). Such cases are sometimes called "lexical splits" (and semantic alignment is also called "split intransitivity"), but here I will use the term LEXICAL PARTITIONS for such subclasses of ditransitive verbs (the term SPLIT is reserved for grammatical splits, see §4 above).
A simple example of lexical partitioning is provided by English, where at least four subclasses of verbs can be distinguished, depending on their occurrence in the double-object, prepositional dative and secundative constructions:

(51) a. give, lend, show, promise, ... double-object & prepositional dative
    b. donate, explain, ... prepositional dative
    c. deny, refuse, ... double-object
    d. supply, provide, furnish, ... secundative construction with with

The first class is by far the biggest, comprising many dozens of verbs (Goldberg 1992). Similarly, classes with ditransitive verbs that take dative R arguments are often quite large in European languages (e.g. Barðdal 2007 for North Germanic, Rudzka-Ostyn 1996 for Polish, etc.). In fact, in Indo-European languages that have preserved a dative case, the class can be easily extended because the dative is also used to express beneficiaries with verbs like 'build' or 'open'. The other classes are much smaller and not productive.

However, this situation is not representative. Much more common in the world's languages is a situation where there is only a handful of verbs that pattern with the 'give' verb, and where this class is not productive (Malchukov et al. 2010: §5.2). There are even a number of languages where 'give' is not only atypical, but actually behaves in a unique way (Kittilä 2006), with no other verb in the language taking the same argument marking.

A widespread pattern is a lexical partition between the core ditransitive verbs 'give', 'show' and 'tell', and other verbs where the R argument is more similar to a spatial goal, e.g. 'send', 'bring'. In general, verbs of the first class tend to take neutral alignment (i.e. a double-object construction), whereas verbs of the second class have indirect alignment. For example, Chintang verbs like 'give', 'feed', 'show', 'tell' use the double-nominative frame (illustrated in 33 above), whereas verbs like 'send', 'throw', 'take to' use the indirective construction with a locative R (Bickel et al. 2010: §4).

In English, we see a pattern of this sort in language use: Even though all these verbs allow both a double-object construction and a prepositional dative construction, it is 'give' and 'tell' that are not only by far the most frequent double-object verbs, but also the two verbs that are the most strongly "attracted to the double-object" construction (Stefanowitsch & Gries 2003: 229), i.e. they show the strongest preference for the double-object construction over alternative constructions.

The cross-linguistically observable predilection of these verbs for the neutral alignment could be explained in part by their high frequency (with highly frequent verbs preferring less overt coding of arguments due to a general economy requirement), but probably a better explanation is that with 'give', 'show' and 'tell', there is a particularly strong animacy asymmetry: The R is invariably animate, and the T is almost always inanimate. With verbs like 'send', 'bring' and 'throw', an inanimate goal-like R is more readily possible. It is also interesting to note that in a number of languages, notably German, the 'teach' verb is a double-object verb, whereas the 'give' verb is indirective. This is probably because while an animate and even human T is not impossible with 'give' (e.g. in marriage contexts), the T is always inanimate with 'teach' (cf. Plank 1987).
As was noted in §3, the contrast between ‘give’ verbs and ‘send/throw’ verbs has recently been highlighted for English by Rappaport Hovav & Levin (2008), who claim that ‘send/throw’ verbs can have two different meanings, caused motion and caused possession. Thus, according to the definition of ditransitive construction that requires a recipient (i.e. a kind of possessor) as the third argument, only one of the two senses is a ditransitive construction.

In addition to verbs of transfer of possession or transfer of cognitive content, many languages also use the same construction for verbs of dispossession. For example, Yoruba uses the secundative construction with the T-marking preposition ní not only with its ‘give’ verb as in (52a), but also with its ‘steal’ verb as in (52b).

(52) Yoruba (Atoyebi et al. 2010: 148, 157)
   a. Ò fún mi ní owó.
      he give me SEC money
      ‘He gave me money.’
   b. Ò jí mi ní owó.
      he steal me SEC money
      ‘He stole my money.’

The use of the dative case is of course widespread in such contexts in Indo-European languages as well.

Another important class of verb forms that plays a role in the discussion of ditransitive constructions is derived causative and applicative verbs. They behave similarly to ‘give’ and ‘show’ verbs in many languages. However, there are also some systematic differences, discussed recently by Malchukov (2013).

References


Kittelä, Seppo. 2006. The anomaly of the verb “give” explained by its high (formal and semantic) transitivity. Linguistics 44(3). 569–612.


