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Three-place predicates: A cognitive linguistic perspective

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1 Introduction

Three-place predicates present the linguist with a range of interesting and challenging problems relating to the representation and explanation of the linguistic facts associated these predicates. The presence of three arguments with a predicate creates a certain richness and complexity, lacking in the majority of (one- or two-place) predicates in a language. My approach to these predicates has been shaped by the goals and methodologies of cognitive linguistics and I have chosen here to indicate some of the ways in which that research programme can contribute to a better understanding of these predicates. The discussion of these predicates which follows, in keeping with the orientation of cognitive linguistics, ranges over literal uses of such predicates and figurative, metaphorical and grammaticalized uses. It is only when one takes such a broad perspective, encompassing all the uses, that one is able to fully appreciate the nature of these predicates. To begin with, though, it is useful to review what we mean by the term *three-place predicate*.

2 What do we mean by three-place predicates?

Reference to “three-place predicates” is not uncommon in linguistics, but there is no simple diagnostic for establishing such a class in a language. As a first attempt to capture what is commonly understood by “three-place predicate” in linguistics, we can say that such predicates make some kind of essential reference to three distinct entities, or arguments, as part of the correct usage of the predicate in question. This is in accord with the definition below:

A verb, or a complex structure consisting of a verb and auxiliary plus a closely bound meaningful element, when this is considered as a linguistic unit, which can or must combine with specified arguments or participant roles to make up a clause. . . .
Grammatically, they may be classified in terms of their valency, the number and types

of arguments they require. . . . the linguistic use of ‘predicate’ is directly derived from [the] logical usage. (Trask 1993: 213)

A way of operationalising this idea of arguments of a predicate is to manipulate a clause structure to try to discover what the minimal or core part of the structure. It is rarely the case, however, that such a procedure yields perfect results. [Note also the vagueness in Trask’s definition, where arguments are described as entities which “can or must” combine with a predicate, a vagueness with significant consequences for any discussion of three-place predicates.] With a verb like *put*, such a test would give a straightforward result. That is, since **I put*, **I put the books*, **I put on the table* are all incomplete, while *I put the books on the table* is complete, we say *put* is a three-place predicate in English. Suppose we apply the same test to *I always give money to the Salvation Army*? *I always give* seems relatively incomplete, but *I always give to the Salvation Army* seems quite complete, it being understood that one regularly gives money to charities. Does this make *give* a two-place predicate, requiring a giver and a recipient, but not necessarily a thing given, in English? Linguists would reject this conclusion in the case of *give*, arguing that the thing given is implied, or covert, in the structure of the sentence. So, simply inspecting what has to be present in the overt structure is not an adequate basis for identifying three-place predicates; rather we invoke understood elements of a sentence, in addition to the observed elements, as part of the procedure.

A further diagnostic sometimes used to identify arguments, as opposed to adjuncts, is the idea that verbs impose restrictions on the former, but not the latter (cf. Radford 1988: 192-193). With a verb like *give*, e.g., it is *to* which has to be used when the recipient is expressed in a prepositional phrase. The selection of *to* is something required by *give*, so we say that the *to*-phrase functions as an argument, rather than an adjunct. On the other hand, the specification of a location in a sentence like *we cooked our meal under the tree/in the kitchen/on the boat* can vary considerably and the selection of the preposition is not dependent upon the verb *cook*. This, it might be claimed, supports the analysis of the prepositional phrase as an adjunct, rather than an argument. But then what do we say about the same variation in the specification of location with *put*, as in *I put the suitcase under the bed/in the lounge/on the bed*? Here, we don’t wish to conclude that *put* is a two-place predicate. Instead, we maintain *put* is a three-place predicate for other reasons, e.g., the location phrase can not be omitted. So, the evidence for argumenthood from selectional restrictions between *give* and the preposition can sometimes conflict with the evidence from the omissibility test, requiring us to rank the tests in terms of their significance.

There can be more sophisticated tests for establishing arguments which go beyond simply inspecting what occurs with the verb. For example, relative freedom in positioning a phrase in a sentence (preposing to the beginning of a clause or postposing to the end of the clause) might be taken to indicate an adjunct, rather than an argument which we expect to be more restricted in its positional variants. Radford (1988: 230-241) summarizes a number of interesting formal tests for establishing constituent structure of VPs which have a direct bearing on the identification of three-place predicates in English (and potentially other languages). As an example, consider the implications of the *do so* construction in terms of the VP elements that can be comfortably elided, as shown in (1) and (2). In so far as this test is stated in terms of the string *do so*, it is restricted to English, though a parallel construction might be found in another language.

- (1) a. OK *Lee will [put the book on the table], and Paul will do so as well.*
 b. **Lee will [put the book] on the table, and Paul will do so on the chair.*
- (2) a. OK *Kim will [cut the bread with a knife], and Paul will do so as well.*
 b. OK *Kim will [cut the bread] with a knife, and Paul will demonstrate how to do so with a cleaver.*

In the case of *put* in (1), the *do so* construction may refer to [*put the book on table*], but not just the [*put the book*] constituent, even when one tries to separate out the prepositional phrase [*on the table*] through contrastive intonation. With *cut* in (2), on the other hand, the *do so* construction comfortably refers to either [*cut the bread*] or [*cut the bread with a knife*]. These differences might be seen as supporting the analysis of *put* as a three-place predicate and *cut* as a two-place predicate. That is, the thing being placed and the location of the placement are more tightly integrated with *put* than the thing being cut and the instrument are with *cut*. The exact relevance of these facts to argument structure will depend greatly on one's theory of syntax. Even if one agrees with Radford about the implications such facts have for constituent structure, there is still the question of how closely constituent structure has to parallel facts about arguments versus adjuncts.

Another factor relevant to the issue is the relative salience of three entities in the semantic frame associated with a predicate. Entities can be salient and, in some sense, essential components in the semantic frame, even if they do not make an appearance in the linguistic encoding of the frame, as already observed above in the case of *I always*

give to the Salvation Army. *Give*, as used to describe the handing over of money to a charity, could be described as a three-place predicate, requiring the presence in the semantic frame of a GIVER, MONEY, and CHARITY, though the MONEY argument can remain unelaborated in the linguistic encoding. This seems to me to accord with how the term has come to be used by linguists. But how should we operationalise this idea of semantic, or as I would prefer to call it, conceptual salience? Should we take the implied listener in a sentence like *Kim told the truth* to be equally salient (one can't tell things unless there's someone to tell things to) and therefore we conclude *tell* is also a three-place predicate in this sentence? What about *The newspaper published the truth*, where publication by a newspaper is always done with the intention that the newspaper be read? One might wish to draw a line here and argue that the intended audience of a newspaper is not quite as salient as the addressee in the speech act situation. These are not easy boundaries to draw in a way that all linguists would agree with.

In light of the preceding discussion, it is not surprising that there might be some disagreement amongst linguists as to exactly what the set of three-place predicates is in any language. Consider the following examples which, at least in some naive sense, might be candidates for three-place predicates of English. I have underlined in each case the three phrases to be considered as arguments of the verb.

- (3)
- a. *She gave/sent/showed the book to us.*
 - b. *Television can distract children from homework.*
 - c. *She persuaded us to go.*
 - d. *She blamed us for the crash.*
 - e. *We elected him chairperson.*
 - f. *I find him objectionable.*
 - g. *Canberra is between Sydney and Melbourne.*

Although each of these predicates might be considered a reasonable candidate for trivalency, not all of these examples would be construed this way by linguists. Most typically (but by no means exclusively), the notion of a three-place predicate is taken to refer to scenes involving at some level of analysis a path along which an affected entity travels. There is quite concrete motion in (a), and I believe that predicates such as *give*, *send*, and *show* are the ones that most linguists would be willing to classify as three-place predicates. There is arguably also a kind of abstract motion in (b)-(d) and these predicates, too, would be classifiable as three-place. Thus, *distract* involves someone “moving” to a new state; *persuade* takes a person and brings them into mental contact with a proposition; *blame* assigns a quality to a person; *elect* moves a person into a new

state. The remaining examples in (3), though arguably having three necessary entities in each clause, are less likely to be grouped together with the (a) examples as three-place predicates in English syntax. (3f), for example, is more likely to be analyzed as basically a two-place predicate structure along the lines of *I find [he is objectionable]* or *I find [him objectionable]*, with *objectionable* being a predicate taking *he* as its argument. (3g) is a locational structure with quite different syntactic and semantic properties, analyzable as a variant of *Canberra is between two places*, essentially a two-place predicate. Clearly, one's views about underlying structures of English sentences have a great bearing on what should be analyzed as three-place predicates.

Summing up these observations, then, the following considerations seem to play a part in linguists' understanding of the term "three-place predicates", without any one being definitive:

- (4)
- a. 3 arguments tend to be present in the overt clause structure and tightly integrated into clause structure;
 - b. 3 arguments seem to be semantically salient;
 - c. the semantics are usually associated with caused motion (this could be 'abstract motion') to a person, thing, or location.

I offer this description not in any prescriptive way as how one should use the term three-place predicate, but as a way of characterizing what has in fact been the usual practice in linguistic literature.

The foregoing remarks have been made with respect to English. When we bring other languages into the picture, the situation becomes even more confused. The use of *cut* in a sentence like *I cut the cheese with a knife* is interesting in this regard. The semantic frame of *cut* requires a CUTTER, a THING being cut, and an INSTRUMENT. For English, we are not generally in the habit of treating *cut* as a three-place predicate. This is consistent with (c) above, since there is no path from x to y which is salient in the semantics. But note that other languages may treat 'cut' verbs as being on a par with 'give' verbs in the syntax, requiring an analysis as three-place predicates. Baker (1989: 537-538) relies upon an analysis of Yoruba 'cut', 'stab' etc. as three-place predicates, on a par with 'give', to account for their particular behaviour in a serial verb construction; Nichols (1984: 188-194) argues for 'stab' being a three-place predicate in Chechen-Ingush.

In a cognitive linguistic approach to clause structure (following, say, the writings of Lakoff (1987), Lakoff and Johnson (1980, 1999), Langacker (1987, 1991a, 1991b), Talmy (1985, 1988)), researchers would, on the whole, be reluctant to rely too much

upon a category derived from a formal semantic/formal logic approach, such as “three-place predicate”. (Note how Trask makes specific reference to the source of the term in (formal) logic in the quote above.) Cognitive linguists would be more inclined to work with categories which have a more obvious grounding in cognition, perception, or experience and none of these linguists give special status to three-place predicates. Langacker’s “billiard-ball model” of conceptualizing events (Langacker 1991a: 13-14 et passim), Slobin’s “manipulative activity scene” (Slobin 1985: 1174-1178), Mandler’s “agency” image-schema (Mandler 1992: 596) are taken to provide an experientially significant basis for construing events, but these constitute the ontological basis for a two-place, transitive kind of clause structure across languages, not a three-place predicate structure. We have, of course, experiences of giving things to people, telling things to people, putting things in a certain place etc., any of which might be candidates for an experiential basis for three-place predicates. But none of the researchers named above recognize any of these more complex experiences as having an importance comparable to the one underlying transitivity and for the most part there is not even a discussion of the issue in the works cited. The research alluded to above advocates a kind of two-place relationship (i.e. Agent-Patient relationship) as experientially the most basic; the linguistic encoding of the more complex scenes is then a matter of fitting the more complex scenes into the basic Agent-Patient model. Certainly, there is no claim in these works that giving, telling, putting etc. are so coherent experientially that languages will always, or even usually, encode all of these in a unified way, distinct, say, from employing the devices of transitivity supplemented with the usual adjunct devices of the language in question.

3 ‘Core’ three-place predicates

A leading idea in cognitive linguistic movement is the relevance of experiential reality in the motivation and explanation of linguistic phenomena. In my own work, this has led to focus on common, everyday states and acts which constitute ordinary human behaviour. In the context of a discussion of three-place predicates, then, my preference is to explore the linguistics associated with the more commonly occurring, experientially most basic kinds of three-participant events.

As basic-level, or ‘core’, three-place predicates, I suggest, as a start, the predicates *give*, *show*, *tell*, *put* and their counterparts in other languages. I stress that this is no more than a tentative suggestion about basic-level three-place predicates and is not founded on any experimental evidence. In keeping with the discussion in the previous

section, I do not claim that any of the scenes associated with these predicates are as salient in our conceptualization as the two-place Agent-Patient kind of interaction. Nevertheless, all of these predicates strike me as relatively common acts in the realm of ordinary human experience, involving a person as a central agent in the act, doing something with his/her body. As simple paraphrases of basic meanings of these predicates, one might adopt the meanings in (5). The definitions reveal the experiential basicness through their reference to seeing, hearing, having etc.

- (5) *give*: to pass something by hand to another person so the other person comes to have it
show: to act in some way, or display some object, in front of another person so that the other person sees it
tell: to say something to another person so that the other person hears it
put: to move something so that it comes to be in a new location

Of these, *give* (and its counterparts in other languages) is particularly noteworthy, for a variety of reasons which I have elaborated upon elsewhere (Newman 1996). The act of giving is arguably one of the more significant interpersonal acts which humans perform. It is not surprising in light of the basic nature of the act of giving that the form of the ‘give’ predicate in some languages is also basic in the sense of being simple in form or structure. Underlying this observation is the idea that linguistic form can be, but need not be, iconic for the meaning carried by the form. More specifically, the structural complexity of a form tends to reflect conceptual or experiential complexity. It should be said that this is nothing more than a tendency and counter-examples are not hard to find. In the case of ‘give’ and its formal realisation in languages, there is evidence of a tendency to relatively simple forms. In the Western Oceanic language Saliba, for example, the ‘give’ verb used for first and second person recipients is a monosyllabic *le*, whereas the typical verb stem in the language is disyllabic (Margetts, to appear). The most dramatic demonstration of this tendency is the realisation of ‘give’ as a zero morph, as in the Papuan language Amele (Roberts 1997), the Amerindian language Koasati (Kimball 1991: 102), and the Australian language Bardi (p.c. Edith Nicolas, 10 July 2000). A ‘give’ clause in Amele is illustrated in (6a) where a morpheme corresponding to ‘give’ is lacking altogether. Instead of the verb stem followed by verbal suffixes that one normally finds in Amele, we find only the string of suffixes (cf. the Amele ‘show’ clause in (6b)).

- (6) a. *Naus Dege ho ut-en.*
 Naus Dege pig 3SG.IO-3SG.SUBJ.PAST
 ‘Naus gave Dege the pig.’ (Roberts 1987: 34, cf Roberts 1997)
- b. *Jo eu ihac-i-ad-ig-en.*
 house that show-PRED-2PL.IO-1SG.SUBJ-FUT
 ‘I will show that house to you (plural).’ (Roberts 1987: 69)

Reduced formal substance is also found with ‘give’ constructions in Woods Cree:

- (7) a. *itis- ah- am- aw- i:w*
 send- INSTRUMENT- INANIMATE OBJ- RECIPIENT OBJ- 3/3
 ‘(S)he sends it to her/him’ (Donna Starks, personal communication)
- b. *mi:th- i:w*
 give- 3/3
 ‘(S)he gives it to her/him.’ (Donna Starks, personal communication)

Here, the reduction appears in the morphology accompanying the ‘give’ stem, with only the third person subject/object suffix *i:w*. Compare this with the fuller marking which is required in the case of another three-place predicate ‘send’, as in (7a).

4 Linguistic variation in encoding three-place scenes

It is worthwhile documenting the range of morphosyntactic marking and syntactic frames that can occur with three-place predicates, as a first step towards constructing a typology of such predicates (see also Comrie 2000 for a summary of person suppletion in ‘give’ verbs cross-linguistically). Some of the main trends are observable even within English, as illustrated in the following sentences:

- (8) a. *The teacher {gave, distributed, donated} the books to the students.*
 SUBJ/giver, OBJ/thing, OBLIQUE/recipient
- b. *The teacher gave the students books.*
 SUBJ/giver, OBJ/recipient, OBJ/thing
- c. *The school presented the top student with a book prize.*
 SUBJ/giver, OBJ/recipient, OBL/thing

The components which constitute ‘give’ scenes are not all equally relevant in the encoding of the unmarked ‘give’ constructions of languages. Languages may, of course, give more prominence to one of these components. So, for example, English incorporates

an image of motion towards a goal into one of its ‘give’ constructions (e.g. *I gave a birthday present to Kim*, where a central meaning of *to* is ‘motion towards a goal’). In this case, the movement of the thing that is given underlies the reliance on *to*. In Chrau, a ‘give’ construction utilises a postposition to mark the recipient, and the postposition elsewhere carries the meaning of ‘for the benefit of’ (Thomas 1971:71). Regardless of whether it is the benefactive or the recipient-marking meanings which are to be considered more basic, there is a close, polysemous association of the meanings in this language. In this case, it is the domain of human interest (whereby the recipient is typically a beneficiary) which is relevant to appreciating the polysemy of the postposition. In Cora (cf. Casad 1997), the most significant part of the giving act is arguably the shape and texture of the thing being given. It is this aspect which leads to the set of classificatory verbs underlying carrying, bringing, taking, holding, giving etc. The set of ‘give’ verbs (in their singular forms) one must choose from in Cora is given in Table 1, along with their classificatory meanings. The opposite directionality of giving and taking acts, a key difference in English which calls for a distinction between *give* and *take* verbs, is a relatively peripheral aspect in Cora and is not the basis for a different choice of verbs, as illustrated in the examples in (9), where a ‘carry’ meaning underlies all the verb forms variously translated as ‘give’, ‘take’, ‘bring’ and ‘have’.

Category of object	Singular Imperative
1. long and rigid	<i>naatác#uite’e</i>
2. round, cylindrical	<i>naatat’ste</i>
3. long and flexible	<i>naatapíhte’e</i>
4. flat and/or round useful objects	<i>naata’íte</i>
5. soft things	<i>naatátu’ite</i>
6. tall things, animals	<i>naatahánte’e</i>
7. people	<i>naatávi’it’ste’e</i>
8. liquids	<i>naatahánya’íte’e</i>
9. drinking water	<i>naatá’a</i>

Table 1. Cora ‘give (sg)’ stems, based on Casad (1997: 158)

- (9) a. *An-c#uaá m’ c#uun!*
 up-carry ART machete
 ‘Take the machete!’ (Casad 1997: 155, ex. 32)
- b. *N-aa-tá-c#uii-te’-e m’ c#uun!*

- me-COMPL-PERF-**carry**-CAUS-APPL ART machete
 ‘Give me the machete!’ (Casad 1997: 158, ex. 34)
- c. *Aí pú ya-‘a-ráh-c#ui mʔ c#uun.*
 DEM SUBJ it-outside face-**carry** ART machete
 ‘He brought the machete.’ Also ‘receive’ (Casad 1997: 163, ex. 38)
- d. *Nya-r-u-‘i-tyée-c#ui í c#uun nya-mwáhka’a-hetsi.*
 I-it-inside face-middle-**carry** ART machete my-hand-in
 ‘I have a machete in my hand.’ (Casad 1997: 166, ex. 41)

A number of researchers have argued for a certain naturalness in the linguistic encoding of transactional scenes when the initiator of the scene appears as the grammatical subject (in the active voice) and the recipient in the transaction is realised as a non-subject. Langacker (1991a: 283) invokes a concept of “action chain” with a “head” and “tail” drawing attention to a natural kind of flow of action or energy in a scene. ‘Give’, ‘send’, ‘show’, ‘tell’ etc. require a grammatical subject which is also the head of an action chain, whereas ‘receive’ requires a subject which is the tail of the main action chain. The perspective implied by ‘give’ is, in this sense, more natural than a predicate like ‘receive’. DeLancey (1981: 632, 633) speaks of events having an “inherent natural attention flow” which, similarly, is from giver to recipient, rather than the other way around. Another study worthy of mention in connection with the naturalness of encoding is Ihara and Fujita (1997). In this study, the researchers investigated patterns of errors in case-marking of Japanese clauses with three Broca’s aphasia patients who had difficulty in producing function words. They focused on two ‘give’ verbs (*watasu*, *ageru*) and two ‘receive’ verbs (*uketoru*, *azukaru*) and asked their patients to describe 20 pictures depicting scenes. The nominative marker *ga* was produced correctly 29/30 times when patients had to use a ‘give’ verb, but was produced correctly only 9/30 when patients had to use a ‘receive’ verb. Also, the dative marker *ni* was produced correctly 30/30 times when the patients had to use a ‘give’ verb, whereas the ablative marker *kara* was produced correctly only 1/30 times when they had to use a ‘receive’ verb (either *ga* or *ni* was substituted for *kara*). While ‘give’ and ‘receive’ verbs might equally imply three focal participants in their semantic frames, the ‘give’ verbs were found to pose fewer problems when it comes to encoding the participants. Ihara and Fujita relate this to the relative naturalness of the perspective imposed by ‘give’ verbs in which a grammatical subject corresponds to Langacker’s head of action chain. The results lead one to expect that predicates such as ‘give’, ‘send’, ‘tell’, ‘show’, ‘put’ etc. (where the grammatical subject in the active voice clause is the head of the action chain) are more natural as core members of any three-place predicate construction type than predicates such as ‘receive’.

Indeed, it has been argued that ‘give’ is the central, prototypical predicate of the ditransitive construction in English (Goldberg 1992) and Zulu (Taylor 1997). Bowden (2000) reports that a ‘close’ ditransitive construction type in Taba, involving an applicative suffix on the verb, is restricted to just a few verbs, including an *ot* ‘get’ stem which translates as ‘give’ in this construction type. Facts like these testify to the prominence of ‘give’ in the characterization of constructions encoding three-place predicates.

Recent work by Kelstrup (2000) has utilised a variant of the ‘fish’ film of Tomlin (cf. Tomlin 1995: 527-532), modified to depict giving events, to ascertain encoding preferences of ‘give’ scenes. Film sequences of approximately four seconds duration, each depicting a ‘give’ event, were constructed to run on a computer and subjects’ comments on them were recorded on tape. Film sequences were varied to allow for differences in gender, height, and colour of the human-like figures, and for the angle from which the scene was viewed (the films are in 3-D). A priming effect was achieved through the use of arrows directing attentional focus to the giver, the thing given, or the recipient in the scene. In analyzing the commentaries provided on these scenes, Kelstrup found a clear bias towards the giver being realised as the grammatical subject, including scenes in which the thing being given was primed for the attention of the viewer. A summary of relevant results is shown in Table 2. Not only is the giver chosen as the grammatical subject when there is no priming, the giver is also a choice for grammatical subject when the thing given is primed. The results provide additional psycholinguistic evidence for a natural attention flow from giver to recipient in the description of giving events. Kelstrup’s ‘give’ film is designed for use with speakers of any language and could be a valuable tool in exploring cross-linguistic encoding preferences for the giver, the thing given, and the recipient in a transactional scene.

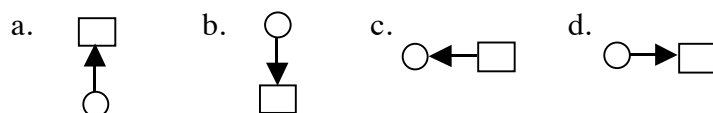
Experiment 1	Grammatical subject selection
side view of participants	
Giver is primed	GIVER
Thing given is primed	THING GIVEN/GIVER
Recipient is primed	RECIPIENT
No priming	GIVER
Experiment II	Grammatical subject selection
viewed facing a participant	

Giver is primed	GIVER
Recipient is primed	RECIPIENT
Unprimed	GIVER

Table 2. Results of Kelstrup's (2000) experiments involving primed and unprimed entities in a giving event

The research reported on here points to some of the cognitive principles which underlie the tendencies which can be observed in the encoding of giving events across languages. A strong theme in this research is the prevalence of a cognitive bias towards construing a giving event in terms of action proceeding from the giver to the recipient rather than the reverse. It would be interesting to investigate to what extent other three-participant events, apart from giving, reveal a similar bias. A predicate like *distract*, as in *Television can distract children from homework*, would appear to involve three participants, as mentioned above, though the direction of the flow of action here seems less obvious than with giving events. The lack of any endpoint in the action, the lack of physical contact between the entities, and the inanimate nature of television combine to make the action flow appear relatively obscure, though further psycholinguistic evidence is needed to establish just how native speakers prefer to encode such scenes. A promising line of psycholinguistic research would be the investigation of native speakers' intuitions of image schemas associated with three-place predicates. In an interesting series of experiments, Richardson, Spivey, Edelman, and Naples (2001) identified clear preferences amongst speakers in the way they associate the spatial images in (10) with verbal predicates.

(10)



Gave to and *showed* were among the verbs included in this experiment and a majority of subjects chose (10d) as the associated image for these verbs: 80.8% choosing the image for *gave to* and 65.9% for *showed*. In fact, the image in (10d) was only selected by a greater percentage of subjects in the case of *pointed at* (89.2%). The experiment supports the notion that there is a strong directionality (from a giver to a recipient) inherent in 'give' verbs, consistent with the findings reported above.

5 Literal, figurative, and grammaticalized uses

In cognitive linguistics, figurative and grammaticalized uses of predicates are also considered to be of interest, alongside the literal uses. The internal complexity of a three-place predicate, with its three participants interacting in intricate ways, can provide a source for a wide variety of non-literal uses.

Three-place predicates, especially ‘give’, have an important role to play in our conceptualization of events (cf. Newman 1996: 133-251; 1998). As an example, consider one of the most widespread extensions of the ‘give’ concept: extensions relating to communicative events, conceptualized as the giving of information. Expressions in English such as those in (11) illustrate this usage. The notion of a transfer from one person to another, a key feature of the literal sense of English *give*, is also present in these uses. Comparable examples can be found in many other languages.

- (11) *give advice to someone, give my opinion to someone, give my best wishes to someone, give the verdict to the court, give orders to someone, give a report to someone, give information to someone, give our thanks to God for something, give my word to someone*

The use of *give* in expressions for various kinds of performance activities, as illustrated in (12), could also be included in this group of extensions. In these cases, there is an audience typically subsumed in the larger semantic frame, parallel to the role of the recipient in the case of literal ‘give’.

- (12) *give a concert, give a recital, give a performance, give a demonstration, give lessons, give a speech, give a lecture, give an address*

Another well-attested group of extensions cross-linguistically relates to the idea of ‘emergence’, illustrated in (13). Here, it is the movement of an object proceeding from the giver, a component of the meaning of literal ‘give’, which provides the image underlying the sense of figurative ‘emergence’.

- (13) a. *iz-davam* *mirizma* (Bulgarian)
 out-give smell
 ‘to give (off) a smell’
 b. *Questo albero non da piu frutti.* (Italian)
 this tree NEG gives little fruit
 This tree no longer bears fruit.’
 c. *dare* *guadagni* (Italian)

give profit
 'to yield a profit'

The extensions of 'give', illustrated in (11)-(13) above, are relatively common cross-linguistically. There can, of course, be patterns of extension in the use of a 'give' verb which are more unusual and less transparent in their motivation. Consider, for example, the use of English *give* in a construction with the meaning of 'hit' or 'scold', as in colloquial English *She really gave it to him!* 'she really scolded him; she really beat him up'. Presumably, the concept of a transfer of energy from one person to another, relevant to the motivation of the uses in (11)-(13), is relevant here, too, in motivating the extension of the constructional meaning (see Palancar 1999 for a discussion of a similar kind of extension in Spanish).

The experientially basic three-place predicates can give rise to quite a range of grammaticalizations. A preliminary survey of such grammaticalizations reveals the range of uses shown in (14). 'Give' grammaticalizations and their motivations, it should be noted, have received particular attention (see Czinglar 2002; Joseph 2000; Kemmer and Verhagen 1994; Lichtenberk 1985; Newman 1996: 133-251, Newman 1999; Peyraube 1988; Song 1997).

- (14) a. **'give'** > emergence/manifestation/existence; causation, enablement, purpose; schematic interaction (*I gave the car a wash*); recipient-benefactive marking; movement; completedness; passive marker; obligation marker; temporal marker; means marker; subjunctive marker (Newman 1996, 1999; Heine et al 1993).
- b. **'show'** > dative marker (Heine et al 1993). Also > Latin *circumlocutio* 'speak'.
- c. **'tell'** [no entry in Heine et al (1993)].
'say' > quotative marker; complement clause marker; result clause marker; purpose clause marker; narrative discourse marker; benefactive marker; dative marker; possessive marker; conditional protasis marker; topic marker; equative marker; evidential marker; interrogative marker; continuous marker; multipurpose adposition; 'instead of' clause marker (Heine et al 1993)
- d. **'put'** > causative marker; locative marker; inferential perfect (Lhasa); 'do with deleterious effect' (Tibetan *bzhag*); resultative marker; participial marker (Heine et al 1993)

The multiplicity of extensions and the particular range of meanings evident here are by no means accidental, even if some extensions appear quite unrelated to the source meanings.¹ The figurative and grammaticalized extensions of three-place predicates typically preserve some of the cognitive structure or “cognitive typology” of the original predicates. A strong theme of the cognitive linguistic movement has been documenting the mappings between the source and target domains in cases of such extensions. Investigating such extensions proves invaluable as a way of illuminating the significant components of meaning in the original uses of such predicates.

As an illustration of the advantage of including both literal and grammaticalized uses in any study of three-place predicates, consider the close semantic association that exists between literal ‘give’ and causation. A causative component of meaning occurs in the ‘give’ word in Ainu: *kor-e* ‘have-causative’ (Shibatani 1990: 48). A causative component of meaning, *na-*, may also be seen as part of the ‘give’ word in Chamorro *na’i* (cf. Topping et al 1975: 149, Topping 1973: 249–251; Gibson 1980: 34; Newman 1996: 19–21). The causative function of *na-* is illustrated in (15) and the ‘referential’ or applicative function is illustrated in (16). The ‘give’ verb *na’i* is analyzable as the combination of these morphemes. As expected of verbs which have the *-i* referential suffix, *na’i* requires the recipient to be the object and the thing given to be in an oblique phrase introduced by *nu*.

(15) Causative *na’-*:

<i>bubu</i>	‘angry’	<i>na’-bubu</i>	‘to anger’
<i>la’la’</i>	‘living’	<i>na’-la’la’</i>	‘to activate’
<i>poddung</i>	‘to fall’	<i>na’-poddung</i>	‘to drop’
<i>taitai</i>	‘to read’	<i>na’-taitai</i>	‘cause to read’

Referential *-i*:

- (16) a. *Hu tugi’ i kätta pära i che’lu-hu.*
 I write the letter to the sibling-my
 ‘I wrote the letter to my brother/sister.’ (Gibson 1980: 34)
- b. *Hu tugi’-i i che’lu-hu nu i kätta.*
 I write-SUF the sibling-my OBL the letter
 ‘I wrote my brother/sister the letter.’ (Gibson 1980: 34)

In both Ainu and Chamorro, then, a causative element of meaning has been utilized to help create the conventional way of describing literal ‘give’ scenes. But ‘causative’ is also common as a grammaticalized extension of ‘give’, whereby the structure of a transfer event in the source domain, involving a giver, a recipient, and a thing given, is

- ‘I make a field for him.’ (Thomas 1971: 71)
- c. *A# an pih ne#h i^n.*
 I give knife him BENEFACTIVE
 ‘I gave a knife to him.’ (Thomas 1971: 71)

In Chrau, constructing a literal ‘give’ clause employs a postposition which elsewhere has a benefactive meaning. But ‘give’ verbs may themselves be grammaticalized to become benefactive markers, as illustrated below. In these examples I have kept the gloss ‘give’ for those ‘give’ verbs which are functioning as benefactive markers.

- (19) a. *Ta@ ge#i wo# zào-le yì do@ng fángzi.* (Mandarin)
 he/she give me build-ASPECT one CLASSIFIER house
 ‘He/she built a house for me.’
- b. *Ông a\$y bán sách cho tôi.* (Vietnamese)
 he sold books give me
 ‘He sold books for me.’ / ‘He sold books to me.’ (Liem 1979: 57)
- c. *Chán sòng na#nsi#: hâi dèk.* (Thai)
 I sent book give child
 ‘I sent a book for a child.’ / ‘I sent a book to the child.’

It is only by including all levels (word-formation, literal usage, grammaticalized usage etc.) that we can fully appreciate the role that certain components of the ‘give’ meaning play. Similar remarks would apply to the other three-place predicates above. If we only allow ourselves to consider the literal uses of these predicates, for example, then we deny ourselves access to data which are enlightening in the way they reflect the components that make up the source of the extension.

6 Experientially grounded parameters relevant to three-place predicates

In my approach to three-place predicates, I find it useful to distinguish the domains in (20) as ones which are relevant to a full understanding of the predicates. These domains are the spatiotemporal domain, the control domain, the force-dynamics domain, and the domain of human interest. Distinguishing these domains helps us to systematize descriptions of the primary experience of the states and actions referred to by the predicates. These domains have been found to play a significant role in accounting for the properties of ‘give’ morphemes and constructions, regardless of whether it is a literal, figurative, or grammaticalized usage (cf. Newman 1996: 37 ff). I believe that these same domains would be equally useful in a discussion of other three-place predicates as well.

- (20) a. THE SPATIO-TEMPORAL DOMAIN: the dimension of meaning in which the relevant facts about the shape of the participating entities are expressed, together with changes affecting the spatial relationships amongst these entities through time.
- b. THE CONTROL DOMAIN: the dimension of meaning which focuses on the change in control over a thing.
- c. THE FORCE-DYNAMICS DOMAIN: the dimension of meaning which expresses the force-dynamics of the events, including some indication of an energy source and an energy sink in the flow of action.
- d. THE DOMAIN OF HUMAN INTEREST: the dimension of meaning which has to do with the ways in which the participants are advantaged or disadvantaged by the event.

I illustrate the relevance of these domains with reference to ‘give’, as shown in Figure 1. Figure 1 offers a rather schematic summary of the experience of giving, separated out into four sub-parts corresponding to the four domains above. Each of these four domains provides us with a perspective on the giving event. To some extent, the characterizations are based on the experimental evidence reviewed above, but for the most part it is based on my own sense of the experiential reality accompanying giving events. Taken together, these four sub-parts constitute the experiential basis which is relevant to motivating the linguistic facts associated with ‘give’ morphemes and constructions in languages.

One way in which these components of the giving event are relevant is their role in motivating the polysemy that can be observed in the case marking and adpositions which are utilized in literal ‘give’ constructions across languages. I have referred to the ‘recipient/beneficiary’ kind of polysemy already. But there are other polysemies which one can observe: recipient-marking and allative, recipient-marking and locative, recipient-marking and possessive, and instrumental-marking extended to marking the thing given. Each of these polysemies can be motivated by reference to some part of the giving event, as indicated by the arrows in the diagram. A second way in which the experiential basis of the giving event is relevant is providing motivations for figurative and grammaticalized extensions of the ‘give’ predicate itself. I have alluded to causative and benefactive extensions of ‘give’ above, but there are many other possible extensions. (Newman 1996, 1999 discusses the full range of such extensions). In Figure 1 I have included a sample of these extensions, as found across languages, and indicated how I see the experiential basis motivating them. The diagram is a simplified representation of the

dynamics of the motivation since often more than one aspect of the experiential reality can be relevant to any one usage. In this diagram I have simply indicated what strikes me as the predominant motivation in each case.

7 Concluding remarks

I hope to have shown how a cognitive linguistic orientation leads to a great variety of observations about three-place predicates, observations which in turn lead to further research questions. A particular question of concern to cognitive linguists must be the identification and description of the cognitive principles which play a part in our preferred ways of conceptualizing three-participant events such as transfer of objects, communication of ideas, etc. Documentation of the cross-linguistic variability in the encoding of such scenes is also an indispensable part of any attempt to understand general principles involved in the linguistic encoding of such events. A start has been made on each of these endeavours. Inevitably, due to the experiential prominence of the giving event, most attention has been given to ‘give’-type predicates. This is understandable, but it is essential that we progress beyond this to reach a fuller understanding of three-place predicates. A fuller understanding of three-place predicates also requires that we move beyond the study of merely the morphosyntax of literal meanings of predicates and embrace the study of the full range of uses which develop from the literal meanings.

Footnotes

1. A case in point might be the use of a ‘give’ verb in an existential kind of construction, as in German *es gibt* ‘there is/are’. It is argued in Newman (1997) that the historically earlier 2-place predicate uses of German *geben* to mean ‘x produces y; x leads to y’ constitute a semantic bridge to the grammaticalized uses involving ‘existence’.



Figure 1. The common experiential grounding of literal and figurative uses of 'give'

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