

HOMOPHONY AND SERIAL VERBS

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INTRODUCTION

Of late there has been a reawakening of theoretical interest in polysemy, i.e. a single lexical item with different senses. Lakoff (1987), for instance, relies on polysemy and its linguistic representation to argue against the classical theory of semantic category structure. Along a somewhat different line, Traugott (1986) investigated the implications of a polysemy analysis for reconstructing the semantic structure of lexical items and, in fact, of whole classes of lexical items.

This recent emphasis provides a fresh semantic perspective from which to view a long-standing problem in the analysis of serial verb structures in the Kwa languages of West Africa. Though various aspects of these structures have proved problematic, one of the more troublesome is the asymmetric distributional behavior of verbal forms across different syntactic constructions. That is, in the Kwa languages one frequently finds that a phonological form in one construction exhibits a range of morphosyntactic behavior characteristic of a verb and in another construction fails to manifest this same range. For instance, in Ewe the form le, shown in 1a, exhibits grammatical properties typical of verbs: it inflects for tense/aspect, accepts the negation marker and adopts sentence initial position in verb focus structures. This same form, however, occurs in sentences like 1b where it manifests none of these verbal properties.

1.a. agbalêa le kp̃a dzi
book be-at table top
'The book was on top of the table'

b. me kpo lori le m̃ dzi
I see lorry street top
'I saw the lorry on the street'

A similar phenomenon occurs in other West African languages, Tswi among them. In this language, a form wo exhibits properties typical of a verb in sentences like 2a, whereas it loses those same properties in 2b.

- 2.a. g wɔ ɔdan mu
 he be-at house inside
 'He was inside the house'
- b. g ye adquma wɔ ɔdan mu
 he do work house inside
 'He worked inside the house'

Non-uniform distributional behavior such as found in Ewe and Tswi has led investigators to postulate two form classes or syntactic categories for the forms in question. Ansre (1966), recognizing the form with the fewest morphosyntactic restrictions as a verb, refers to the form with the more restricted behavior as a verbid (1b and 2b). Lord's (1973) analysis is similar, though she prefers the term preposition rather than verbid. In either terminological framework, a state of homophony rather than polysemy is assumed, implying thereby the existence of two lexical items. Indeed, a traditional criterion for deciding whether the meaning structure of a given form reflects polysemy or homophony is form class, polysemy being restricted to the different senses of a single syntactic category (Lehrer 1974 and Lyons 1977).

Though the criterial role of form class in deciding cases of polysemy or homophony has been debated in the past, recent semantic analyses by Brugman (1983) and Lakoff (1987) challenge its utility. Expanding on Brugman, Lakoff analyzes the different senses of the English form over, syntactically realized as a preposition (3a), particle (3b), or adverb (3c), to be a chain of image schemas related via a number of schema altering processes to a central image. The senses of over in 3, then, derive from this central schema by semantic processes identified in Lakoff as instantiation (3a), reflexive transformation (3b) and metaphoric interpretation (3c).

- 3.a. The dog jumped over the fence
 b. He turned the paper over.
 c. Do it over.

MOTION IN EMAI

Though the challenge mounted by Lakoff appears promising, it is the examination of lexical problems in other languages which will ultimately clarify our understanding of polysemy. A case in point is a particular type of serial verb construction in Emai, an Edoid language of south central Nigeria. In the Emai domain of motion, there is a closed class of forms which are employed in sentences conveying directional motion, irrespective of whether the Manner or Cause of that motion is specified. In the sentences of 4, for instance, the directional component of the respective motion situations is expressed by the forms lagaa and raa re, leaving the forms la 'to run' and sio 'to crawl' to express the Manner in which the different events transpire.

4. a. ɔli ɔmɔn lá lagaa uhai
 the child run move around well
 'the child ran around the well'
- b. ɔli ɔmɔn síɔ lagaa uhai
 the child crawl move around well
 'the child crawled around the well'
- c. ɔli ɔmɔn lá ráa uhai ré
 the child run move past well
 'the child ran past the well'
- d. ɔli ɔmɔn síɔ ráa uhai ré
 the child crawl move past well
 'the child crawled past the well'

Similarly, directional forms like lagaa and raa re also occur in sentences where the Cause of a motion event is specified, as shown by the sentences of 5, with the causative verbs nwun 'to carry' and si 'to pull.'

5. a. *gli ómɔn nwún ɛkpɛtɛ láɡaa uhai*
 the child carry stool around well
 'the child carried the stool around the well'
- b. *gli ómɔn sí ɛkpɛtɛ láɡaa uhai*
 the child pull stool around well
 'the child pulled the stool around the well'
- c. *gli ómɔn nwún ɛkpɛtɛ ráa uhai ré*
 the child carry stool past well
 'the child carried the stool past the well'
- d. *gli ómɔn sí ɛkpɛtɛ ráa uhai ré*
 the child pull stool past well
 'the child pulled the stool past the well'

What makes the directional forms lagaa and raa re relevant for discussion is their asymmetric distributional behavior vis-a-vis the Manner and Cause constructions. To be sure, this non-uniform behavior is not confined to lagaa and raa re, for it is characteristic of forms such as sho re 'to move out', o 'to move into,' and shan 'to move via' among others. It is the grammatical behavior of this entire set of forms which is then under investigation.

To explore these directional forms at a more specific level, consider the differential behavior of lagaa in 6 and 7. For the Manner constructions in 6, first of all, lagaa assumes the position of focused constituent (6a); follows the consecutive marker o (6b); and occurs as a main verb in either clause of sentences designed to disambiguate sentence negation (6d and 6e).

6. a. *úlagaa li gli ómɔn síɡ láɡaa uhai*
 moving around F the child crawl move around well
 what the child did at the well by crawling was
 move around it'
- b. *gli ómɔn síɡ ɡ láɡaa uhai*
 the child crawl and then move around well
 'the child crawled and then moved around the well'
- c. *gli ómɔn ɡ i síɡ láɡaa uhai*
 the child he not crawl move around well
 'the child did not crawl around the well'

- d. qli om̄on si bi khi o i lagaa uhai
 the child crawl with that he not move around well
 'the child crawled but he did not move around the well'
- e. qli om̄on lagaa uhai bi khi o i si
 the child move around well with that he not crawl
 'the child move around the well but not by crawling'

In contrast, lagaa in the Cause constructions of 7 fails to exhibit this same range of behavior. It fails to occur as a focused constituent in 7a; does not allow the consecutive construction in 7b; and does not occur in either clause of biclausal sentences designed to disambiguate sentence negation 7d and 7e. Across Manner and Cause constructions, therefore, the distributional behavior of directional forms is asymmetric.

7. *a. ulagaa li qli om̄on si ekpete lagaa uhai
- *b. qli om̄on si ekpete o lagaa uhai
- c. qli om̄on o i si ekpete lagaa uhai
 the child he not pull stool around well
 'the child did not pull the stool around the well'
- *d. qli om̄on si ekpete bi khi o i lagaa uhai
 the child pull stool with that he not around well
- *e. qli ekpete lagaa uhai bi khi qli om̄on o i si oi
 the stool around well the man he not pull it

ANALYSIS OF EMAI FORMS

Following the analytic strategy outlined by Ansre and Lord, one would be inclined to ascribe the distributional asymmetry of the Emai directional forms to differences of form class. The form lagaa in 6 might then be analyzed as a verb, since it exhibits morphosyntactic properties comparable to other verbs in Emai. Applying this same strategy to lagaa in 7 would lead to assigning it the role of preposition, for like the few other prepositions in Emai it precedes a noun phrase and has a meaning corresponding to an English preposition. The Lord/Ansre hypothesis would thus lead us to postulate two distinct lexical items, in other words homophony.

Consistent with syntactic facts though it is, postulating homophony overlooks a significant semantic characteristic of these forms, their similarity of meaning. That is, across constructions the same directional aspect of meaning is maintained by lagaa, i.e. 'around' and by raa re, i.e. 'past.' To posit homophony is to ignore this state of semantic relatedness and so to minimize the role of semantics in determining lexical structure. An alternative interpretation would be to place this semantic relatedness centerstage, so to speak, and to postulate for these directional forms a case of polysemy, a single lexical item with different senses. In fact, a previous analysis of Emai verbs of motion in the framework of Talmy (1985), assumes the polysemy alternative (Schaefer 1988). As part of this analysis, forms like lagaa and raa re are interpreted as lexicalizing the semantic components of Motion+Path (Path being equivalent to Direction) in Manner constructions, but specifying only Path in Cause constructions. Forms of the type lagaa thus manifest two senses, one of which can be rendered as 'to move around' and the other simply as 'around.'

HISTORICAL IMPLICATIONS

Besides capturing the semantic relatedness of the Emai directional forms across Manner and Cause constructions, is there any other aspect of the polysemy interpretation to commend it? In a recent paper, Traugott (1986) shows how certain questions of a historical nature are raised by a polysemy analysis. Specifically, she suggests that there is a single principle governing the historical order in which the related senses in a polysemous structure emerge. Assuming a state of homophony, on the other hand, raises no such question, for with distinct lexical items there is no reason to presume a question of order other than what may characterize any two items chosen at random from the lexicon. To account for the historical relationship implicit in a polysemous structure, Traugott proposes a principle of subjectification, according to which meanings over time tend to refer less to the objective than the subjective situation, and less to a described situation than to the discourse of a situation. In other words, she holds that there is a broad principle of discourse

restructuring which underlies the historical development leading up to a state of polysemy.

To support her case, Traugott analyzes English verbs like observe, where both a mental sense, 'to watch attentively,' and a speech act sense, 'to say something is the case,' co-exist. Since the speech act sense treats the described situation as a discourse situation, her principle of subjectification predicts that this sense should have emerged after the mental verb sense. Indeed, this hypothesis is confirmed based on datings in the Oxford English Dictionary.

Whether one accepts this dictionary evidence or not, the hypothesis that discourse motivates polysemous lexical structures is worth further investigation. For Emai directional forms like lagaa, Traugott's hypothesis suggests that we adduce evidence for the historical order in which its senses, Motion+Path and Path, emerged. Is the Motion+Path sense found in Manner expressions earlier in time or is this reserved for the simple Path sense revealed in Cause expressions? Of greater import than the choice between possible orderings, however, is our identification of the particular feature of discourse which led to the change in lexical structure.

That a principle of discourse may in fact play a role in explicating the historical development of Emai directional forms is suggested by another source. Hopper and Thompson (1984) advance the concept of decategorialization to describe how the morphosyntactic properties distinguishing nouns from verbs neutralize in particular discourse contexts. Verbs, for instance, lose their prototypical grammatical properties in conditions where they do not assert the occurrence in discourse of an actual event. Illustrating this condition is the differential behavior of the form throw in 8, which accepts a variety of tense, aspect, modality and agreement morphemes in 8a but not in 8b. For the latter we can say that throw has been decategorialized.

8. a. The boy threw the log into the fire.
 b. The boy prepared to throw the log.

Emai directionals also exhibit decategorialization, since in Manner constructions they exhibit a full range of morphosyntactic properties typical of Emai verbs, whereas in Cause constructions they do not. Following the Hopper and Thompson analysis, one would expect that a change in the discourse role of the directional forms underlies their non-parallel behavior in Manner and Cause constructions. In order to explore this further, however, we require some notion of how semantic components in this domain of motion were distributed at earlier stages of Emai or of the language family to which it belongs. Fortunately, data from an earlier stage can be inferred from Tswana, another Niger-Congo language of Africa. Tswana is particularly revealing in this regard, since the Bantu subfamily of which it is a part has been postulated as undergoing the least historical change in the Niger-Congo family (Heine 1980).

MOTION IN TSWANA

Tswana reveals a crucial similarity to Emai in its lexicalization of the motion domain. Just as Emai relied on a directional verb in its Manner expressions, i.e. a main verb incorporating the components of Motion+Path, so too does Tswana. But what is potentially more relevant to the historical analysis of polysemy in Emai is that this pattern of lexicalization occurs in sentences expressing Cause as well. Previous analysis of Tswana sentences like 9 and 10 has revealed this to be the case (Schaefer 1985), but rather than recapitulate these arguments here, let us examine some crucial facts concerning the verbs in 9 and 10.

9. a. mosimáné ó-pótóloga petse á-tábóga
 boy he-move around well he-run
 'the boy is running around the well'
- b. mosimáné ó-páláma thaba á-gágába
 boy he-move up hill he-crawl
 'the boy crawled up the hill'

10. a. mosimáné ó-pq̄tologá petse á-gogá kolói
 boy he-move around well he-push cart
 'the boy is pushing the cart around the well'
- b. mosimáné ó-paláma thaba á-beleḡa kolói
 boy he-move up hill he-push cart
 'the boy is pushing the cart up the hill'

First, take note of the directional verbs potologa and palama, which incorporate the semantic components Motion and Path. Each occurs as the sole verb of the main clause in the Manner sentences of 9 and the Cause sentences of 10. Support for this conclusion is based on the attachment of the Class 1 concord prefix o- to each directional verb. Secondly, notice that there is another verb in each of these construction types. This second verb refers to either the Manner or Cause of the overall motion event and occurs in what Cole (1955) would identify as a participial clause, a clause type akin to a subordinate clause in English. Particularly important in attributing this second verb to a participial clause is the attachment of a Class 1 concord prefix distinct from that employed in a main clause, the a- prefixed to the verbs toboga, gagaba, goga and beleḡa. This prefix only occurs in participial clauses, not main clauses. It would appear, therefore, that concepts of Manner and Cause in Proto-Niger-Congo occurred in clause structures considered background information, subordinate to the assertion of the main clause.

RESTRUCTURING MOTION

Allowing the sentences from Tswana to lay the foundation for a hypothesis about the structure of Proto-Niger-Congo, we can view the Emai motion sentences afresh. From this new perspective, the Emai sentences show not only a change in the clausal distribution of the Manner and Cause verbs but an accompanying change in the foreground or background status of the information conveyed by these verbs. That is, in Proto-Niger-Congo we infer that a bi-clausal structure was employed to express the components of a basic motion event, each clause explicitly marked at the surface level for concord and tense/aspect agreement. These two clauses differed, however, on the dimension of grounding, with the Direction verb

expressed in a foreground clause and the Manner or Cause verb expressed in a background clause. What then might have motivated a change in this structure, particularly a change to a system like that in Emai where the foreground/background distinction is no longer supported by morphosyntactic marking?

An interesting fact to begin with is that the verbs in the Tswana background clauses differ in transitivity, as discussed by Hopper and Thompson (1980). These investigators argue that transitivity is a composite of interlocking gradients whose values co-vary with grounding values in such a way that high transitivity clauses correlate with foreground information and low transitivity clauses with background information. Notice in this regard that the clause containing the Cause verb in Tswana involves two participants compared to the single participant of the clause with the Manner verb. In the Hopper and Thompson scheme, the former would be of higher transitivity value. What would happen, however, to the grounding status of the clauses containing the Cause or Manner verb as the agreement morphology formally marking their background status became lost, as indeed the Emai data suggests? Without the support of the concord markers, one can only surmise that the Cause or Manner verb would compete with the Direction verb for foreground status. As a resolution to this dilemma it seems natural to hypothesize that the clause with the higher transitivity value within the different types of motion constructions would come to be viewed as foreground information.

To see how this might work, let us consider the two different types of motion construction. In constructions of the Cause type, the Cause not Direction verb would be foregrounded, since the clause containing it manifests a greater number of those features associated with high transitivity. Firstly, the Object of the Cause verb is totally affected by the action of its verb compared to the Object of the Direction verb, and secondly, the Object of the Cause verb is more highly Individuated. The latter may be somewhat controversial, but it is important to recall that Hopper and Thompson maintain that Objects high on the Individuation scale are animate and human while Objects low on the same scale are inanimate. With

respect to the latter, notice that the Object of a Direction verb represents a location, an inanimate par excellence. The higher transitivity value of the Cause clause, therefore, would lead to its reinterpretation as foreground information.

Interlocked with this realignment of grounding values one might postulate a linear restructuring of clauses. Bever (1970), that is, maintains that in SVO languages the natural order of clauses differing in grounding is foreground followed by background. Hence, the foreground information consisting of the Cause verb would come to precede the background information, the Direction verb and its Object. Today, it is this linear order of verbs which characterizes Emai Cause constructions.

As for Manner constructions, their overall analysis would appear to be similar. Manner verbs, though, are not as highly correlated with transitivity as Cause verbs. On initial inspection, in fact, they may seem to be less strongly correlated with transitivity than Direction verbs and so less likely to assume the role of foreground information. True, Manner verbs have no affected Object as do the Cause verbs, but unlike Direction verbs they do not occur with an Object which is of low value on the Individuated scale. In other words, Manner verbs are neutral on this transitivity feature whereas Direction verbs are low. The clause containing the Manner verb, as a consequence, would be higher in transitivity value than the Direction verb, and more crucially, would be reassigned foreground status relative to the latter. And in agreement with the natural order principle, the Manner verb in the foreground clause would come to precede the background Direction verb, exactly the linear order prevailing in Emai Manner constructions today.

I would like to suggest, therefore, that a historical reinterpretation of the foreground/background status of clauses in motion constructions underlies the current state of polysemy affecting Emai directional forms. This reinterpretation, it would appear, was mediated by Hopper and Thompson's (1980) transitivity scale.

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