# Constructional Integration, Grammaticization, and Serial Verb Constructions

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An important but under-appreciated aspect of grammar is the extent of the integration a grammatical construction specifies among its constitutive elements. Besides its vital role in synchronic grammar, this essential aspect of constructional meaning is a pivotal factor in grammaticization. These points will be illustrated through a variety of construction types drawn from a number of diverse languages, with special emphasis on serial verb constructions.

Key words: construction, grammaticization, cognitive grammar, compositionality, benefactive, serial verbs

## 1. Preface

I shall be discussing an essential aspect of grammatical constructions, namely the nature and extent of the conceptual integration a construction effects between its component elements. Conceptual integration is an important part of constructional meaning. It proves to be crucial for understanding grammar, from both the synchronic and diachronic standpoints. Yet the problem never even arises in theoretical frameworks which claim the autonomy of syntax vis-à-vis semantics, or which fail to recognize the conceptual basis of linguistic meaning. Despite its fundamental character, it is therefore largely absent from contemporary theoretical discussion.

By contrast, the theory of **Cognitive Grammar** (CG) adopts a conceptual view of meaning and claims that grammar is inherently meaningful. The conceptual integration effected by grammatical constructions thus emerges as a central issue that needs to be dealt with explicitly. As a foundation for doing so, I must start by briefly reviewing some basic ideas, descriptive constructs, and notations of the CG framework.

## 2. Basic notions of cognitive grammar

The central claim of CG (Langacker 1987a, 1990, 1991, 1999a) is that grammar is **symbolic** in nature. A **symbolic structure** is defined as the pairing of a **semantic**

**structure** and a **phonological structure** (its two **poles**). It is claimed that lexicon and grammar form a continuum consisting solely of **assemblies** of symbolic structures. It follows that all grammatical elements are meaningful.

However, the meaningfulness of grammar only becomes apparent with an appropriate view of linguistic semantics. First, it has to be a **conceptualist** semantics (Talmy 2000a, 2000b). Moreover, it has to fully accommodate our manifest and multifaceted ability to construe the same situation in many different ways. An expression's meaning is not just a matter of the conceptual **content** it evokes, but is equally dependent on the **construal** it imposes on that content (Langacker 1993a). One dimension of construal is the degree of **specificity** (or conversely, **schematicity**) chosen for the characterization of a given entity, e.g., the decision to describe a certain creature as an *animal*, a *dog*, or a *beagle*. Numerous aspects of construal pertain to the **perspective** taken on a scene. An obvious example is the **vantage point** presupposed, exemplified by the contrast in (1). The choice of *go* vs. *come* indicates whether the speaker is maintaining his own vantage point or adopting that of the listener.

(1)  a.  *I'll go to your apartment tomorrow.*
     b.  *I'll come to your apartment tomorrow.*

Especially crucial for grammar is the **prominence** conferred on various elements. Of the different kinds of prominence that need to be distinguished, the most important are **profiling** and **trajector/landmark alignment**.

As the basis for its meaning, an expression evokes a certain array of conceptual content, called its **base**, on which it imposes a **profile**. An expression's profile is the entity it is construed as **designating** (its conceptual **referent**), and as such is a focus of attention. Expressions with the same base can differ in meaning by virtue of profiling different facets of it. As shown in Figure 1, for instance, *husband* and *wife* have the same base, the conception of a male (M) and female (F) in a marriage relationship (represented diagrammatically by a double line). Despite this shared content, they contrast semantically due to their alternate choices of profile. Note that profiling is indicated by means of heavy lines.
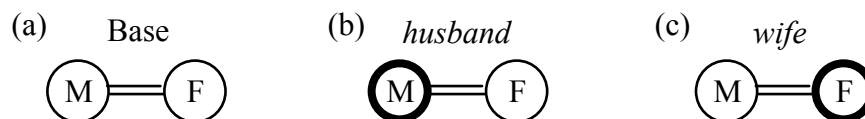


*Figure 1*

Figure 2 provides a more elaborate example. The verb *choose*, diagrammed in (a), profiles a relationship that unfolds through time, which I call a **process**. Its two participants are given as circles. The vertical arrow stands for a range of options. The profiled relationship, given as a dashed horizontal arrow, consists of one participant singling out the other from the range of options available. Diagrams (b)-(d) represent nouns which, being derived from this verb, invoke the process profiled by the verb as their own conceptual base. On this base they impose their own profiles, in each case a **thing** (abstractly defined—see Langacker 1987b). The noun *chooser* profiles the agent, and *choice* the thing chosen. *Choice* can also designate an abstract entity consisting of one instance of the process of choosing (e.g., *She made her choice in only seconds*). Repesented by an ellipse, this profiled entity is an abstract thing obtained as the product of conceptual reification (Langacker 1991:1.2). These shifts in profile, from process to things inherent in that process, constitute the meanings of the derivational elements.
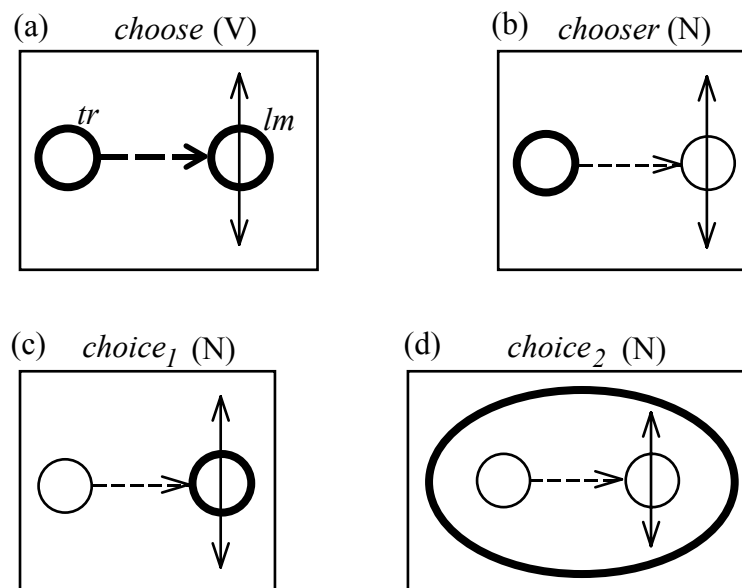


*Figure 2*

An expression's grammatical class is not determined by its overall conceptual content, but specifically by its profile. A noun profiles a thing (any product of conceptual reification), while a verb profiles a process (a relationship scanned sequentially in its evolution through time). Such classes as adjectives, adverbs, and prepositions profile relationships that are non-processual ("atemporal" in the sense that evolution through

time is not in focus). In abbreviatory diagrams, a thing is normally represented by a circle or ellipse, and relationships by various sorts of lines and arrows.

When a relationship is profiled, its participants are made prominent to varying degrees. The most prominent participant, called the **trajector** (*tr*), is construed as the entity being located, evaluated, or described. It is the primary focus ("figure") within the profiled relationship. Often another participant is made prominent as a secondary focus. This is called a **landmark** (*lm*). In Figure 2(a), the actor is marked as being the trajector of *choose*, and the thing selected is its landmark.

Expressions can have the same content, and profile the same relationship, but differ in meaning because they make different choices of trajector and landmark. A case in point is *above* vs. *below*, diagrammed in Figure 3. Each expression profiles the spatial relationship between two things, which are at roughly the same location with respect to the horizontal plane, but at different positions along the vertical axis. Since they both have this content, and profile the same relationship (referentially, an *above* relationship is also a *below* relationship), some other conceptual factor has to be responsible for their difference in meaning. The contrast is a matter of which participant the expression is concerned with locating, i.e., its choice of trajector. *Above* situates its trajector in relation to a landmark lower on the vertical axis, *below* in relation to a higher one.
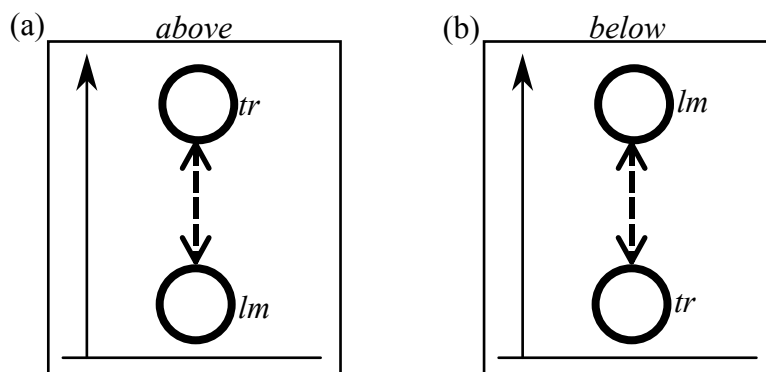


*Figure 3*

For further exemplification of these notions, consider the boldface expressions in (2), respectively diagrammed in Figure 4. As a transitive verb, *melt* profiles the process sketched in 4(a), where the double arrow represents causation, and the single arrow an internal change of state; the resulting state, shown as a box labeled L, is that of being liquid. The trajector is the source of energy, which causes the change of state, while the landmark is the entity that undergoes it. The passive *be melted*, shown in 4(b), has the

same content and profiles the same process. However, primary focal prominence —trajector status—is conferred on the patient undergoing the change, not on the actor, which is defocused (Shibatani 1985). In (c) and (d), *melt* is used intransitively. Here the profiled process consists solely of the patient undergoing the change of state, and since there is only one profiled participant, it (the patient) functions as trajector. The semantic contrast between (c) and (d) is not a matter of profiling or trajector choice, but rather whether reference to causation is saliently evoked as part of the conceptual base. In (2)c, the adverb *easily* forces an agentive interpretation which is absent in (2)d; although we do infer that the heat is reponsible, the sentence does not specifically portray it as a causer (only as a location).

(2)   a.   *The fire will **melt** it.*
      b.   *It will **be melted** by the fire.*
      c.   *It should **melt** easily.*
      d.   *It may **melt** in the heat.*
      e.   *It is finally **melted.***
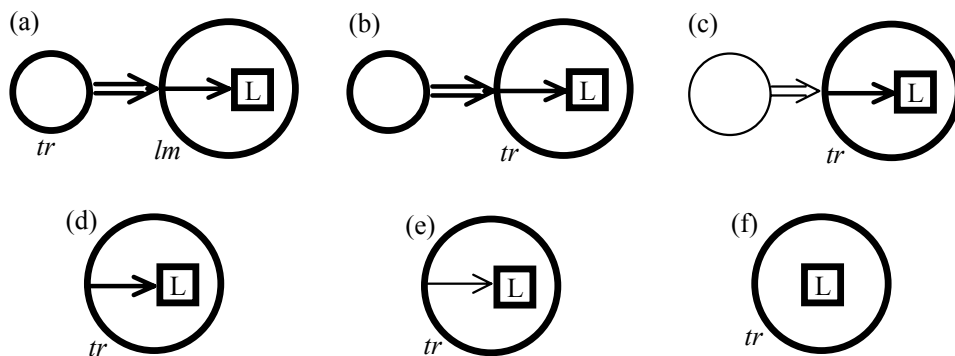      f.   *It is now **liquid**.*



*Figure 4*

In contrast to the verbs in (a)-(d), which profile a change unfolding through time, **melted** in (e) and **liquid** in (f) profile non-processual relationships. It is the same, static relationship in each case, that of the trajector having the property of being liquid (L). The difference between them is that *melted*—as a past participle, derived from a verb —portrays this state against the background of the process producing it, whereas the adjective *liquid* merely presents it as such. Thus, as an unprofiled facet of the base, 4(e) includes an arrow representing the change, while 4(f) lacks this arrow. Observe that

something can be *liquid* without ever having melted (e.g., we can obtain liquid nitrogen by cooling a gas). On the other hand, something is correctly described as *melted* only if it has undergone the melting process.

We must now consider **assemblies** of symbolic structures. Any such assembly —specific or schematic, fixed or novel, regular or irregular—is called a **construction** (hence the term is used more broadly than in Construction Grammar; see Goldberg 1995). Canonically, a minimal construction (representing a single level of organization) consists of two **component structures** which are **integrated** to form a **composite structure**. An illustration is given in Figure 5, where the component structures *near* and *the door* are integrated to form the composite expression *near the door*. *Near* profiles a non-processual relationship of spatial proximity between two things; in the diagram, the trajector is placed inside an ellipse representing the landmark's neighborhood. The other component structure, *the door*, profiles a thing. The pictorial representation is not per se to be taken seriously—it is merely a convenient way to abbreviate the many semantic specifications of the lexical noun. (To simplify matters, the definite article is just ignored.) Finally, the composite structure profiles the same spatial relationship as the preposition *near*, except that its landmark is specific rather than schematic, being characterized as a door.
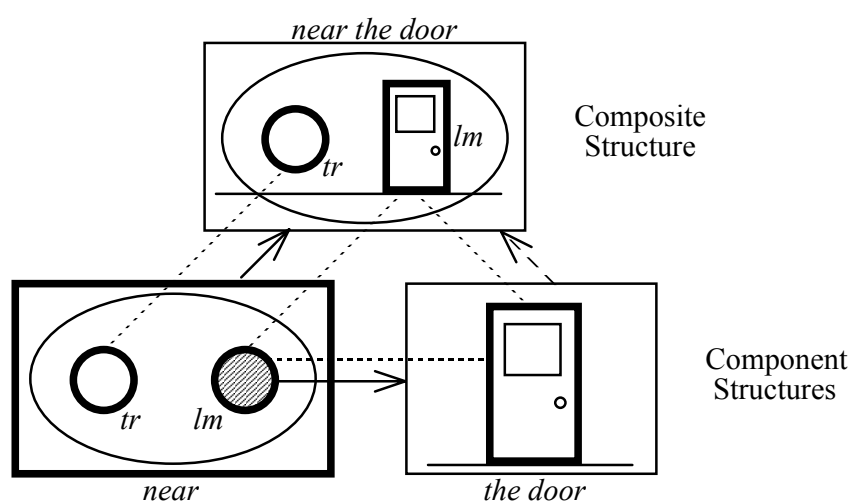


*Figure 5*

The component and composite structures of a symbolic assembly are linked by **correspondences** (dotted lines) and relationships of **categorization** (arrows). Correspondences indicate conceptual overlap. They specify that particular elements of one symbolic structure are taken as being identical to particular elements of another. For

instance, the "horizontal" correspondence line specifies that the schematic landmark of *near* is identified with the profile of *the door*. Horizontal correspondences can also be interpreted as instructions for "unification": superimposing the corresponding elements and merging their specifications produces the composite structure (which is thereby linked to the component structures by "vertical" correspondences). Two kinds of linking arrows are shown: a solid arrow, for a relationship of **elaboration**, and a dashed arrow, for **extension**. In an elaborative relationship between A and B (marked by a solid arrow), A is a schematic categorizing structure and B a more specific structure unproblematically construed as an instance of the category, there being no conflict in their specifications. In a relationship of extension (marked by a dashed arrow), A is a local or global prototype used to categorize B despite some conflict.

In a construction, it is usual for one component structure to contain a schematic substructure corresponding to the profile of the other component structure, which specifies it in finer-grained detail. This schematic substructure is called an **elaboration site** (or **e-site**), marked by hatching. In Figure 5, the schematic landmark of *near* is an elaboration site specified by *the door*. It is also usual for the composite structure to inherit its profile from one of the components, which is thus called the **profile determinant** and indicated by a heavy-line box. In Figure 5, *near* is the profile determinant, since the relationship it profiles is also profiled by *near the door*. The profile determinant at a given level of organization constitutes the grammatical **head** at that level. This follows from the characterization of the head as the element determining the grammatical class of the composite expression, as well as the fact that grammatical class depends specifically on what is profiled. Observe that the head (or profile determinant) is schematic with respect to the composite structure, which is more specific concerning certain facets of it (in this case its landmark). On the other hand, the categorizing relationship which the non-head component bears to the composite structure is one of extension, owing to a conflict in their profiles.

In later diagrams, I shall often simplify by omitting indications of profile determinance, categorization, and e-sites. Also, the composite structure may be suppressed when the primary concern is with how the components are integrated. Still, all these factors must be included in the full description of a construction.

The symbolic assembly depicted in Figure 5 represents a specific expression, the prepositional phrase *near the door*. It instantiates a regular grammatical pattern, the prepositional phrase construction. In CG, patterns of composition are described by **constructional schemas**, i.e., schematic symbolic assemblies representing whatever commonality is observable across a set of symbolically complex expressions. Constructional schemas serve as templates for the construction and evaluation of novel expressions. They are precisely analogous to the expressions that instantiate them, except

that some or all of the symbolic structures constituting the assembly are schematic rather than specific. For instance, the basic constructional schema for prepositional phrases is sketched in Figure 6. It is just the same as Figure 5 except that the specific content of *near* and *the door* is replaced by the schematic characterizations of prepositions and nominals (i.e., noun phrases). A preposition profiles a non-processual relationship between two things, its trajector and landmark, while a nominal profiles a thing (which is further **grounded**, typically by a determiner). Note that each symbolic structure in Figure 6 is instantiated by the corresponding symbolic structure in Figure 5, which in each case is more specific. Internally, moreover, the constructional schema and its instantiation display the same correspondences, categorizing relationships, and profile determinance.
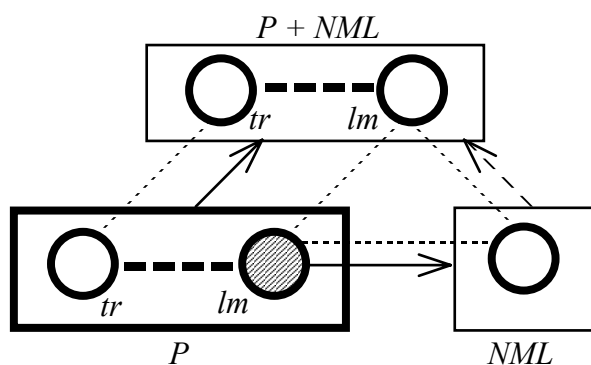


*Figure 6*

A symbolic assembly exhibits a kind of **constituency** when the composite structure at one level of organization (in one construction) functions in turn as component structure at a higher level of organization (in a higher-order construction). Consider Figure 7, representing a simple clause (again ignoring grounding, i.e., tense). At the first, lower level of organization, the nominal *Bill* (whose semantic specifications are abbreviated as B) elaborates the schematic landmark of the verb *admires* (which profiles a mental relationship, represented by a dashed arrow). Since *admires* is the head, the composite structure *admires Bill* is also processual. The composite expression *admires Bill* then functions as component structure with respect to a higher level of organization, where the nominal *Alice* (with semantic specifications A) elaborates its schematic trajector. At this level *admires Bill* functions as profile determinant, so the full expression also profiles the process of admiring. Indeed, a finite clause always profiles a process, as a matter of definition.
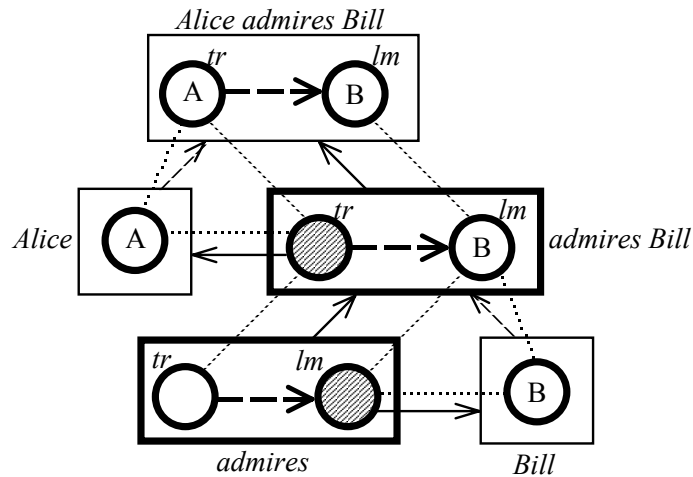
*Figure 7*

While constituency does exist and has to be accommodated, in CG it is conceived as being flexible, variable, and non-essential (Langacker 1995a, 1997). It is simply a matter of the order in which simpler symbolic structures are progressively combined to form more elaborate symbolic structures, and often the same composite structure results from different orders of composition. The real substance of grammar is conceptual, and the real work of grammar is done by correspondences. Grammatical dependencies reside in correspondences between conceptual elements, and the same correspondences can be established regardless of constituency.

Two fundamental grammatical dependencies are the **subject** and **object** relations. A subject relation resides in a correspondence between the profile of a nominal expression (a thing) and the **trajector** of a profiled relationship. In Figure 7, *Alice* is thus the subject with respect to *admires*, *admires Bill*, and the entire clause. An object relation resides in a correspondence between the profile of a nominal expression and the **landmark** of a profiled relationship. Hence *Bill* is the object with respect to all three levels. Likewise, in Figure 5 *the door* is the object with respect to both *near* and the full prepositional phrase. Since these relationships are not defined in terms of constituency, when it varies they are not affected. Suppose, for instance, that *Alice* first combines with *admires* to form the intermediate-level constituent *Alice admires*, whose landmark is then elaborated by *Bill*. This alternate constituency does occur in English, e.g., in (3). However, since the same elements correspond, *Alice* is still the subject of *admires*, and *Bill* its object.

(3)   *Bill Alice admires.  Sam she doesn't.*

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## 3. Conceptual overlap

Correspondences between component structures indicate **conceptual overlap**: corresponding entities each project to the same entity at the composite structure level. Component structures should not be thought of as building blocks stacked together to form the composite structure. Rather, they represent overlapping fragments of the integrated composite conception artificially extracted from the whole for purposes of linguistic symbolization. Unlike a mosaic, where the individual stones are non-overlapping and exhaustive of the whole, a construction is like a collage, where components may overlap extensively yet fail to cover the entire canvas. They **evoke** the whole, and **motivate** it to varying degrees, but they do not **constitute** it. Hence the vertical arrows between component and composite structures indicate a relationship of categorization rather than strict composition. The common view that semantics is fully compositional is aprioristic and maintained only by imposing artificial boundaries. In CG, language is seen as exhibiting only **partial compositionality**.

This is not however to deny the existence and importance of compositional patterns. In CG these patterns are nothing other than the semantic pole of constructional schemas. For instance, Figure 6 represents a pattern for deriving the composite meaning of a prepositional phrase from the meanings of a preposition and its nominal object. While they do not tell the whole story of linguistic meaning, the correspondences established at the semantic pole by constructional schemas are pivotal to grammar and its role in the formation of composite semantic structures.

In a typical construction, correspondences hold between salient elements of the two component structures, such as the profile or a focal participant (trajector or landmark). The examples above (Figures 5-7) are canonical in this respect. Observe that each construction involves only a single correspondence, and that each component structure has substantial conceptual content in addition to the elements that correspond. Often, however, there is a tighter conceptual integration between component structures, a greater degree of conceptual overlap relative to their full semantic values. This closer integration can be reflected in either of two ways: there may be multiple correspondences, rather than just one; alternatively, the elaboration site may constitute a greater proportion of a component conception (even its totality). Tighter conceptual integration is characteristic of elements considered grammatical (as opposed to lexical). As such, it is relevant to the historical process of grammaticization, which typically involves an increase in conceptual overlap between component structures.

Consider first the derivational morpheme *-er*, as in *hiker*, *complainer*, *cheater*, *blender*, *driver*, etc. The *V-er* construction exemplifies an extreme case of conceptual overlap: the overlap is total, in the sense that the schematic elaboration site is exhaustive of one component structure. In its prototypical value (see Ryder 1991 for a broader view),

*-er* evokes a schematic process as its base and profiles its trajector. This is shown in Figure 8, where the conceptual base of each symbolic structure comprises a specific or schematic process, i.e., a relationship (represented as a vertical line) followed in its evolution through time (the horizontal arrow). The entire schematic base of *-er*, consisting just of that process, functions as elaboration site, being elaborated by the verb stem. The suffix is thus a schematic noun (for it profiles a thing), and since it imposes its profile on the composite structure, the derived expression is also a noun.
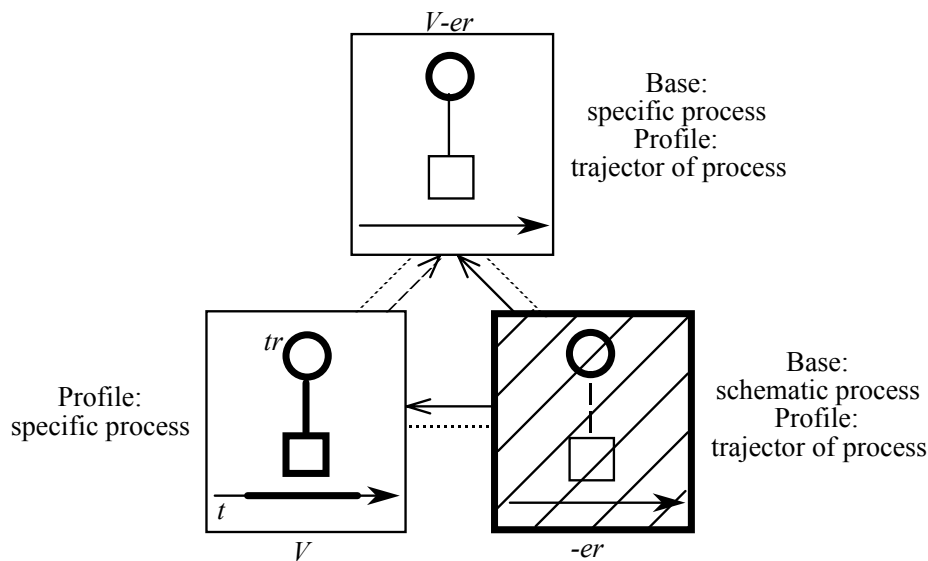


*Figure 8*

Hence the semantic contribution of *-er* resides in its role as profile determinant, profiling being a matter of construal (prominence) rather than content. Note that the choice of profile determinant is a function of the construction (specified in the constructional schema), not of individual components. Above and beyond the meanings of the component elements taken individually, this facet of the expressions' semantic value resides in the configuration of the entire symbolic assembly—a matter of which component structure profile matches the composite structure profile. It is thus one aspect of **constructional meaning**.

Even more extreme is the auxiliary verb *do*, exemplified in (4):

(4)    a.    ***Did*** *he* ***finish?***
         b.    *He* ***DOES like*** *her.*
         c.    *I* ***do*** *not* ***see*** *it.*
         d.    *They* ***do***.

Being a verb itself, *do* does not even differ in profiling from the verb it combines with. I analyze *do* as profiling a fully schematic process (hence semantically it is equivalent to the schema defining the class of verbs). Not only, then, does the elaboration site exhaust its content, as shown in Figure 9, but also, since the two component structures have corresponding profiles, its semantic contribution is effectively invisible—the content and profiling of the composite expression is effectively equivalent to that of the content verb. For this reason *do* is often considered meaningless (e.g., inserted by a rule of "*do*-support"), but it is not. It merely has a highly schematic meaning, and one that fully overlaps with that of a co-occurring element. Some degree of conceptual overlap is characteristic of every construction; the case of full overlap is merely the limiting case. Here the conceptual integration is so tight that the meaning of one element is wholly non-distinct from that of the more contentful element it combines with.
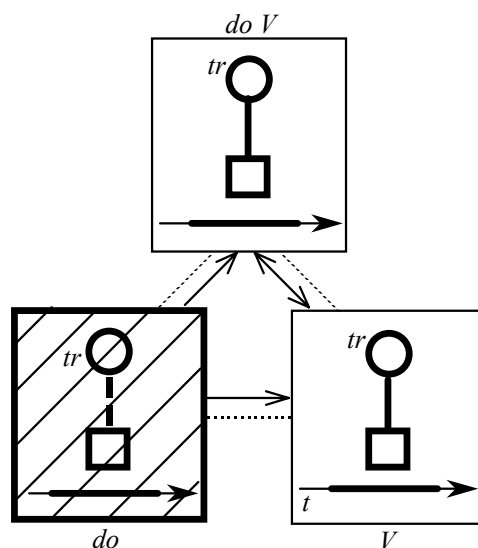


*Figure 9*

As seen in (4)d, *do* can also occur without an accompanying verb, as a clausal pro form. In this use its semantic value may be more evident. Owing to their schematicity, however, such expressions are not very useful unless they can be interpreted anaphorically.

Let me now examine a case where each component structure has substantial content not subsumed by the content of the other. The tighter conceptual integration (greater overlap) is then reflected in multiple correspondence lines (ultimately, I think this distinction is more a matter of notation than an actual difference). The example, which I first used in a transformational analysis (Langacker 1968), concerns body-part nouns functioning as direct objects in the Romance languages. When the object nouns occur

with the definite article, having no possessive marking, they are interpreted as being possessed by the subject. In the transformational era, examples like (5) were naturally analyzed by positing a deep structure in which the object contained a possessor pronoun. This pronoun was deleted transformationally by virtue of coreference to the subject NP.

(5)  a.  *Elle lève la main.*  'She raises the [= her] hand.'      [French]
     b.  *J'ouvre les yeux.*  'I open the [= my] eyes.'
     c.  *Il ferme la bouche.* 'He closes the [= his] mouth.'

I have generally presented this construction using a diagram like Figure 10, which is fine so far as it goes. If the construction involves only correspondence (a), we have a normal instance of the direct object construction (see Figure 7). This involves the typical degree of conceptual overlap between component structures. On this construal, (5)a might be interpreted as indicating, for example, that she raises up the hand of a statue, perhaps with a crane to move it into place. The hand and the force exerted can be totally external to the subject referent. Far more likely, however, is the interpretation of the subject raising her own hand in the normal manner. The expressions in (5) instantiate an entrenched subschema of the direct object construction, one which specifies the object nominal as being a body-part expression marked with the definite article. Further characteristic of this subconstruction is correspondence (b), which indicates that the body containing the profiled body part is the same as the verb's trajector. There is thus a tighter conceptual overlap between the two components—a higher degree of conceptual integration.
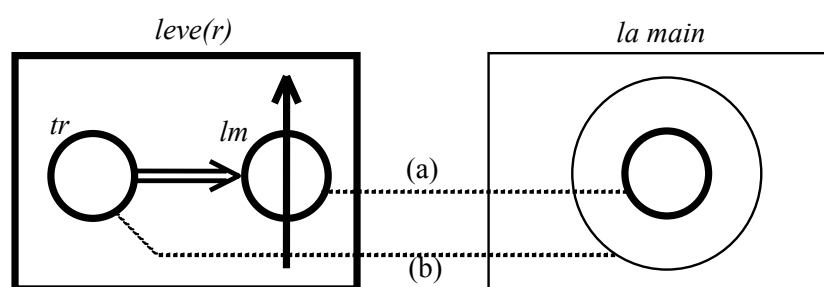


*Figure 10*

With only correspondence (a), the composite structure is as shown in Figure 11(a). With correspondence (b) in addition, the composite structure is the one shown in 11(b). The extra correspondence is a facet of constructional meaning: it is not inherent in either component structure, but is rather a feature of how they are connected in the larger symbolic assembly in which they function. This additional correspondence, notationally so unobtrusive, has drastic consequences for semantics and grammar. Observe that it

does the work for which a special deep structure and deletion transformation had to be posited in a classical transformational account.
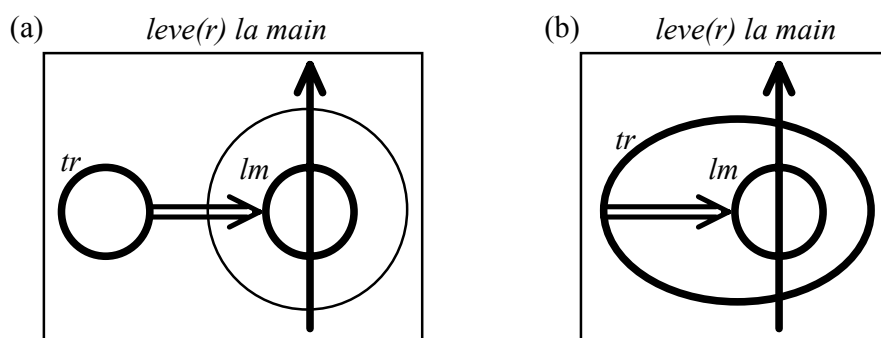


*Figure 11*

We are not yet finished, however. On the construal incorporating correspondence (b) the expressions in (5) do not merely indicate that the subject referent is the individual whose body part moves. Additionally, as shown in Figure 11(b), the movement is interpreted as involving the **internal transmission of energy** effecting the movement, in the manner **characteristic** of the body part in question, in terms of standard cognitive models. Thus (5)a could not be used when one arm lifts the other, or when the subject pushes a button to activate a hoist which lifts an arm. Thus the configuration in 11(b) involves more than is accomplished solely by correspondence (b). As shown in Figure 12, this subconstruction actually incorporates a third correspondence, (c), whereby the exertion of force evoked by the verb is identified with the canonical, internal exertion of force evoked as part of the meaning of the body-part expression. This represents still a higher degree of conceptual integration.
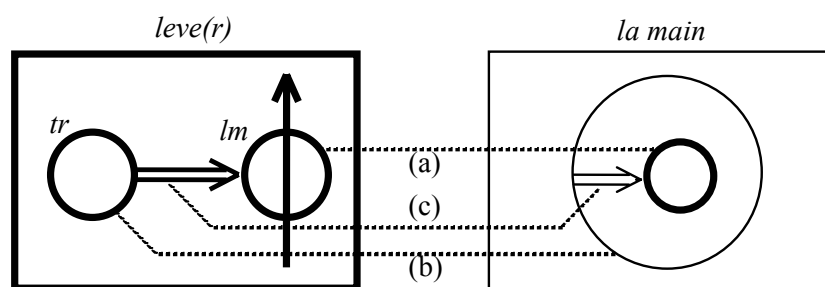


*Figure 12*

Extensive conceptual overlap is characteristic of so-called "agreement" phenomena. Agreement is basically the multiple coding of the same specification. It is quite variable

in specifics, so the single example I shall look at cannot be taken as fully representative (see also Langacker 1988). It does however afford an idea of this essential dimension of conceptual overlap in an area considered "grammatical" as opposed to "lexical".

The specific example involves postpositional endings in Luiseño, a Uto-Aztecan language of southern California. As we see in (6), when an adjective modifies a noun marked with a postposition, the same postposition occurs on the adjective, redundantly. Being redundant is not however the same as being meaningless (as agreement markers are sometimes taken as being). It is rather a matter of overlapping meaning (often quite abstract), but all grammatical constructions involve semantic overlap.

(6)  a.  *ki-nga yawaywi-nga*   (house-in pretty-in) 'in the pretty house' [Luiseño]
     b.  *palvun-ik konokni-yk*   (valley-to green-to) 'to the green valley'

The constructional schema for such expressions is sketched in Figure 13. A noun profiles a thing, a postposition profiles a non-processual relation between two things, and an adjective ascribes a property (shown as a box) to its trajector. The lower left portion of the diagram represents the postpositional object construction, which—at the semantic pole—is equivalent to the prepositional object construction (Figure 6). The lower right portion specifies the suffixation of a postpositional ending to an adjective (assuming for sake of discussion that the forms in question are in fact adjectives—morphologically they are comparable to nouns). Here the postposition's landmark is put in correspondence with the adjective's trajector. The resulting composite structures, N+P and ADJ+P, profile the same relationship as the postposition (the profile determinant). In the case of N+P, its landmark inherits all the semantic specifications of the object noun (abbreviated as X). In the case of ADJ+P, the landmark is still schematic, but it does have the property (Y) specified by the adjective.
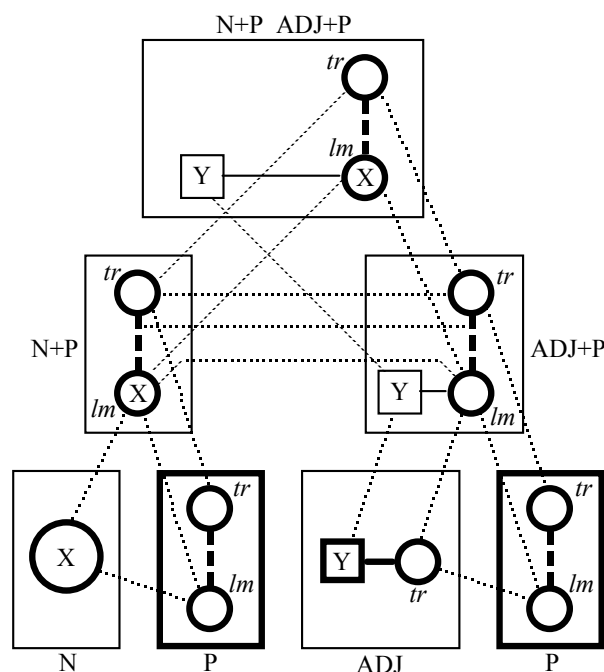
N+P  ADJ+P

N+P

ADJ+P

N          P          ADJ          P

*Figure 13*

The upper portion of Figure 13 shows the two composite structures, N+P and ADJ+P, functioning as component structures at a higher level of grammatical organization. Their integration is total: the two postpositional relations are identified, hence their trajectors and their landmarks also correspond. The composite structure for the entire complex expression therefore profiles just a single non-processual relationship. Its trajector remains schematic (to be specified in the context of a larger expression). Its landmark is characterized as a thing of type X (specified by the noun), further having property Y (specified by the adjective). If we examine the ultimate component structures in the bottom row, we see that the same postpositional relation is symbolized twice, and that all four component structures make reference to what turns out to be a single thing (the referent of the postpositional object). Despite this massive redundancy, everything collapses onto a compact conceptual structure at the highest level.

## 4. Grammaticization and benefactives

If tight conceptual integration is characteristic of grammatical morphemes, it ought to figure prominently in **grammaticization**, the evolution of grammatical markers from

lexical elements (and the constructions involving them). This does appear to be so. Among the cases I have discussed elsewhere are *of*, the passive *by*, the infinitival *to,* and for Spanish the "personal *a*" and the auxiliary verb *estar* (Langacker 1982, 1992a, 1992b, 1999b). Here I shall examine the well-established path wherein verbs meaning 'give' evolve into benefactive markers. But to lay the groundwork for this, I must first consider a couple of other, independently interesting constructions.

The first is a **cognate object** construction, exemplified in (7)c. Normally *die* does not allow an object. Like some other one-argument verbs, it can however be coerced into occurring with a "cognate" object—one related to the verb—under certain conditions that do not concern us here. (For reasons discussed in Rice 1987 and 1988, these expressions are very low in transitivity and resist passivization.) All that does concern us is how the verb is integrated with the object in those cases where it is possible.

(7)  a.  *He died.*
     b.  **He died a death.*
     c.  *He died a brave death.*
     d.  *He observed a brave death.*

Consider first a normal direct object construction involving *death,* as in (7)d. This is sketched in Figure 14(a), where a dashed arrow represents the process of observing, and a solid arrow indicates a change of state. As a count noun, *death* profiles an abstract thing, one instance of the process of dying. This abstract thing, shown by an ellipse, derives from the process by a particular kind of conceptual reification (Langacker 1991: 1.2). The object nominal based on it elaborates the landmark of the verb in the usual fashion.
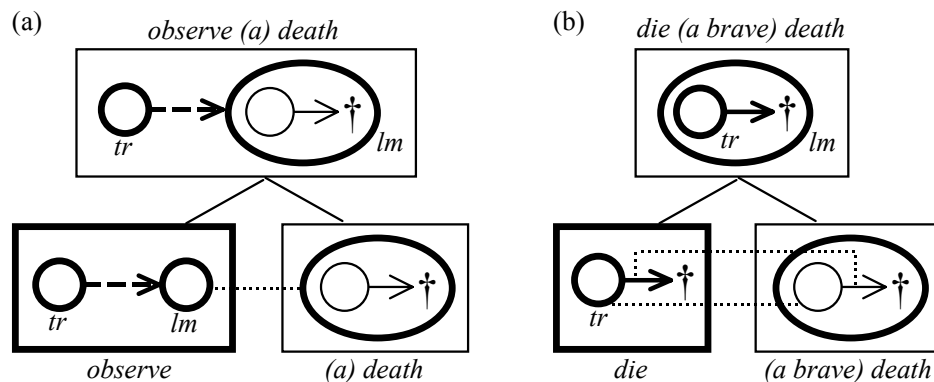


*Figure 14*

In 14(a), the process designated by the verb and the one that is reified to form the object nominal are basically distinct—their only connection is that the reified event functions as the observed entity (the landmark). This is clearly not the case with a cognate object construction, as shown in 14(b). Here the process reified to form the object nominal is actually identified with the one profiled by the verb. Correspondence lines indicate (perhaps redundantly) that their trajectors are the same, as well as the processes themselves. The composite semantic structure thus incorporates, as a focal participant (landmark), an abstract thing that fully overlaps with the verbal process, representing the conceptual reification of that process.

Let me briefly mention another construction to indicate that this kind of overlap is not so unusual as it might at first appear. This is the main verb *do*, as in (8). In contrast to the auxiliary *do* considered earlier, the main verb takes a nominal (rather than a verbal) complement and implies some measure of causation or responsibility on the part of the subject.

(8)   *He did {a study/a dance/something/it}.*

The object complement makes reference to some kind of event (more transparently in cases like *do it* than cases like *do a study*), and the subject is the one who carries out that event. We can usefully contrast *do* with a verb like *cause*, which also indicates that the subject is responsible for the occurrence of an event expressed by its complement. In (9)a, *it* refers back to Bill's quitting. The thing to notice is that the quitting and the causation are basically distinct—Joe's causation constitutes an event above and beyond that of Bill's quitting. This is sketched in Figure 15(a). The double arrow in bold represents the profiled act of causation. Its landmark is an abstract thing consisting of the reification of an event, which may itself involve an act of causation on the part of the causee (e.g., the volitional act of Bill quitting). What the causee induces (e.g., Bill becoming unemployed) is given as a box.

(9)   a.   *Bill quit.  Joe caused it.*
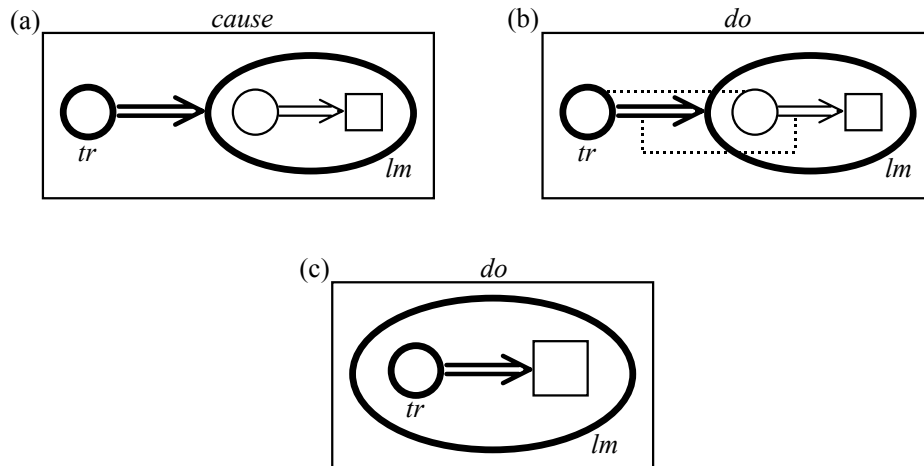       b.   *Bill quit.  He really did it.*

*Figure 15*

Compare this to (9)b, with *do*. With *do*, the subject is necessarily identical to the individual who carries out the process induced. There is however a further difference: in (9)b, the doing is not a distinct event above and beyond the quitting—the quitting **is** the doing. The meaning is not that Bill did something and that this induced the quitting —rather, the doing **constitutes** the quitting. The examples in (10) are further evidence for this contrast between *cause* and *do*.

(10) a.  *Joe caused something, namely (he caused) Bill's quitting.*
     b.  *\*Bill did something, namely (he did) his quitting.*
     c.  *Bill did something, namely he quit.*

Diagrammatically, the contrast is seen by comparing Figures 15(a) and 15(b). In both cases, the landmark is a reified event. That event itself involves (optionally in the case of *cause*) some kind of action or causation (double arrow) leading to a result (given as a box). The crucial difference lies in the correspondences. In addition to the trajector of *do* corresponding to the actor of the induced action, the causative/volitional part of that action is equated with the very act of causation which *do* profiles. The doing and what is done are not distinct, but largely overlap. This overlap is indicated directly in 15(c), which is a notational variant of 15(b). What is done, what is brought into being by the doing, includes that doing per se. Otherwise put, *do* highlights the causative facet of some action and reifies that action overall as its landmark.

Having explored some non-canonical cases of conceptual overlap, we are ready to tackle GIVE. In particular, when verbs meaning GIVE occur in serial verb constructions,

they often grammaticize into benefactive markers. This is actually one facet of a whole complex of paths of semantic extension and grammaticization witnessed for GIVE and related verbs, which I cannot explore here (see Lewis 1989, Newman 1996, and Fagerli 2001 for extensive data and interesting discussion).

Let me start with a basic sketch of GIVE in its prototypical value. A partial representation of the ditransitive variant is provided in Figure 16. The **agent** (A) exerts some force resulting in a **theme** (T) moving into the **dominion** (D) of a **recipient** (R). The force can be physical or abstract. The theme is the transferred entity, when transfer is involved, and hence the mover in cases of physical transfer. The recipient's dominion is its sphere of access, control, and influence; the type of access and interaction involved can be physical, perceptual, or more abstract. The double arrow indicates causation; the single solid arrow represents the theme's movement into (or manifestation within) the recipient's dominion; and the single dashed arrow stands for the recipient's access to (or interaction with) the theme. (In other work—e.g., Langacker 1993b, 1995, Taylor 1996 —it has been argued that **possessive** relationships are best characterized schematically as being **reference point** relationships. Giving can be analyzed as the induction of a possessive relationship. Thus R can also be taken as standing for the reference point, and T for the target found in R's dominion.)
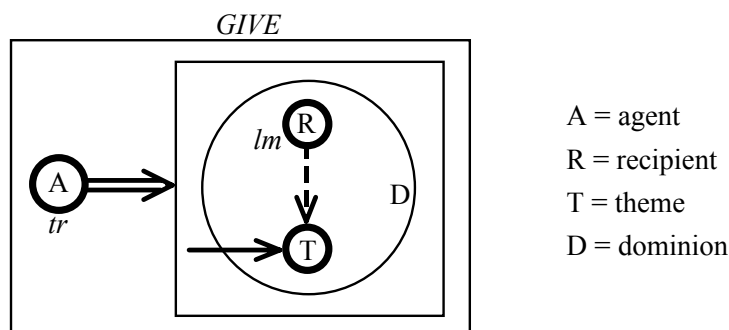


*GIVE*

A = agent
R = recipient
T = theme
D = dominion

*Figure 16*

Canonically, the theme originates in the agent's dominion and is transferred to the recipient's, as in (11)a. I have abstracted away from this because very often the theme is not transferred from the agent at all, but merely induced in the recipient's dominion by the agent, as exemplified in (11)b-d. I have also left out other facets of the overall conception, such as the social interaction between agent and recipient, the agent's intention for the recipient to acquire the theme, and the possible benefit (or detriment) of the recipient having it. Such factors can be retained in various ways and degrees as GIVE follows its myriad paths of grammaticization.

(11) a.  *Give me that hammer.*
     b.  *Ali gave his opponent a black eye.*
     c.  *The students give me a lot of trouble.*
     d.  *I gave the door a new coat of paint.*

The frequent evolution of GIVE into a benefactive marker is well documented. Here I cite just a few examples for sake of concreteness. The Mandarin data in (12) is from Newman (1996:213, 217). In (12)a, *gěi* is used as a main verb (V). In (12)b, it marks a recipient (R), and in (12)c it functions as a benefactive (B). (Although in (12)c a possessive relationship is induced, that is not crucial.)

(12) a.  *Wǒ   gěi   tā   yí   fèn   lǐwù.*          (V)   [Mandarin]
         I     give   him   one   CL   present
         'I gave him a present.'
     b.  *Wǒ   sòng-le   yí   fèn   lǐwù   gěi   tā.*   (R)
         I     present-ASP   one   CL   present   give   him
         'I gave a present to him.'
     c.  *Tā   gěi   wǒ   zào-le   yí   dòng   fángzi.*  (B)
         he   give   me   build-ASP   one   CL     house
         'He built a house for me.'

Comparable examples are found in Thai (Newman 1996:213). Note that (13)b can be interpreted as involving either a recipient or a beneficiary.

(13) a.  *Chán   hâi   nǎnsɨ̌:   kɛ̀:   dèk.*   (V)     [Thai]
         I     gave   book   to     child
         'I gave a book to a child.'
     b.  *Chán   sòng   nǎnsɨ̌:   hâi   dèk.*   (R/B)
         I     sent   book   give   child
         'I sent a book {to a child/for the child}.'

The examples in (14) are from Sranan, an English-based creole of Suriname (Fagerli 2001:211, 214). The marker *gi* is from English *give*. Here there is no change of possession. These are pure benefactives, or in the case of (14)c, a kind of malefactive. Nothing is transferred, and the theme is not a thing. Rather, the similarity with GIVE is that something is induced in the recipient's dominion, interpreted as a realm of experience.

(14) a. *Kofi    og  na  Paramaribo  gi    mi.*          (B)   [Sranan]
        Kofi   go  to  Paramaribo  give  me
        'K. went to P. for me.'

    b. *Mi     wroko  gi    en.*                  (B)
        I      work   give  him
        'I worked for him.'

    c. *Kofi   kibri  wan   sani       gi   Gado.*   (B)
        Kofi   hide   one   something  give God
        'Kofi is hiding something from God.'

Presumably, in a main verb use like (12)a, Mandarin *gěi* has something like the structure shown in Figure 16. This is repeated on the right in Figure 17. Diagram 17 represents the kind of use shown in (12)b, where *gěi* marks a recipient. It combines in a serial verb construction with another verb of transfer, in this case *sòng* 'present'. For our purposes, these two elements can be considered to have the same content. Indeed, they designate the same event, hence the correspondence line equates them as wholes. The only relevant difference between them is that *sòng* confers focal prominence (landmark status) on the theme, whereas *gěi* confers it on the recipient. Because *sòng* is the main verb in this construction, it imposes its choice of trajector and landmark on the composite whole (not shown). The function of *gěi* is then to introduce another participant as its own focused landmark (just as prepositional phrases do in English). Of course, since *sòng* is the profile determinant, its own organization prevails at the composite structure level, so the theme winds up with greater overall prominence than the recipient. The full expression profiles an act of presenting a present, not one of giving to someone.
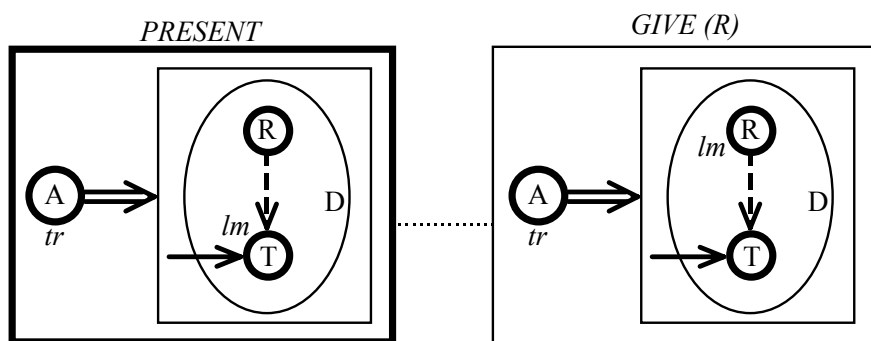


*Figure 17*

Finally, we can address a benefactive use, as in (12)c and (14). The first observation

is that the theme which is manifested in the recipient's dominion is not a thing, but is rather identified as the event profiled by the main verb. What GIVE conveys is the manifestation of this event in the recipient's experiential dominion, with the consequence (depending on its nature) of its being beneficial or detrimental to the experiencer/recipient. This is sketched in Figure 18(a). The theme is some kind of event, consisting of an agent-like participant bringing about some unspecified consequences (given as a square).
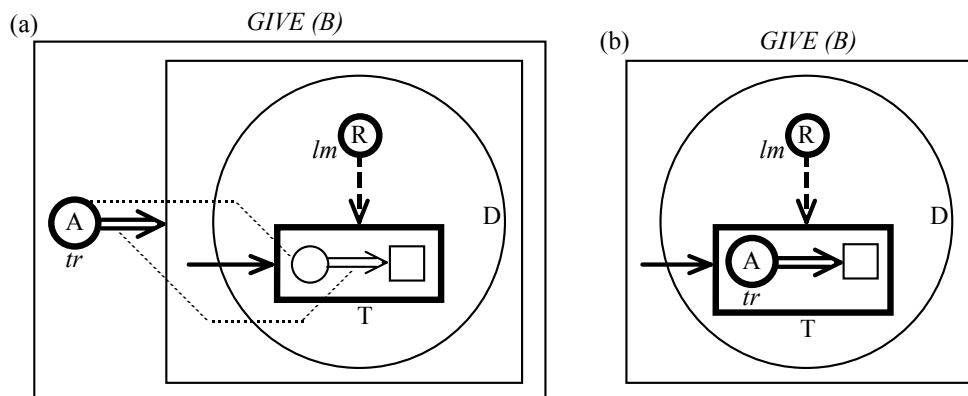


*Figure 18*

I suggest, however, that the "giving" in question is not distinct from the event manifested in the recipient's experiential dominion. That is, the trajector—the giver—is precisely the agent-like participant who carries out this event, and the act of giving inheres in the very act of carrying it out. This is indicated by the correspondence lines in 18(a). In other words, performing some action constitutes per se an act of giving by virtue of inducing the action performed to be manifested in somebody's realm of experience. This is quite reminiscent of the overlap witnessed in the case of the main verb *do*, sketched in Figure 15(b). The difference is that here the focused landmark is not the overall event, but the recipient who experiences that event.

Collapsing this diagram by superimposing corresponding entities results in Figure 18(b). The two are notational variants, the former being an "exploded" version of the latter.

The last step is to show how the benefactive phrase combines with the main verb. This is done in Figure 19. The action profiled by the benefactive GIVE is specified only schematically. This is put in correspondence with (and elaborated by) the specific action designated by the main verb (the diagram shows the trajector's exertion bringing about some activity or consequences, labeled X). The main verb is so called because it functions as head, or profile determinant, hence the composite expression profiles the

process it designates. Its manifestation in the recipient's experiential dominion, the semantic contribution of GIVE in this grammaticized use, is an unprofiled facet of the base (which does not, of course, make it insignificant).
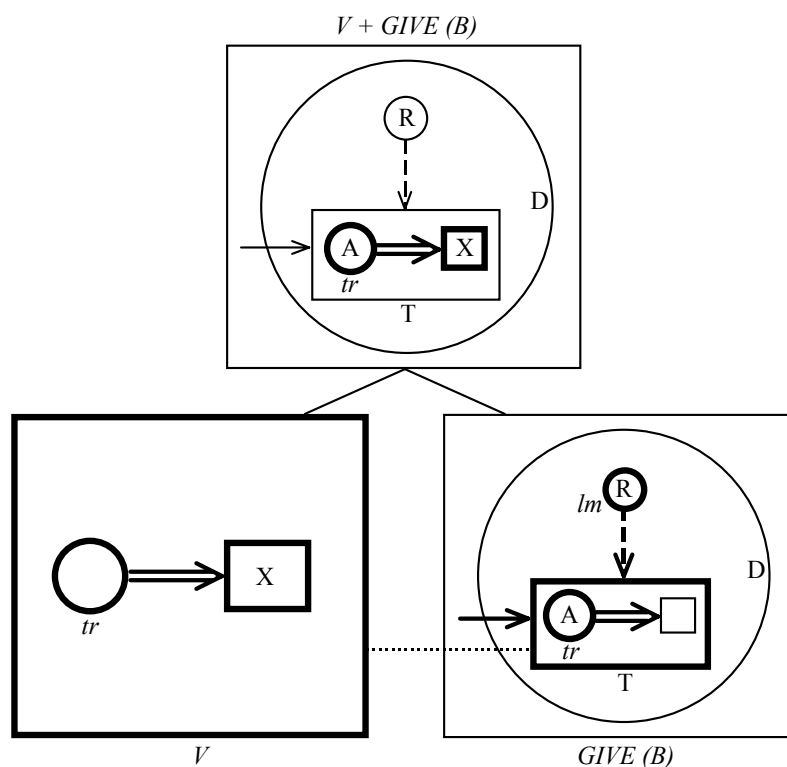


*Figure 19*

## 5. Conclusion

Perhaps it has been evident all along to everybody that conceptual overlap is significant to grammar and especially important in the case of grammatical markers. If so, maybe I have only spelled out a few details for a few examples. Still, the linguistics literature is hardly replete with explicit discussions of the matter. In part this reflects the lingering influence of the autonomous syntax hypothesis, that grammar is describable without essential reference to meaning. Yet even in cognitive linguistics, relatively few scholars engage in trying to articulate the conceptual structure of lexical or grammatical elements in explicit detail. Nor is much effort devoted to describing constructions by specifying precisely which conceptual substructures correspond to one another. But if lexical items and grammatical markers are semantic atoms in the sense that they function

as wholes for purposes of symbolization, they are not atoms in the classical sense of being indivisible. Like the atoms of modern physics, they have elaborate internal structures that can in principle be discovered and explicitly characterized. Discerning and describing the fine detail of these conceptual structures and the correspondences they participate in is fundamental to understanding grammatical elements and grammatical constructions.

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# 結構整合、語法化與連動結構

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　　語法結構組成成分間的整合程度，是結構句式意義的基本層面，也是語法上一個重要卻未受到足夠關注的層面。本文藉由不同語言的各種結構句式，尤其是連動結構，展示結構式組成成分間的整合度，除了在共時語法上佔有重要的角色外，也是語法化的核心因素。

關鍵詞：結構句式，語法化，認知語法，組合性，受益者，連動詞