## UNIT I

# CLASSIC TRANSFORMATIONAL GRAMMAR

### INTRODUCTION: BUILDING THE FOUNDATIONS OF A SYNTACTIC ANALYSIS

This unit traces the developments in the treatment of Raising and Control in early generative syntax. The distinction between Raising and Control is robust in early transformational grammar, the Standard Theory as delineated in Noam Chomsky's 1965 *Aspects of the theory of syntax*. But as with other grammatical features, developments in this area were many and rapid, in part fueled by the exuberance of the early practitioners of generative linguistics and in part by the developing rift between interpretive semantics and generative semantics.

Chapter 1 examines the grammatical characteristics of Raising and Control, outlining the empirical distinctions between these constructions which every analysis in the generative era must deal with in developing an adequate analysis. As the course of the book shows, the same distinctions that fueled the initial Standard Theory analyses drive the proposals of the 2000s.

Chapter 2 provides an overview of Standard Theory and lays out Rosenbaum's (1967) classic analysis of both Raising and Control. In Rosenbaums's analysis, both Raising-to-Subject (RtoS), as in *Barnett seemed to understand the formula*, and Raising-to-Object (RtoO), as in *Barnett believed the doctor to have examined Tilman*, include movement of the subject of the embedded clause into a position in the matrix clause. Although Raising and Control are unified in a single rule in Rosenbaum's analysis, reaction to and evaluation of his proposal often led to the splitting of these constructions into separate structures. And the movement analysis of RtoO later became controversial.

The classic transformational work on Raising is Postal's (1974) tome *On Raising*. Chapter 3 outlines a number of Postal's many and varied data arguments for recognizing a movement analysis of both RtoS and RtoO and includes reading selections from that work. Postal's treatment emerged roughly simultaneously to Chomsky's (1973) "Conditions on transformations," which

includes Chomsky's shift from deep structure semantics to interpretive semantics and the concomitant repudiation of the movement analysis of RtoO. Chapter 4 details these developments and includes a selection from "Conditions on transformations."

In some ways the Raising-to-Object transformation was a rallying point for the so-called "linguistic wars" (Harris 1995; Huck and Goldsmith 1995) between generative semantics, as embodied in Postal (1974), and interpretive semantics, represented by Chomsky (1973). As generative semanticists sought to generalize syntactic operations throughout the grammar, introducing levels of abstract representation deep into the lexicon, Chomsky's interpretivist endeavors were aimed at drawing clear distinctions between the lexical and syntactic components of the grammar (as epitomized in N. Chomsky 1970), and constraining what the syntactic component of the grammar could do.<sup>1</sup> The combative nature of this debate is evident in Bresnan's (1976) review of Postal, which lays out objections to nearly every one of Postal's empirical arguments for movement in RtoO, and Postal's (1977) uncompromising response to that review. This material is the subject of Chapter 5.

#### Note

1 Needless to say, initial theoretical stances can be poor predictors of theoretical evolution, and as will be seen in unit IV, some of the theoretical repositioning in Chomsky's 1990s Minimalist Program involves the adoption of assumptions that would have been deemed generative semantic heresy in the 1970s.

### CHAPTER 1

# LAYING THE EMPIRICAL GROUNDWORK

#### **1** Constructions and labels

A primary motivation for the attention given to Raising and Control in generative syntax is the striking similarity of the constructions in English. This is obvious in the data in (1) and (2), which illustrate Raising-to-Subject and Subject Control.

- (1) Barnett seemed to understand the formula.
- (2) Barnett tried to understand the formula.

The surface strings in (1) and (2) are identical: an intransitive matrix clause with an infinitival complement, NP-V-to-VP. The sole surface difference is the choice of the matrix verb, *seem* vs. *try*. However, as will be seen in the following section, there are fundamental differences between the two sentences that center on the subject of the matrix clause. In the Raising construction in (1), the subject *Barnett* is semantically linked only to the embedded verb *understand*, while in (2) it is semantically linked to both the matrix verb *try* and the embedded verb. For this reason, the subject in (2) is said to "control" the reference of the subject of the embedded clause and the construction has come to be referred to as "Subject Control."

Parallel data are found with transitive matrix verbs where the locus of these differences is the immediately postverbal NP.

- (3) Barnett believed the doctor to have examined Tilman.
- (4) Barnett persuaded the doctor to examine Tilman.

Again, the surface strings are (virtually) identical, but there are fundamental differences in the characteristics of the NPs immediately following the matrix verbs. In (3), *the doctor* is semantically linked only with the embedded verb

*examine*, while in (4) *the doctor* is semantically linked to both the matrix verb *persuade* and the embedded verb. The construction in (3) is referred to as Raising-to-Object and that in (4) as Object Control. Additionally, there are constructions such as (5) that parallel the surface strings (3) and (4).

(5) Barnett promised the doctor to examine Tilman.

In (5), the subject *Barnett* but not the object *the doctor* is semantically linked to the embedded predicate, and the sentence, like (2), is a case of Subject Control.

Whether or not the structures in (1–5) are Raising or Control depend on properties of the matrix verb, that is, the Raising and Control that are examined here are lexically governed. In other words, while some syntactic rules apply independent of lexical selection (e.g., SUBJ-AUX Inversion applies in questions regardless of the main verb of the sentences), other rules apply only in the context of particular lexical items. Being marked for Raising may have nothing to do with the argument structure of a verb or the thematic roles it assigns. It will be seen below that there are large classes of "raising predicates" and "control predicates," and their structure will be examined in the course of our discussion. However, we first turn to diagnostics for distinguishing the two constructions.

#### 2 Empirical distinctions between Raising and Control

Despite the superficial similarities in word order and morphology, raising and control constructions differ in a variety of ways, many of them related to meaning. This section outlines the traditional arguments for distinguishing Raising and Control.

#### Thematic roles

Raising and control structures have distinct thematic structures; that is, the roles of the participants in the state of affairs described in the sentence are distinct. In the case of intransitive verbs, the matrix subject appears to have a role only in the action of the complement. Note that (1) is truth-conditionally equivalent to (6).

(6) It seemed that Barnett understood the formula.

In (6), *Barnett* is assigned the thematic role of "experiencer" as the subject of *understand*. *It*, on the other hand, as a pleonastic (or semantically empty) element, receives no thematic role, showing that the predicate *seem* need not assign a thematic role to its subject. The thematic structure of (1) is identical to (6). *Barnett* is understood to be an experiencer, but has no other thematic role assigned. Conversely, in (2), *Barnett* appears to have two roles in the sentence, one as experiencer of *understand* and one as agent of *try*. The control verb *try*,

unlike the raising verb *seem*, assigns a thematic role to its subject. Thus, intransitive raising and control verbs have different thematic structures.

Transitive raising and control verbs exhibit a similar difference, with the difference residing in the postverbal argument. In (4), *Barnett persuaded the doctor to examine Tilman, the doctor* plays two roles in the sentence: one as the agent of the embedded verb *examine* (i.e., the examiner) and the other as the object of persuasion (i.e., the persuadee) of the verb *persuade. Persuade* assigns three thematic roles: agent, persuadee, thing persuaded of (the clausal complement). In (3), *Barnett believed the doctor to have examined Tilman, the doctor* plays a single role, that of agent or examiner. That is, (3) is truth-conditionally equivalent to (7).

(7) Barnett believed that the doctor had examined Tilman.

In (7), as in (3), *believe* has two thematic roles to assign: agent to its subject and theme to the clausal complement. Thus, transitive raising and control predicates have distinct thematic structures, just as intransitives do.

#### Embedded passive

Raising and control structures can be distinguished by their behavior when the complement clause is passive (Rosenbaum 1967:59–61). For raising predicates such as *seem*, a sentence with a passive complement is synonymous with the same sentence with an active complement. This is illustrated in (8).

- (8) a. Barnett seemed to have read the book.
  - b. The book seemed to have been read by Barnett.

With an intransitive control verb, the sentences with embedded passive are not synonymous with the active, and, in fact, an embedded passive is not always possible.

- (9) a. The doctor tried to examine Tilman.
  - b. Tilman tried to be examined by the doctor.
- (10) a. Barnett tried to read the book.b. #The book tried to be read by Barnett.

The sentences in (9) are not synonymous. In (9a), it is the doctor who attempts the examination; however, the attempt may fail for some reason, be it Tilman's refusal to be examined or some other circumstance. On the other hand, in (9b), it is Tilman who makes the attempt, but may be unsuccessful due to the doctor's refusal or some other circumstance. (10) shows that the passive is not possible when the object of the embedded clause is an inanimate entity such as a book. This relates to the thematic structure of *try*, which assigns the agent role to its subject, and so in the normal state of affairs requires a sentient, volitional entity as subject.

The same situation is encountered with transitive raising and control predicates. With raising predicates, sentences with embedded passive and active are truth-conditionally equivalent; so, (11) and (3) are synonymous.<sup>1</sup>

(11) Barnett believed Tilman to have been examined by the doctor.

In both (3) and (11), Barnett's belief is that the doctor examined Tilman. In contrast, with a matrix control predicate, the embedded passive and active are not synonymous. The state of affairs expressed in (12) is not the same as that expressed in (4).

(12) Barnett persuaded Tilman to be examined by the doctor.

In (12), Barnett must persuade Tilman of the need for the examination, while in (4), it is the doctor that must be persuaded. The synonymy or nonsynonymy of sentences with active and passive complements thus provides a second diagnostic for distinguishing Raising and Control.

#### Selectional restrictions

Another diagnostic distinguishing raising and control constructions is available from selectional restrictions imposed by embedded predicates. For semantic reasons, many predicates require that one argument or another have particular properties. This is illustrated in (13).

(13) a. The rock is granite.b. #The rock understands the important issues of the day.

(13a) is a perfectly well-formed sentence; the predicate *be granite* selects for a subject that can in fact be granite. (13b), on the other hand, is pragmatically odd; the predicate *understand* requires that its subject be sentient. Since rocks do not have this property, (13b), while syntactically well-formed, is semantically ill-formed.

The influence of the selectional restrictions of predicates of complement clauses provides a diagnostic for distinguishing Raising from Control. The data in (14, 15) illustrate.

- (14) a. The rock seems to be granite.
  - b. #The rock seems to understand the important issues of the day.
- (15) a. #The rock tried to be granite.b. #The rock tried to understand the important issues of the day.

Looking first at (14), we see that (14a) is perfectly well-formed, while (14b) is semantically odd. The data precisely parallel the situation in (13). In (14a), the embedded predicate is *be granite*, and *the rock* can be the subject of the entire sentence, while in (14b), the embedded predicate is *understand*, and having *the* 

*rock* as subject of *seem* is semantically ill-formed. Thus, it is possible to account for the judgments in (14) on the basis of the semantics of the embedded predicate. With the control predicate *try*, the situation changes. Both sentences in (15) are semantically ill-formed, the embedded predicate having no influence over the judgments of acceptability. In fact, the oddness in (15a) and (15b) results from the semantic requirements of *try*; *try* assigns the agent role to its subject, which requires an entity capable of volition. The sentences in (15) are ill-formed precisely because rocks violate this selectional restriction. Raising constructions can thus be distinguished from control constructions on the basis of whether or not the selectional restrictions of the **embedded** predicate can determine the semantic well-formedness of the sentence.

The sentences in (16) and (17) show that the situation is similar with transitive raising and control predicates. With raising predicates such as *believe*, when the selectional restrictions of the embedded predicate are satisfied, the sentence is well-formed (16a), but when they are violated, the sentence is semantically ill-formed (16b). As (17) shows, with control verbs such as *persuade* the situation changes. Despite the fact that the selectional restrictions of the embedded predicate are satisfied in (17a), this sentence is as semantically ill-formed as (17b). The reason is that *persuade* requires a sentient object, an object that is capable of being persuaded; *the rock* satisfies this requirement in neither (17a) nor (17b).

- (16) a. Barnett believed the rock to be granite.b. #Barnett believed the rock to understand the issues of the day.
- (17) a. #Barnett persuaded the rock to be granite.b. #Barnett persuaded the rock to understand the issues of the day.

#### Pleonastic subjects

As seen in the preceding sections, the fact that control predicates assign a thematic role to the controller while raising predicates assign no thematic role to the corresponding argument provides an explanation for the distinct behaviors of the two classes with respect to embedded passive and selectional restrictions. A further diagnostic where this is relevant involves the *it* of meteorological expressions and existential *there*. While either can be the subject of an intransitive raising predicate such as *seem* (18), neither is possible with control predicates (19).

- (18) a. It seemed to be raining.b. There seems to be a unicorn in the garden.
- (19) a. \*It tried to be raining.b. \*There tried to be a unicorn in the garden.

Since pleonastic elements are semantically empty, they can be assigned no thematic role. Therefore, they are not possible subjects for verbs such as *try*,

which assign thematic roles to their subjects, in this case agent, and the sentences in (19) are ungrammatical. Conversely, as was seen above, intransitive raising verbs do not assign a thematic role to their subjects and so pleonastic elements are semantically allowable subjects. As the sentences in (18) show, as long as the pleonastic subjects are sanctioned by the predicates of the embedded clause, they are possible subjects of intransitive raising predicates.

Again, parallel data are found with transitive raising and control predicates.

- (20) a. Barnett believed it to have rained.
  - b. Barnett believed there to be a unicorn in the garden.
- (21) a. \*Barnett persuaded it to rain.
  - b. \*Barnett persuaded there to be a unicorn in the garden.

Raising predicates such as *believe* accept meteorological *it* or existential *there* as postverbal NPs (20), while control predicates such as *persuade* do not (21). Again, the ungrammaticality of the sentences in (21) is attributable to the fact that *persuade* has a thematic role to assign to its object, and this role cannot be assigned to semantically empty elements such as *it* and *there*.

#### Idiom chunks

A final diagnostic for distinguishing raising from control constructions comes from the behavior of idiomatic expressions. In (22), *the cat* can take on a special meaning.

(22) The cat is out of the bag.

The sentence in (22) is ambiguous. When interpreted literally it describes a situation in which a particular feline is not in a particular container, and *the cat* denotes that feline. As an idiom, (22) means that a one-time secret is no longer a secret, and *the cat* denotes that secret. Clearly this is an unusual meaning of *the cat* and is only possible when *the cat* occurs in this particular idiomatic expression.

As (23) and (24) show, the possibility of idiomatic interpretations distinguishes Raising from Control.

- (23) a. The cat seemed to be out of the bag.
  - b. ?The cat tried to be out of the bag.
- (24) a. Tina believed the cat to be out of the bag by now.
  - b. ?Tina persuaded the cat to be out of the bag.

With raising predicates, expressions can retain their idiomatic interpretation: (23a) and (24a) can still be interpreted as describing situations in which *the cat* can refer to a secret. On the contrary, with control predicates, the idiomatic interpretation is no longer possible: in (23b) and (24b) *the cat* can only be interpreted as referring to a particular feline.<sup>2</sup>

#### 3 Where things get fuzzy

There are verbs in English which seem to occur in both raising and control structures, albeit with slightly different meaning. One such predicate is *begin*, as described in detail by Perlmutter (1970).

(25) The street sweeper began to work.

(25) can be viewed as either a raising or a control structure, and this can be made clear with the addition of further context as in (26).

(26) a. The street sweeper began to work, once we replaced the spark plugs.b. The street sweeper began to work, as soon as he got to the park.

In (26a), *the street sweeper* is clearly a machine, and *begin* functions only as an aspectual raising verb, assigning no thematic role to its surface subject. In (26b), though, *the street sweeper* denotes a person. Here the NP is assigned the thematic role of agent by the embedded verb *work*, but additionally, the commencement of the activity is a volitional act, in which case *the street sweeper* is also assigned an agent role by the matrix verb *begin*. As Perlmutter shows, *begin* displays some of the behaviors typical of raising predicates.

- (27) It began to rain.
- (28) Headway began to be made toward a solution.

In (27), the subject is meteorological *it*, which (as shown previously) is possible with Raising but not Control, and in (28), *headway* is sanctioned in the idiomatic expression *make headway*, but not as a possible agent of *begin*. On the basis of evidence such as this, Perlmutter argued for two thematically distinct verbs *begin*, one a raising verb and the other a control verb.<sup>3</sup>

Two other English verbs which show the characteristics of both raising and control predicates are *promise* and *threaten*. In each case, the distinction depends on whether the subject of the verb is an agent. When the subject is non-agentive, the verb takes a single argument, which may be propositional as in (29a) or nominal as in (29b).

(29) a. Rain threatened to fall.b. Rain threatened.

When the subject is agentive, the verb takes two arguments, an agent and a theme, which is generally propositional, (30a). (30b) is a control construction.

(30) a. Sandra threatened that she would leave.b. Sandra threatened to leave.

These raising/control distinctions are illustrated in (31) and (32).

- (31) a. The boy promises to be a gifted musician.
  - b. The boy promised to pick up a quart of milk on the way home.
- (32) a. Several downtown businesses threaten to go bankrupt.
  - b. Several downtown businesses have threatened to take the city to court over the new parking regulations.

In (31b), the boy has clearly made a verbal commitment to perform a task, a volitional act. Thus, here *promise* assigns the role of agent and the structure is Control. In contrast, (31a) describes someone's assessment of whether or not the boy will become a gifted musician; the boy is not making a verbal commitment and is not a participant in the event of promising. In (32), *threaten* shows the same contrast. In (32b), a conscious threat has been made by the representatives of these businesses, while (32a) simply describes a likely scenario which imputes no volition to the businesses or their representatives. As with *begin*, the volitional uses of *promise* and *threaten* are control constructions and the non-volitional uses are raising constructions.

As (33) and (34) illustrate, both verbs can take pleonastic subjects when they are licensed by the embedded predicates, indicating their status as possible raising predicates.

- (33) a. There promises to be trouble at the concert.
  - b. It promises to be a beautiful day.
- (34) a. There threatens to be a revolution in San Marino.
  - b. It threatens to be a hard winter.

Finally, Postal (1974:ch. 11) discusses other cases in English in which the distinction between Raising and Control is blurred. There are cases that would be analyzed as Raising-to-Object/Object Control, with predicates such as *allow*, *find*, *permit*, and others. On the one hand, these predicates behave as raising predicates exhibiting the property of allowing pleonastic elements (35a, b) and idiom chunks (35c).

- (35) a. I allowed there to be a unicorn in the garden.
  - b. The president will not permit it to seem that he is hiding something from the public.
  - c. Hoover allowed tabs to be kept on Jane Fonda.

On the other hand, these predicates display the control-type behavior of not preserving meaning when the complement is passive.

- (36) a. Barnett permitted the doctor to examine Tilman.
  - b. Barnett permitted Tilman to be examined by the doctor.

Clearly, in (36a) Barnett has given the doctor permission to do the examination, while in (36b), Barnett has given Tilman permission to undergo the examination. See Dowty (1985) for an examination of the semantics of these predicates.

#### The lists of verbs

Thus far, our illustrations of Raising and Control have involved very few predicates. There are, however, extensive numbers of both raising and control predicates in English. Here we provide lists compiled from other sources.

#### Intransitive raising predicates (Postal 1974:292)

a. <i>Adjectives</i> about apt bound	certain going liable	likely set supposed	sure unlikely	
b. Verbs appear become begin cease chance come commence continue end up	fail get grow happen impress keep (on) need persist proceed	promise prove quit resume seem stand start start out stay	stop strike tend threaten turn turn out were wind up	
c. <i>Auxiliaries</i> (Modals) can could ought	may might must shall	should will would	(Non-modals) be have used	
<i>Transitive raising predic</i> acknowledge admit affirm allege assume believe certify concede declare decree deduce demonstrate	cates (Postal 1974:305 determine discern disclose discover feel figure gather grant guarantee guess hold imagine	i, 308) intuit judge know note posit presume proclaim reckon recognize remember report reveal	rule specify state stipulate suppose surmise take think understand verify	
Subject control predicates a. Adjectives careful eager reluctant				

endeavor	hope	promise		
fail	intend	refuse		
forget	learn	remember		
help	manage	try		
-	-	-		
Object control predicates				
force	permit	tell		
let	persuade	urge		
order	-	-		
	fail forget help force let	fail intend forget learn help manage force permit let persuade		

#### Ruwet (1991)

In his consideration of raising and control structures in French, Ruwet (1991) points to the apparent difficulty in determining precise syntactic diagnostics for distinguishing the two classes that are applicable in all cases. He takes as his starting point the generally accepted notion that *sembler* 'seem' is a raising predicate and *prétendre* 'claim' is a control verb. The particular syntactic test for Raising in French that he examines is *en*-cliticization on the embedded verb.

A restricted set of verbs (perhaps a subset of unaccusative verbs<sup>4</sup>) allows the subjects to optionally take the partitive clitic *en* as complement.

- (37) a. La préface de ce livre est trop longue. 'The preface of this book is too long.'
  - b. La préface (en) est trop longue. 'The preface (of it) is too long.'

In (37b) the subject *la préface* optionally takes the clitic *en* as a pronominal complement, substituting for the PP complement *de ce livre* found in (37a).

French raising verbs such as *sembler* 'seem' can be distinguished from control verbs such as *prétendre* 'claim' by means of the *en* clitic. As (38b) shows, *en* can cliticize to the embedded verb in a raising construction, although it is associated with the subject of the matrix clause.

- (38) a. L'auteur de ce livre semble être génial.'The author of this book seems to be brilliant.'
  - b. L'auteur semble **en** être génial. 'The author of it seems to be brilliant.'

On the contrary, *en* cannot cliticize to the embedded verb in a control construction, as in (39b).

- (39) a. L'auteur de ce livre prétend être génial. 'The author of this book claims to be brilliant.'
  - b. \*L'auteur prétend **en** être génial. (The author of it claims to be brilliant.)

(39b) is ungrammatical precisely because of the presence of *en*. Thus, *en*-cliticization is taken to be a syntactic diagnostic for Raising in French.

Ruwet further shows that *promettre* 'promise' and *menacer* 'threaten' are ambiguous between Raising and Control in the same way as for English. For example, (40) can mean either that the young boy gives a verbal promise that he will become a great musician or that his chances of becoming a great musician are promising.

(40) Ce jeune garçon promet de devenir un grand musicien. 'The young boy promises to become a great musician.'

Likewise, (41) can mean either that the terrorists verbally threaten to break everything or that there is a good chance that they will do so.

(41) Les terroristes menacent de tout casser.'The terrorists threaten to break everything.'

Thus, it seems that *promettre* and *menacer* are clear examples of verbs that take either raising or control structures.

However, Ruwet demonstrates that the *en*-cliticization facts seem to cast doubt on the status of these verbs. If *en*-cliticization is a marker of Raising, and if these two verbs both possess a raising and a control variant, then one would expect that *en*-cliticization would provide a means for clearly distinguishing the raising senses of (40) and (41) from the control interpretations. However, with this class of "ambivalent" verbs, Ruwet finds that *en*-cliticization on the embedded verb is only possible when the subject is non-human. Compare (42b) and (43b) with (38b) above.

- (42) a. La préface menace de ne jamais **en** être publiée. 'The preface of it threatens to never be published.'
  - b. ??L'auteur menace de ne jamais **en** devenir célèbre. (The author of it threatens to never become famous.)
- (43) a. Les conditions promettent d'**en** être satisfaisantes. 'The conditions of it promise to be satisfactory.' (e.g., treaty)
  - b. \*Les représentants promettent d'**en** être intègres. (The representatives of it promise to be upright.)

Thus, with the class of verbs that includes *promettre* 'promise' and *menacer* 'threaten', the distinction between raising and control structures is fuzzy. While raising predicates are supposed to exert no influence on the selection of their subjects, this does not seem to be the case with this class of verbs. Ruwet goes on to demonstrate that not only are there "ambivalent" raising and control verbs that disallow *en*-cliticization with a human subject, but also that there are certain "pure" control verbs such as *prétendre* 'claim' and *exiger* 'demand' which allow *en*-cliticization on the embedded verb provided the matrix subject is non-human.

(44) La liste ne prétend pas en être exhaustive.'The list of them does not claim to be exhaustive.'

Ruwet successfully demonstrates the fact that identifying Raising and Control is not always a black and white issue. Regrettably, it is not always the case that syntactic diagnostics are available as reliable tests for Raising and/or Control.

#### A third class

As outlined above, there is a large class of raising predicates and a large class of control predicates. And for the most part, the membership of the two classes is mutually exclusive, notable exceptions to this being *begin*, *promise*, and *threaten*. There is a third class of verbs, exemplified by *want* and *prefer*, which at first blush also appear to belong to both classes.

Notice first that when *want* and *prefer* are followed by an infinitival complement, the infinitive can have an overt accusative subject, or not, as seen in (45) and (46).

- (45) a. She wanted them to be nice.
  - b. She wanted to be nice.
- (46) a. Barnett would prefer the doctor to examine Tilman.
  - b. Barnett would prefer to examine Tilman.

Example (45a) seems to have more in common with the Raising (-to-Object) sentence in (47a) than with the Object Control sentence in (47b). At the same time, (45b) has more in common with the Subject Control sentence in (48b) than with the Raising (-to-Subject) sentence in (48a).

- (47) a. She believed them to be nice.b. She persuaded them to be nice.
- (48) a. She seemed to be nice.
  - b. She tried to be nice.

These superficial observations are supported by some of the diagnostics developed earlier in this chapter. According to these diagnostics, (45a) and (46a) appear to be cases of Raising, as they pattern like *believe*: for example, the postverbal NP can be existential *there* (49) and idioms can have their idiomatic interpretation (50).

- (49) a. I want there to be fried squid at the reception.
  - b. Fillmore would prefer there to be a unicorn in the garden.
- (50) a. I want the fur to fly at next week's meeting.b. Tina would prefer the cat to be out of the bag.

As (45b) and (46b) show, however, verbs of the *want*-class also appear to occur in control constructions. The sentences seem to be examples of intransitive control constructions such as were seen with verbs like *try*. Note that like *try*, in (45b) *she* appears to be assigned two thematic roles, one as subject of *want* and one as subject of *be nice*. Likewise, in (46b) *Barnett* is assigned a thematic role by *prefer* as well as by *examine*. Further, pleonastic subjects are excluded (51) and idioms lose any idiomatic interpretation (52) (or are just completely ungrammatical (52a)).

- (51) a. \*There wants to be fried squid at the reception.b. \*There would prefer to be a unicorn in the garden.
- (52) a. \*The fur wants to fly.
  - b. The cat would prefer to be out of the bag.

What distinguishes verbs of the *want*-class from others examined thus far is their ability to occur with the complementizer *for*, as illustrated in (53).

- (53) a. Terry wants very much for Ashley to arrive on time.
  - b. The administration would prefer for all professional staff to agree to a furlough.

This is possible neither with "pure" raising predicates (54) nor with "pure" control predicates (55).

- (54) a. \*Barnett believes (very much) for the doctor to have examined Tilman.b. \*Terry proved (very convincingly) for Ashley to be an idiot.
- (55) a. \*Barnett persuaded (very strongly) for the doctor to examine Tilman.b. \*Tina forced (very strongly) for the author to rewrite the introduction.

Verbs that may also belong to this class include *hate, intend, like, mean,* and others.

#### Notes

- 1 As Postal (p.c.) points out, the synonymy of the embedded actives and passives under Raising holds only of specific/non-quantificational nominals. In (i) and (ii), which are parallel to (3) and (11), the relative scope of the quantified expressions affects interpretation and obviates the synonymy referenced by this diagnostic.
  - (i) Barnett believed no doctor to have examined many students.
  - (ii) Barnett believed many students to have been examined by no doctor.

(i) is true just in case there is no single doctor who has individually examined many students, while (ii) is true just in case there are many students who did not receive an examination by a doctor.

- 2 (23b) is somewhat degraded syntactically and (24b) is acceptable only to the degree that one believes that cats can be persuaded of anything. However, it remains clear that *the cat* can only denote an animal in these sentences.
- 3 Contra Perlmutter, Newmeyer (1969) argues that *begin* is only an intransitive verb.
- 4 Unaccusative verbs are a subset of intransitive verbs, and are in complementary distribution with unergative (intransitive) verbs. Where transitive verbs are characterized by having a subject and an object, intransitive verbs fail to have one of these. A verb that has (underlyingly) a subject but no object is termed unergative, and a verb that has an object (underlyingly) but no subject is termed unaccusative. The "unaccusative hypothesis" was most fully developed by David Perlmutter and Paul Postal in the mid-1970s, in the context of their Relational Grammar theory. The terminology was struck by Geoffrey Pullum. For a detailed and entertaining tale about the origin of this notion, see Pullum (1991).