

Verbal complementation: A pedagogical challenge

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ABSTRACT

Errors of verbal complementation are among the most frequent and intractable types of grammatical error produced by ESL learners of all levels. Formal rules help only to a very slight degree, and most of the time one operates on intuition. One avoids constructions such as **Mary avoids to make mistakes*. simply on the basis of feel—it sounds and looks odd. Many learners seem to operate on the ‘economy principle’, that is to say, they show a preference for shorter forms, such as the to-infinitive or gerund, resulting in errors such as **He suggested us to leave*. The writer makes the point that teaching verbal complementation without invoking semantic considerations may be counterproductive. Verbal complementation is meaning-driven. Verbs possess certain semantic properties which help us to predict the type of complementation that can be selected. Hence, it makes good pedagogical sense to focus on the semantic features of verbs and to notice the dependency relations that exist between them and the allowable complementation sequences.

Introduction

Native speakers of English normally do not have a problem with verbal complementation. They know instinctively which patterns of complementation a particular verb allows or rejects. They know for instance that ‘enjoy’ is complemented by a gerund rather than an infinitive. They would never say: **I enjoy to play tennis*. They may not know the rule or the metalanguage but they can very quickly detect and correct the error. In other words, they know what is in the language and what is not. Likewise, they can instantly spot that something is amiss with the statement: **I put the book*. They can tell you that it is perfectly acceptable to ‘read the book’ or ‘buy the book’ but it is not acceptable to ‘put the book’ as the verb ‘put’ requires not only a following noun phrase, but also a locative phrase. What they cannot tell you is why it is that ‘enjoy’ triggers the gerund, or why ‘put’ is incomplete without a locative phrase. In fact, many grammarians have a hard time explaining verbal complementation. Many pedagogical grammars ignore it on the grounds that it is unteachable, or at least very complex and messy. It is seen as one of those areas of English grammar that is best acquired without overt instruction. A few grammar books do attempt to deal with it in a systematic manner, for instance, Shepherd et al. (1984) and Graver (1986).

The Traditional Approach

There are at least three possible approaches to the description of verbal complementation. One is to regard it as a lexical matter and reduce it to a question of collocation. Such an approach simply takes the view that knowing a verb implies, among other things, knowing the dependency relations that exist between a given verb and the structures that complement it. The problem with this approach is that there are about 40 different allowable structures that are associated with different types of verb. For instance, Graver (1986, pp. 142-161) provides a taxonomy of verbs in five groups as follows:

Group 1. Verbs followed by the gerund. e.g., *She avoided making the same mistake.*

There are 63 such verbs, e.g. *admit, avoid, enjoy*, etc. From a pedagogical perspective, there are two major problems here. Firstly, there are too many verbs to remember. Secondly, many of the verbs in group 1 may be complemented by a that-clause (e.g., *suggest*) as well as a gerund.

Group 2a: Verbs followed by the to-infinitive, e.g., *I offered to help.*

There are 47 such verbs, including *agree, decide, claim, offer*, etc. This is a simple fact and no attempt is made to explain why certain verbs are complemented in one way rather than another.

Group 2b: Verbs followed by a noun + to-infinitive. e.g., *I forced them to agree.*

There are 44 verbs in this group, including many 'control' verbs, such as *cause, instruct, force, oblige*, etc. The only thing they have in common is the fact that all of them belong to the pattern: subject + verb + noun + infinitive. At least two of these verbs (*persuade*, and *convince*) can be followed by a that-clause, e.g., *He persuaded me that the plan was sound*. The problem with this classification, as with the previous one, is its inability to see the unity inherent in the system. It does not help the learner to make semantic sense of sentences such as *Jack forced Jill to climb the hill*. It does not tell the learner that the verb 'force' and similar control verbs do not collocate with that-clauses.

Group 2c: Verbs followed by the infinitive, with or without preceding noun, e.g., *Everyone helped (me) to clean up the mess.*

There are only 12 verbs in this group, but many of them may also be complemented by a that-clause. Knowing these verbs does not enable the learner to distinguish between sentences such as:

- a) *Sam dared to plunge into the pool.*
- b) *Sam dared us to plunge into the pool.*

Sentence (a) involves Equi NP deletion and in Transformational grammar it is derived from a deep structure [Sam dared Sam to plunge into the pool] while sentence (b) refers to a non-Equi situation.

Group 3: Verbs followed by the gerund or the infinitive, e.g., We like to swim/swimming.

There are 36 verbs in this group. However, each verb collocates with only one of three infinitive options, – infinitives without a preceding noun (e.g., *He declined to tell me his name.*), infinitives followed by a noun + infinitive (e.g., *He allowed her to borrow his pen.*), and infinitives with or without a preceding noun (e.g., *I hate (them) to make fun of Sally.*) At least half of these verbs may also be complemented by a *that*-clause. While all this information is correct, it is hard to see how the learner of English could possibly internalise it or retrieve it in productive use.

Group 4: Verbs followed by a noun + present participle or infinitive without to, e.g., I saw the train leave (*leaving*) the station.

There are only eight verbs in this group, the verbs known as ‘verbs of perception’, *feel, hear, notice, observe, perceive, see, sense, watch*. The use of the bare infinitive (e.g., *I saw him cross the road*) denotes the whole action, while the –ing participle (e.g., *I saw him crossing the road*) denotes an activity in progress. This group is quite problematic in that there are many other verbs associated in meaning with Group 4: e.g., (i) *catch, spot, find, discover, and smell*. None of these is followed by an infinitive, but all may be followed by an object + –ing participle (e.g., *He caught the boys fighting.*); (ii) the verbs *leave* and *keep* can be followed by an object + a present or past participle (e.g., *She kept me waiting. He kept his room locked.*)

Group 5: Verbs followed by a *that*-clause e.g., I know that London is an expensive city.

There are 32 such verbs, including *assume, believe, declare, think*, etc. Some *that*-clauses can be paraphrased with the ‘accusative and infinitive’ construction. e.g. They found his ideas to be very useful.

It would be very difficult for all but the most dedicated learner to master all the verbs and all the complementation patterns outlined above. Obviously, teaching would have to focus only on those verbs and patterns that arise in a given context of use. A focus on form is always selective and has a limited and specific objective. Very often it may be effected by means of language awareness rather than direct instruction. In a language awareness approach it is axiomatic that the problem be first encountered in a meaningful context; that its form and function be ‘noticed’ and that its critical features be highlighted in the data. For example, in a text one might come across sentences such as:

She objected to working overtime.

He succeeded in passing the test.

Here, one would want students to infer the fact that the presence of propositions triggers gerund complementation. They should then be in position to detect and correct errors such as: **We look forward to see the show.*

Other verbs possessing the feature verb + prep would then be noted and listed (e.g., *object to*, *look forward to*, *succeed in*, etc.) The structural jigsaw would not all be completed on one lesson. It would be revisited whenever it cropped up again in other contexts of use. The idea behind 'form-focused instruction' is for learners themselves to wrestle with the raw data, and by inductive means infer the rule, rather than having it presented and explained by the teacher. There are two good reasons for favouring an inductive, problem-solving approach, viz. (a) it is more stimulating for students to uncover linguistic facts themselves, and (b) they do not easily forget something that they have discovered for and by themselves.

The Structural Approach

As we have seen, the traditional approach to verbal complementation is based on collocation. The more comprehensive Structural approach is based on the notion of transitivity. Apart from 'linking' verbs, most verbs can be used transitively (i.e., with a grammatical object following the verb). The most frequent verb pattern in English is S-V-O, e.g., *Mary (S) likes (V) marmalade (O)*. We can say, therefore, that English verbs such as 'like' are complemented by a direct object. We can also notice that quite a few verbs can be used transitively or intransitively. They are said to be weakly transitive, e.g., *Abu is writing (a letter)*. A few verbs are inherently intransitive. e.g., *The old man died*. Various grammarians have used transitivity as the basis on which to develop a complex web of complementation patterns. (e.g. Quirk et al., 1972; Greenbaum & Quirk, 1990). The most common verb patterns are also summarised by Hornby (1976) in a *Guide to Patterns and Usage* well as in the third edition of the *Oxford Advanced Learners Dictionary of Current English* (1974). The bare bones of the 'Quirkian' approach can be outlined as follows: (Greenbaum & Quirk, 1990, pp. 343-358)

1. Intransitive verbs where no complementation occurs.
2. Complementation of copular verbs: The copula *be* and a few other verbs (e.g., *appear, feel, look, seem*) are complemented by a noun phrase or adjective. Here it is important to note that 'Complement' in this context is an element of sentence structure, alongside Subject, Verb, and Object, and must not be confused with 'complement', meaning any obligatory structure(s) that must follow verbs other than copular verbs.
3. Complementation of monotransitive verbs: Monotransitive verbs require a direct object, which is often a noun phrase, but may be a finite clause or a nonfinite clause. Some verbs, such as phrasal verbs, are complemented by a noun phrase as prepositional object.
4. Complementation by a finite clause: Greenbaum & Quirk (p. 346) distinguish four categories of verbs that are complemented by that-clauses: FACTUAL, SUASIVE, EMOTIVE, AND HYPOTHESIS. These semantic categories are not elaborated, and seem oddly out of place in an otherwise structural description.
5. Complementation by nonfinite clauses: Greenbaum & Quirk (p. 348) distinguish five types on nonfinite clauses that function as direct object. They are as follows:

- (i) wh-infinitive clause
- (ii) subjectless infinitive clause
- (iii) subjectless -ing participle clause
- (iv) to-infinitive clause with subject
- (v) -ing participle clause with subject.

These categories are not elaborated and no semantic underpinning is suggested.

6. Complementation of complex-transitive verbs: Greenbaum & Quirk (pp. 349-353) deal at some length with six patterns of complementation associated with complex-transitive verbs, i.e., verbs whose complement is a complex of an Object and a Complement (C) or Adjunct (A). Here, once again, one must not confuse the lower-case 'complement' with the upper-case 'Complement'. The six patterns are as follows:
 - (i) Direct object and object complement in the pattern SVOC, e.g., *They considered him a fool.*
 - (ii) Direct object and adjunct in the pattern SVOA. e.g., *He put his hat on his head.*
 - (iii) Direct object and to-infinitive clause: e.g., *Adam believed the intruder to be a neighbour.*
 - (iv) Direct object and bare infinitive clause: There are three causative verbs (*have, let, make*) and a few perceptual verbs that take this pattern, e.g., *We saw Rooney score an incredible goal.*
 - (v) Direct object and -ed/-en participle clause: This pattern occurs with perceptual verbs, volitional verbs, and the causative verbs *get* and *have*, e.g., *Peter had his car stolen.*
 - (vi) Direct object and -ing participle clause: This pattern also occurs with both perceptual, causative *get* and *have*, plus verbs of encounter, e.g., *We found them hiding in the bushes.*
7. Complementation by ditransitive verbs: Ditransitive verbs are complemented in a number of ways:
 - (i) The most common pattern is the verb followed by two object noun phrases, e.g., *Molly gave her dog a bone.*
 - (ii) Many ditransitive verbs are complemented by a NP and a prepositional object, e.g., *We informed them of the danger.*
 - (iii) Some ditransitive verbs (e.g., *advise, inform, persuade*, etc) are complemented by a NP and a that-clause, e.g., *The captain informed the passengers that the ship was sinking.*
 - (iv) Other ditransitive verbs are complemented by a prepositional object and a that-clause, e.g., *Our teacher explained to us that smoking is addictive.*
 - (v) Directive verbs (e.g., *advise, ask, command*) are complemented by a NP and a to-infinitive clause. e.g., *Parents advise their children to work hard.*

Virtually all pedagogical treatments of verbal complementation are based on a Structuralist analysis of the type outlined above. Such a treatment, when it is done well, (as in Shepherd et al., 1984) can be of enormous benefit to advanced learners of English and especially those who have a working knowledge of the metalanguage. It is obviously a useful way of implementing 'form focused

instruction' in the ESL classroom. However, when it comes to accounting for verbal complementation it is not entirely satisfactory. One has to go beyond form-focused instruction to meaning-focused instruction.

Semantic Properties of Verbs¹

Verbs possess well-defined properties which help us to predict the type of complement which can be selected.

1. Factivity

Factivity involves the presupposition by the speaker that the information contained in the complement is true. As Kirby (1987, p. 24) notes, it is contrasted with mere assertion or assumption. Factive verbs (e.g., *regret*, *admit*, *acknowledge*, etc.) are complemented by gerunds or that-clauses, while non-factive verbs (e.g., *hope*, *want*, *wish*, etc) are complemented by the infinitive.

Examples:

<i>He resented</i>	<i>paying the bill.</i>	[+ fact]
<i>He hoped</i>	<i>to visit China.</i>	[- fact]

From these examples we can infer the rule:

FACTIVE VERB	→	gerund
NON-FACTIVE VERB	→	to-infinitive

This looks like a promising distinction to develop in teaching but as always there are problems. Firstly, how can the learner know which verbs are factive, semi-factive, or non-factive? One is talking about fine semantic distinctions which are challenging even for native speakers of English. In the case of factive verbs the reference in the complement is to an event which took place prior to the action of the matrix verb.

Example:

She admitted hitting the child.

Here the 'hitting' incident obviously happened before she admitted it.

Secondly, one has to assess the degree of factivity. According to Kirby (p. 38), "the likelihood of having a gerundial complement is closely bound up with the degree of factivity inherent in the matrix verb." Thirdly, some factive verbs allow or require that-clause complementation, e.g., *She conceded that the plan was unworkable.*

However, in spite of the difficulty of coping with the concept of factivity, learners can easily remember and apply the factive verb rule above, which is generative, rather than all 63 of the gerund-triggering verbs in Graver's (1986, p. 42) Group 1.

Learners will notice that certain factive verbs allow the insertion of the word 'fact' just before the complement clause.

¹ The following account is based on Kirby (1987: 24-48) whose work in turn is derived from the school of Generative Semantics, in particular Horiguchi (1984), Lakoff (1971), the Kiparskys (1970), Bolinger (1968), and Menzel (1975).

Examples:

regretted
deplored
 She *accepted* [the fact] *that the plan had failed.*
resented
bemoaned

By the same token, they will observe that verbs that take factive complements reject infinitives, e.g., **She accepted the plan to have failed.*

2. Actuality

The gerund is closely linked with verbs expressing the idea of activity, action, or event. The gerund implies actuality and 'fulfilment' whereas the infinitive implies 'potentiality' (Quirk et al., 1972, p. 825).

Examples:

We enjoy reading books [+ activity]
We expect to arrive at 6pm. [- activity]

Action verbs include *avoid, enjoy, detest, appreciate, deny, postpone*, etc. Verbs expressing potentiality include *expect, wish, hope, want*, etc. Whether learners can distinguish between actuality and hypothesis is a moot question. A useful test is to see if the head word *activity* can be inserted in the predicate without altering its meaning.

	<i>enjoys</i>		<i>playing chess</i>
	<i>detests</i>		<i>washing dishes.</i>
Peter	<i>dislikes</i>	[the activity of]	<i>visiting relatives.</i>
	<i>postponed</i>		<i>sending an answer</i>
	<i>avoids</i>		<i>getting into debt.</i>

Language awareness tasks can be used to raise awareness of the actuality vs. hypothesis contrast. Learners might, for example, be asked to account for the non-occurrence of: **I enjoy to go to the park.*

Here, they have to realize that one does not enjoy something that is hypothetical and does not occur. Rather, one enjoys something that does occur and has happened at least once. (Kirby, 1987, p. 25).

Gerundial complements also occur in two other slightly different contexts. They can be found in an oblique position after phrasal verbs.

Examples:

	<i>approves of</i>	<i>working hard.</i>
	<i>boasts about</i>	<i>gaining promotion.</i>
Peter	<i>is engaged in</i>	<i>selling computers</i>
	<i>persists in</i>	<i>arriving late.</i>
	<i>is thinking of</i>	<i>quitting his job</i>

Here the reference of the phrasal verb is to an activity, action or event.

Gerunds also occur after the verbs *necessitate*, *entail*, *involve*, *imply*, and *entail* which denote a resultative action rather than a general activity.

necessitate
imply *moving overseas.*
entail

A semantic approach to verb complementation implies that learners are enabled to see and name the semantic features of the matrix verb. e.g.,

We enjoyed *making the video*
 [+ fact] [+action] [+ past] [+ event]

How far one can go along the road of explicit semantic processing can only be determined by doing it. In many teaching situations the constraints of time, periodic tests, syllabus coverage, etc. may well rule out the type of exploratory learning necessary to establish semantic parameters.

3. *Implication*

Verbs can have positive or negative implications. Where the implication is positive, one finds infinitival complements; where negative, gerundial complements.

Examples of positive implicators:

caused
persuaded
 We *forced* *them to try it.*
encouraged
convinced

Here the agent of the matrix verb successfully manipulates the subject of the lower verb into acting in the required way.

Examples of negative implicators:

prevented
dissuaded
 We *stopped* *them from doing it*
discouraged
prohibited

Here the agent of the matrix verb successfully prevents the action from taking place. There will always be one or two tricky verbs that do not conform to the general pattern. For instance, the verb *forbid* does not follow the pattern: negative implicator † object + v-ing. But it does fit the pattern: positive implicator † object + to-infinitive, e.g., *I forbade him to use my car*. Thus, *forbid* is felt to be an effect verb comparable to *persuade*, *convince*, etc.

4. *Cognitive verbs*

Cognitive verbs such as *believe*, *know*, *assume*, etc., are an important class of

non-factive verbs. They are complemented by a *that*-clause, and they do not allow 'fact' insertion before the complement clause.

Examples:

believes
assumes
 Adam *understands* *that the house is haunted.*
supposes
thinks

They also permit an accusative and infinitive complementation, e.g., *Adam believes the house to be haunted.*

5. *Emotive verbs*

Emotive verbs such as *like, love, hate, wish, fear, regret, ignore, intend*, etc., are similar to cognitive verbs in that they are not normally used in the progressive form. We do not say things like: **I am loving you*. However, they differ from cognitive verbs in that they do not take a *that*-clause as object complement. We do not say things like: **I dislike that she swears*. These verbs can be complemented by a *that*-clause only after 'fact' insertion, or else by the gerund.

Examples: *I dislike the fact that he swears.*
I dislike him (his) swearing.

It makes good pedagogical sense to focus on the semantic features that verbs share, and to notice the dependency relations that exist between them and the allowable complementation sequences.

6. *Communication verbs*

Communication verbs are concerned with asking for and presenting information. They appear in indirect speech as reporting verbs: *say, declare, maintain, report, deny, remark, mention*. Like cognitive verbs they characteristically collocate with a *that*-clause and resist 'fact' insertion, e.g. *She remarked that the roses were fading*. However, a few communication verbs collocate with a gerund.

admitted
 He *denied* *raising the matter.*
mentioned

In these cases the complement has a clear past tense reference and the matrix verb has factive value.

Following Horiguchi (1976, p. 62), Kirby (1987, p. 32) subdivides communication verbs into 'effect' verbs and 'presentation' verbs. Effect verbs exert some manipulative force on the lower agent. In functional grammar, they are known as *suasive verbs* (Wilkins, 1976, pp. 46-48). They take an indirect object before the complement clause.

Examples:

persuaded
reminded *her* *that she should stay.*
He *told* *to stay*
convinced
advised

In some cases a that-clause is the only possible complementation option after the indirect object.

informed
He *assured* *her* *that she could stay.*
promised

Presentation verbs are concerned only with the presentation of information. They do not seek to control the addressee or manipulate him into acting in a certain way.

Examples:

said
mentioned
She *remarked* *that the roses were fading.*
declared
pointed out

It could be argued, however, that verbs are seldom neutral. The context often colours the verb, adding implicational meaning. For instance, in the sentence *She remarked that the roses were fading*, the implication might be that the speaker wants the addressee to do something about it.

7. Request verbs

These verbs are used to report directive functions ranging from explicit imperatives to tentative suggestions.

Examples:

suggested
demanded
insisted
She *requested* *that he leave.*
asked
urged
hinted

A noticeable feature of this type of complement is that that the verb is uninflected as to tense or aspect.

Request verbs are fairly easy to report especially if the context is clear. A situation can be easily devised to force a particular request verb.

Example: *Jane is annoyed with Paul. She wants him to leave at once.*
 → *Jane demands that Paul leave immediately.*

Tense and aspect

Within the generative approach tense and aspect are regarded as semantic features. With many verbs the gerund denotes past time reference.

- a) *He stopped smoking.* [+ past]
- b) *He stopped to smoke.* [+ future]

The choice of complement depends on the tense feature. In the following examples the tense feature overlaps with the factive feature since past actions are invariably factual.

- He remembered posting the letter.*
- He admitted taking the money.*
- He envisaged changing his job.*

The choice of gerund or infinitive is decided partly by the contrast between durative and non-durative aspect. Volitional verbs such as *want, wish, refuse*, etc. refer to the onset of an action, i.e. a single point, and are complemented by the infinitive, e.g. *She refused to sign the contract*. When the reference is to the action in its entirety the gerund is selected, e.g., *She avoided signing the contract*.

Verbal complementation within corpus linguistics

The present study draws on the research by Kirby (1987), Horiguchi (1978) and others working within a generative semantics framework. However, these studies all predate a major shift in language description, viz. corpus linguistics. Corpus linguistics complements the 'old' descriptive grammar and a good deal of recent work on verbal complementation has been worked out within this field. An outline of three corpus-based studies dealing specifically with verbal complementation has been included to show the kinds of insights that corpus studies can yield.

The first is a study by Mair (2002) which looks at three instances of grammatical variation in present-day standard English: the use of bare and to-infinitive with the verb 'help'; the presence or absence of the preposition/complementizer 'from' before -ing complements after 'prevent'; and the choice between -ing and infinitival complements after the verbs 'begin' and 'start'. The analysis of these forms is based on data obtained from matching corpora of British and American standard English. Mair compared two matching one-million-word samples of written British and American English, the LOB corpus (Lancaster/Oslo/Bergen) and the Brown corpus (Brown University). Both corpora were updated by the Freiburg-based corpus linguistics research group in 1991 and 1992, and are referred to as Frown and F-LOB. The study set out (a) to verify/falsify certain hypotheses on linguistic change in present-day English which are found in the linguistics literature and (b) to uncover instances of change and/or variation not previously noted in the literature. The study shows a great deal of divergence between British and American usage in the complementation of verbs, and it clearly refutes the anecdotal claim that there is only one standard English.

The second study of verbal complementation is a corpus-based analysis of sentential complements of the main verb in the speech of seven young English-speaking children (Diessel & Tomasello, 2001).

Example: *I think* | *Daddy is sleeping.*
 [main clause] [finite complement clause]

It was found that the main clauses in these early utterances do not express a full proposition but serve as epistemic markers and attention getters. The main focus of the study is complement clauses (COMP-clauses) i.e. subordinate clauses functioning as an argument of a predicate. Three main types have been identified (Diessel & Tomasello, 2001, p. 100):

1. S-complements marked by 'that' or by zero.
 e.g., *Sally thought that he was crazy.*
2. if-complements marked by 'if' (or whether)
 e.g., *Peter asked Bill if it was true.*
3. wh-complements introduced by a wh-word
 e.g., *Mary didn't understand what Bill was saying.*

In this study only a small set of complement-taking verbs (CTV) has been analysed, mainly mental verbs, perception verbs, and desiderative verbs. The researchers distinguish between the assertive use and the performative use of these verbs.

Even though the entire corpus is quite small (a total of 1811 S-complement clauses which occur with 20 different complement-taking verbs), it provides a rich source of data in which one can observe how verb complementation patterns in child language development emerge and change over time.

The third study of verb complementation is based on a corpus of texts selected from *Project Gutenberg* and the *Oxford Text Archive* and covers the period from 1710 to 1920. This corpus of Late Modern English texts known as CLMET was compiled by De Smet (2005). Chronologically, it extends from the age of Alexander Pope (1733) to Gilbert Keith Chesterton (1912).

De Smet and Cuyckens (forthcoming) have used a slightly extended version of CLMET to investigate changes in the English system of verbal complementation. For instance, they have looked at the development of the construction 'like + to-infinitive' from a volitional to a habitual construction. They have also used the corpus to study the impact of entrenchment on the long-standing competition between infinitives and gerunds as verbal complements in English.

It is worth noting that most recent grammars of English are corpus-based, for instance, the *Cambridge Grammar of English* (CGE) by Carter and McCarthy (2006) contains a whole section on verb complementation (pp. 503-529). The CGE is based on a corpus of spoken and written English called the Cambridge International Corpus (CIC) containing over 700 million words of English, drawn from a wide range of contexts of use. The authors of CGE make the point that their grammar is 'informed' by the corpus and not driven and controlled by it. The verbal complementation taxonomy offered by CGE does not depart fundamentally from the older descriptive framework. There are still four major types of verbal complementation: monotransitive, ditransitive, complex transitive,

and copular. The main difference is that the GCE description is finely grained.

One obvious analytical tool available to modern corpus-based grammarians is the concordance. Concordances are especially useful in studying verbal complementation in that all the instances of a given verb can be shown on the computer screen, with the keyword (in this case a particular lexical verb) centralised and bolded, with the surrounding co-text shown on either side. In this way, it is possible to provide a reliable and comprehensive description of the patterns of usage associated with any given verb. Moreover, one can glean useful statistical evidence from the corpus regarding the range of complementation patterns that various verbs allow or require, their frequency of occurrence, the contexts in which they are most typically used, the different functions that they encode, as well as new insight into verb complementation structures.

Like the CGE, the *Longman Student Grammar of Spoken and Written English* (LSGSWE) by Biber, Conrad and Leech (2002) is also a modern corpus-based grammar, based on the Longman Spoken and Written Corpus (LSWE) containing 40 million words of text. The topic of verb complementation is treated under the heading 'valency patterns', i.e., the pattern of clause elements that can occur with a given verb, e.g. intransitive, monotransitive, ditransitive, complex transitive and copular. The description of valency patterns is quite brief (pp.119-122). There is, however, a longer section (pp.106-114) on semantic categories of lexical verbs. The authors of LSGSWE distinguish seven semantic categories: activity verbs, communication verbs, mental verbs, causative verbs, verbs of occurrence, verbs of existence or relationship, and verbs of aspect. However, there is no attempt to link these semantic categories to the various structural patterns that they allow or require.

It seems, therefore, that the 'new' descriptive grammar is not saying anything radically different from the 'old' descriptive grammar, except that it is fuller, richer, and attested to by copious examples of 'real English'. As Hunston (2002, pp. 138-139) notes, a key observation that emerges from the close study of items in a corpus is the association between pattern and meaning. For example, take the verb MAINTAIN. It has three basic meanings each of which is associated with a particular grammatical pattern.

- the 'enable a situation to continue' meaning, as in *Britain has maintained good relations with Malaysia for over 50 years*. The pattern here is verb followed by noun.
- the 'state something strongly' meaning, as in *He maintained that the economy would continue to expand rapidly*. The pattern here is verb followed by that-clause, or verb + noun phase.
- The 'keep at the same level or rate' meaning, as in *Nissan aims to maintain prices at the current level*. The pattern here is verb followed by noun followed by 'at' + NP.
- Without a large diachronic corpus of modern English, it is not possible to track these semantic shifts and their associated patterns of complementation.

Conclusions and recommendations

We have seen that English verbs are complemented in a variety of ways. However, complementation is never random; it is constrained by the semantic properties of the verb. Therefore, a semantically based classification of English complementation seems to have a certain logic and usefulness for the advanced ESL learner. Fossilisation of faulty patterns is not uncommon and a purely grammatical treatment of the problem leaves a lot to be desired. However, analysis is not acquisition. The semantic categories outlined above are not a description of the learner's linguistic system. Interlanguage studies have explored the phenomenon of verb complementation and attempted to establish acquisition orders of complement types in English by Spanish learners (Anderson, 1983), and by Dutch learners (Kirby, 1987). These studies show that English complementation errors cannot be attributed mainly to transfer from the mother tongue. James (1980, p. 184) has shown that contrastive analysis often fails to predict many errors which are made. He claims that languages which are generically very different such as European and Oriental languages will tend to provoke little interference (p. 188). Rather, it appears that complementation errors are due mainly to ignorance of the target language system and occur most frequently when learners are required to perform at a level beyond their current capacity (Kirby, 1987, p. 85).

Whatever the cause, verbal complementation remains a minefield for many ESL learners. The writer takes the view that language awareness and 'focus-on-form' tasks can raise learners' awareness of different types of verbs and their associated syntactic complementation patterns. It may also help learners to re-structure (or in some cases de-fossilise) their emerging interlanguage. It is proposed that meaning determines structure and not vice versa. In teaching, therefore, it seems reasonable to begin with a focus on meaning before moving on to a focus on form. Both foci are interdependent and the challenge for the teacher is to find ways and means of making the transition from one to the other.

Notes

1. The author acknowledges his indebtedness to J. P. Kirby (1987) whose work on verbal complementation provided the inspiration for the present article.
2. The author uses the term 'verbal complementation' in the sense of 'dependency relations' as in Skelton, (1984).

References

- Anderson, J. (1983). An accuracy order of English sentential complements for speakers of Persian and Spanish. *Papers and Studies in Contrastive Linguistics*, 16, 16-32.
- Biber, D., Conrad, S., & Leech, G. (2002). *Longman student grammar of spoken and written English*. London: Longman.
- Bolinger, D. (1968). Entailment and the meaning of structures. *Glossa*, 2, 119-127.
- Carter, R., & McCarthy, M. (2006). *Cambridge grammar of English*. Cambridge: Cambridge University Press.
- De Smet, H. (2005). A corpus of Late Modern English texts. *ICAME Journal*, 29, 69-82.
- De Smet, H., & Cuyckens, H. (forthcoming). Pragmatic strengthening and the meaning of complement constructions: The case of *like* and *love* with the to-infinitive. To appear in *Journal of English Linguistics*.
- Diessel, H., & Tomasello, M. (2001). The acquisition of finite complement clauses in English: A corpus-based analysis. *Cognitive Linguistics*, 12(2), 97-141.
- Graver, B.D. (1986). *Advanced English grammar* (3rd ed.). Oxford: Oxford University Press.
- Greenbaum, S., & Quirk, R. (1990). *A student's grammar of the English language*. London: Longman.
- Horiguchi, I. (1978). Complementation in English syntax: A generative semantics approach. Georgetown University Doctoral dissertation. Washington, D.C.
- Hornby, A.S. (Ed.) (1974). *Oxford advanced learner's dictionary of current English* (3rd ed.). London: Oxford University Press.
- Hornby, A.S. (1975). *A guide to patterns and usage in English*. Oxford: Oxford University Press.
- Hunston, S. (2002). *Corpora in applied linguistics*. Cambridge: Cambridge University Press.
- James, C. (1980). *Contrastive analysis*. London: Longman.
- Kirby, J.P. (1987). *Acquiring English verbal complements: A project in interlanguage studies*. Unpublished Ph.D. dissertation. Centre for Language and Communication Studies, Trinity College Dublin.
- Mair, C. (2002). Three changing patterns of verb complementation in Late Modern English: a real-time study based on matching text corpora. *English Language and Linguistics*, 6(1), 105-31.
- Kiparsky, P. & C. (1970). Fact. In Bierwisch, Manfred & Heidolph, Karl Erich (Eds.), *Progress in linguistics* (pp. 143-147). Mouton: The Hague.
- Lakoff, G. (1971). Generative semantics. In D. Stein. & L. Jakobovits (Eds.), *Semantics* (pp. 232-296). Cambridge, England: Cambridge University Press.
- Shepherd, J., Rossner, R., & Taylor, J. (1984). *Ways to grammar*. London & Basingstoke: Macmillan.
- Skelton, J. (1984). Dependency relations in language teaching. *ELT Journal*, 38, 135-138.
- Wilkins, D. (1976). *Notional syllabuses*. Oxford: Oxford University Press.

