Control in *promise* constructions like (1a) raises a number of interesting questions for grammatical theory. As is well known, *promise* is one of a small number of verbs in English that select an object and an infinitive and show subject control. This behavior departs from the far more common pattern of verbs like *persuade* and *force*, which take an object and an infinitive and show object control (1b):

(1) a.  John promised Mary to return home by 5:00 p.m.
    b.  John *(persuaded)* Mary to return home by 5:00 p.m.

One of the most intriguing facts about the "special" control behavior of *promise* is that it is not an isolated difference; *promise* actually diverges from verbs like *persuade* and *force* in a number of important respects. The suspicion naturally arises then that some reduction can be made—that it might be possible to derive the control behavior of *promise* from other, independent properties of the verb.

In this article I argue for such a reduction. Pursuing an observation by Bowers (1973), I propose that the control behavior of *promise* derives from its status as a dative verb, and from a resulting formal parallel between examples like (1a) and double object constructions like *John promised Mary a sports car*. A key element in this analysis is the account of double object structures developed in Larson (1988a), in which these constructions are derived syntactically from more basic, oblique forms. I show that the D-Structure representations available in this account make it possible to predict control structurally using a Minimal Distance Principle analogous to that of Rosenbaum (1970). Control and selectional properties of *promise* are thus linked together in a simple and intuitively satisfying way.

In section 1 I briefly review the syntactic behavior of *promise*, suggesting its status as a double object verb. In section 2 I introduce the account of complementation and double object structures from Larson (1988a), applying it to *persuade, force, and promise*.
ise. In section 3 I relate these structures to control via the Minimal Distance Principle and contrast the analysis with the structurally based theories of Stowell (1981), Thomason (1976), Bach (1979), and Bach and Partee (1980). In section 4 I briefly consider how the structures assumed in this account are projected and licensed. Finally, in section 5 I discuss two classes of problems for a configurational account of control with promise.

1. Promise as a Double Object Verb

The underlying syntactic character of infinitival promise constructions is directly suggested by the paradigm in (2), first noted (to my knowledge) by Bowers (1973), and subsequently by Stowell (1981):

(2) a. 
   i. John promised [Mary] [a sports car].
   ii. John promised [a sports car] [to Mary].
   b. i. John promised [Mary] [to leave].
   ii. *John promised [to leave] [to Mary].

Along with its NP–Infinitive subcategorization, promise also permits two NP objects, which may appear in either a “double object” configuration (2ai) or an oblique dative configuration (2aii). Furthermore, the usual V–NP–Infinitive construction with promise (2bi) also has a (somewhat marginal) oblique variant (2bii). These facts suggest that the pairs in (2a,b) are formally parallel; more precisely, they imply that promise–NP–Infinitive constructions are analogous to double object structures, with the NP object and infinitive of the former parallel to the inner and outer objects (respectively) of the latter.

There is evidence beyond the parallels in (2) supporting this view. As noted by Stowell (1981), infinitival promise constructions resist extraction of their NP objects (3a–c) just as double object structures resist extraction of their inner objects (4a–c):¹

(3) a. ??Who do you think John promised to leave?
   b. *John was tough to promise to leave.
   c. ??John promised to leave [all the people who didn’t want him there].

(4) a. ??Who do you think John \(\{\text{promised} \atop \text{gave}\}\) a sports car?

¹ In Larson (1988a; forthcoming) it is proposed that “Heavy NP Shift” (as in (3c) and (4c)) does not actually involve rightward movement of the object NP (ia) but instead involves leftward movement of a complex predicate phrase (ib):

(i) a. John saw \(\text{t} \atop \text{[everyone he knew]}\) at the concert.
   b. John [saw at the concert] everyone he knew \(\text{t}\).

Under this view, (3a–c) are not in fact all instances of extraction from the inner object position—only (3a,b) are. (Similarly for (4a–c).) The existence of this alternative analysis of Heavy NP Shift does not affect the central point at issue, which is the parallel behavior of promise–NP–NP and promise–NP–Infinitive with respect to this phenomenon.
b. *John was tough to \{promise\} a sports car.

c. ??John \{promised\} give a sports car [everyone that helped him].

Correlatively, *promise permits the extraction of its infinitival complement, just as double object verbs permit the extraction of their outer objects:

(5) a. What did John promise Mary?
   (Ans.: To leave by five o'clock.)
   b. What John promised Mary was [to leave by five o'clock].

(6) a. What did John \{promise\} give Mary?
   (Ans.: A sports car.)
   b. What John \{promised\} gave Mary was [a sports car].

*Promise with an infinitive also patterns analogously to a double object structure in the realization of its complements:

(7) a. John promised \$ to leave.
   b. ??John promised Mary \$ ...

(8) a. John \{promised\} give \$ a donation.
   b. ??John \{promised\} gave \$ the charity \$.

The distribution of other predicates in English superficially similar to *promise shows clearly that such behavior is correlated with double-object-taking status. Consider the verbs force and persuade. The latter resemble *promise in selecting the V–NP–Infinitive complement frame:

(9) a. John \{persuaded\} forced Mary to leave.
   b. John promised Mary to leave.

But they differ in having neither double object nor oblique dative subcategorizations (compare (2)):

(10) a. *John persuaded Mary a conclusion.
   *John forced Mary an action.
   b. *John persuaded a conclusion to Mary.
   *John forced an action to Mary.
   c. John persuaded Mary to leave.
      John forced Mary to leave.
   d. *John persuaded to leave to Mary.
      *John forced to leave to Mary.
Force and persuade also sharply diverge from promise with respect to the data in (3)–(8). In fact, the complements of the former show behavior essentially the inverse of the latter. Thus, force and persuade allow extraction of their NP objects but resist extraction of their infinitival complement (compare (3a–c), (5a,b)):

(11) a. Who do you think John \{persuaded \} to leave?

b. John was tough to \{persuade \} to leave.

c. John \{persuaded \} to leave [all the people who had no business being there].

(12) a. *What did John \{persuade \} Mary?

(Ans.: To leave by five o’clock.)

b. *What John \{persuaded \} Mary was [to leave by five o’clock].

And force and persuade require the presence of an object while permitting absence of the infinitive (compare (7a,b)):

(13) a. *John \{persuaded \} \O to leave.

b. John finally persuaded Mary \O.

John forced Mary \O against her will.

These contrasts are straightforward under the premise that infinitival promise constructions are double object structures whereas infinitival force and persuade constructions are not. Recall that a salient property of double object structures is that the underlying grammatical relations of their complements appear “inverted” in surface form; the underlying indirect object surfaces as a direct object, and the underlying direct object surfaces as an oblique of some kind. This means that the associations between grammatical relations of the complements of promise versus persuade and force are as follows:

\[
\begin{array}{c}
\text{promise} \\
NP \quad \text{INFINITIVE}
\end{array}
\]

\[
\begin{array}{c}
\text{persuade} \\
NP \quad \text{INFINITIVE}
\end{array}
\]

\[
\begin{array}{c}
\text{force} \\
\end{array}
\]

Given this situation, it comes as no surprise that complements of promise should behave “inversely” to those of force and persuade, with the NP of the former patterning with the infinitive of the latter two, and conversely.²

² Y. Endo points out to me that surface case marking of accusative and dative complements in Japanese appears to exhibit the dative character of promise and the “inverse” complement relations of promise and persuade in a direct way. Thus, Japanese yakusokusi ‘promise’ exhibits the same case pattern as a dative verb
2. The Syntax of Double Object Constructions

Assuming that NP–Infinitive complements to promise involve a double object structure, let us turn to the analysis of the latter. The account I will adopt here is one developed in Larson (1988a), whose central idea is that double object structures are syntactically related to oblique forms by a modern version of "Dative Shift." The relevant D-Structure realizations derive from early proposals by Chomsky (1955) and their more recent elaboration in the work of Dowty (1978), Bach (1979), and Jacobson (1983: 1987). The basic idea is that in an example like (14a), all verbal arguments are initially structured within VP in the subject-predicate form, as shown in (14b):

(14) a. John [\(\text{VP promised a reward to Mary}\)]

\[
\begin{array}{c}
\text{VP} \\
\text{NP} \\
\text{John} \\
\text{V} \\
\text{\(\text{VP} \quad \text{promise} \quad \text{to Mary} \)}} \\
\end{array}
\]

\(\text{ageru} \ '\text{give}' \ (\text{ia}, \text{b}). \) And just as the double object (double accusative) form is forbidden with the dative, so it is forbidden with 'promise' (iiia,ib):

(i) a. \(\text{Taro}'-ga \text{ Hanako-ni hon-o age-ta.} \)
\(\text{Taro-Nom Hanako-Dat book-Acc give-Past} \)
'\(\text{Taro gave a book to Hanako.'} \)

b. \(\text{Taro}'-ga \text{ Hanako-ni daigaku-e iukoto-o yakusokusi-ta.} \)
\(\text{Taro-Nom Hanako-Dat college-to go-Acc promise-Past} \)
'\(\text{Taro promised to go to college to Hanako.'} \)

(ii) a. \(\text{\"Taro\"-ga Hanako-o hon-o age-ta.} \)
\(\text{Taro-Nom Hanako-Acc book-Acc give-Past} \)
'\(\text{Taro gave Hanako a book.'} \)

b. \(\text{\"Taro\"-ga Hanako-o daigaku-e iukoto-o yakusokusi-ta.} \)
\(\text{Taro-Nom Hanako-Acc college-to go-Acc promise-Past} \)
'\(\text{Taro promised Hanako to go to college.'} \)

Finally, the equivalent of persuade in Japanese departs from 'promise' in showing the NP object as accusative and the sentential complement in the unmarked position of the oblique (iii) (compare (iib)):

(iii) \(\text{Taro}'-ga daigaku-e iku yoo-ni Hanako-o settokusi-ta.} \)
\(\text{Taro-Nom college-to go-so-as-to Hanako-Acc persuade-Past} \)
'\(\text{Taro persuaded Hanako to go to college.'} \)

Endo observes that in certain cases the object of persuade surfaces as a dative.
On this view, the VP underlying *promise a reward to Mary* is a binary branching structure; it consists of an empty V taking a VP complement whose specifier is *a reward*, whose head is *promise*, and whose complement is the PP *to Mary*. The intuitive content of this structure is that *promise* takes the complement *to Mary*, forming a small predicate *promise-to-Mary*. This is predicated of an "inner subject" *a reward*, forming a VP with clausalike structure: *a reward promise to Mary*. The latter is then predicated of the subject *John*.

The correct surface ordering of sentence constituents, shown in (15), derives by movement of *promise* to the empty V position and by raising of the VP-internal subject to SpecIP position:

(iv) Taroo-ga Hanako-ni daigaku-e ikuyoo-ni settokusi-ta.
    Taro-Nom Hanako-Dat college-to go-so-as-to persuade-Past
    'Taro persuaded Hanako to go to college.'

However, he points out that in such examples the meaning of the verb shifts so that the sentence no longer carries the implication that the object was "totally affected" by the subject—specifically, there is no implication that Hanako was persuaded, only that she was urged. Such examples appear to illustrate what is referred to as "2-to-3 demotion" in Relational Grammar, and to involve a derived sense of "persuade."
This movement is suggested to follow from general principles governing the assignment of Case and Agreement: promise must head a projection govern by Infl to receive Tense and Agreement information, and the object a reward must be governed (and hence c-commanded) by V in order to receive Case. The verb raises to meet these joint requirements. Likewise, the subject NP must receive Case and raises to Spec I' for nominative Case assignment. Since we will be concerned here only with relations holding within VP, we will henceforth ignore IP structure and subject raising for simplicity.

Double object examples like John promised Mary a reward derive transformationally from to-dative forms similar to (14b). In particular, they arise when the familiar set of operations responsible for passive sentences apply within VP. Under standard proposals, the derivation of passives involves two central effects: withdrawal of Case from an object, and dethematization of a subject position. This triggers NP-Movement of the object to subject position. The suppressed subject 0-role is (optionally) realized by an adjunct phrase attached to a V projection (V'):

(16)

Assume now that the dative preposition to has the status of Case marking. And consider imposing the general suite of effects involved with passives on the lower clause-like VP in (14b), as shown in (17). Case is withdrawn from Mary, which, in this instance, amounts to saying that the preposition to is absorbed. Furthermore, the VP-subject position is dethematized, and hence empty. This constellation of effects triggers NP-Movement of the Caseless indirect object to the empty VP-subject position. The suppressed VP-subject 0-role is again realized by an adjunct phrase attached to a V projection (V'):

3 Directionality of Case assignment as a motivation for verb raising is proposed by Koopman (1983) and Travis (1985); inflectional marking by Infl as a motivation for verb raising is proposed by Roberts (1985).
Finally, as before, the verb raises, achieving the correct surface order of constituents shown in (18):
This is (modulo Subject Raising) the S-Structure configuration for a double object verb phrase. Evidently, the VP in (16) and the lower VP in (18) are closely analogous.\(^4\)

2.1. Persuade and Force versus Promise

This analysis of complementation and double object formation can be applied to yield very different structures for the two classes of verbs discussed above taking a surface object and an infinitival complement. Consider first examples with persuade and force like (1b) (repeated here):

\[
\text{(1) b. John \{persuaded\, forced\} Mary to return home by 5:00 p.m.}
\]

Under the present account we can assign such examples the D-Structure form in (19), where Mary is an underlying subject of a small predicate persuade to return home by 5:00 p.m. (or force to return home by 5:00 p.m.).\(^5\)

\[
\begin{center}
\text{(19)} \\
\text{VP} \\
\text{NP} \\
\text{John} \\
\text{V} \\
\text{e} \\
\text{NP} \\
\text{Mary} \\
\text{V} \\
\}\text{persuade, force} \\
\}\text{to return home by 5:00 p.m.}
\end{center}
\]

This structure subsequently undergoes V-Raising at S-Structure, as in (20):

\[^4\text{In Larson (1988a), Case assignment to the outer object in a double object structure is licensed through a rule of V*-Reanalysis that optionally recategorizes V* as V whenever the former is thematically equivalent to a montransitive verb (that is, whenever V* has a thematic structure with one unsaturated internal argument). Applied to (18), this yields (i):}\]

\[^5\text{This is (modulo Subject Raising) the S-Structure configuration for a double object verb phrase. Evidently, the VP in (16) and the lower VP in (18) are closely analogous.}\]
No further movements apply in the derivation of (1b); the relative positions of the verbal complements (NP and \( \alpha \)) remain constant. This accords with our earlier observation that constructions with *persuade* and *force* preserve their underlying grammatical relations in surface form: the surface direct object (*Mary*) is also a deep direct object, and so on.

Consider now examples with *promise* like (1a) (repeated here):

(1) a. John promised [Mary] [to return home by 5:00 p.m.].

As noted earlier, such sentences are formally analogous to double object constructions. Under the analysis of double objects presented above, this entails an underlying D-

\[
\begin{align*}
(1) \quad & \text{John promised [Mary] [to return home by 5:00 p.m.].} \\
& \text{As noted earlier, such sentences are formally analogous to double object constructions. Under the analysis of double objects presented above, this entails an underlying D-}
\end{align*}
\]

---

In this structure the outer NP *a reward* is in the canonical configuration of objective Case assignment---\( [\cdot V \text{ NP}] \)---and is assumed to receive an inherent objective Case from the reanalyzed V.

1 In what follows I will take no position on the categorical status of infinitives, or on the related issue of whether they contain an empty subject (PRO). For various points of view on these questions, see Chomsky (1981), Koster and May (1982), Chierchia (1984), and Borer (1986).
Structure representation like that in (21):

(21)

```
    VP
   /\  
  NP  V'
  /\  /\  
John V e NP V'
     e V'  
      /
    α

promise NP

V

V'

Mary

to return home by 5:00 p.m.
```

As in (17), the VP-subject position is dethematized and hence empty. The notional direct object (to return home by 5:00 p.m.) appears as a V' adjunct. Furthermore, the Case of the indirect object (the preposition to) has been absorbed. These circumstances trigger NP-Movement of the indirect object to direct object (VP-subject) position. And there is also the usual raising of V, yielding the derived VP structure of (1a) shown in (22):

(22)

```
    VP
   /\  
  NP  V'
  /\  /\  
John V_1 V'
      promise NP_j
          /
        α

Mary V'

V_1

NP_j

to return home by 5:00 p.m.
```
Here, unlike the case of persuade and force, there is a change of deep and surface grammatical relations. Promise involves an inversion of direct and indirect object grammatical relations, just as standard passives involve an inversion of subject and object grammatical relations. Despite the surface similarities between (1a) and (1b), then, their structures and derivational histories are radically different. The latter is an “active” form, whereas the former is fundamentally a “passive.”

It is natural to inquire why the oblique counterparts of infinitival promise constructions are somewhat marginal—why examples like (23a), with the structure in (23b), are less acceptable than (15):

(23) a. John promised [to return home by 5:00 p.m.] [to Mary].

b. 

```
NP                  VP
  |                  |
  John              V'
                  |
        V_i         |
          |        V'
          promise  a
           |    to return
            home by 5:00 p.m.
                  |
                      |
                      e
                      |
                      PP
                      |
                      to Mary
```

I suggest the relevant factor is “Case resistance” in the sense of Stowell (1981). Briefly, in the structure in (23b), the infinitival to return home by 5:00 p.m. is in the position of direct objects, and hence in the position of structural, accusative Case assignment. Assume (essentially following Stowell (1981)) that infinitival complements are analogous to PPs in being “inextricably Case-marked.” Furthermore, assume (again following Stowell) that this status is incompatible with receiving structural accusative Case. These assumptions entail that an infinitive cannot be realized as a surface direct object even when it has this notional status underlyingly. (23b) therefore has the status of a Case theory violation.

The double object structure provides a resolution for the conflicting demands of Case theory and θ-theory involved with infinitival promise constructions. For even though the infinitive is notionally a direct object, the double object derivation with promise allows it to be realized as an adjunct, and hence in a position not targeted by structural, accusative Case.⑥

⑥ Recall from footnote 4 that Case assignment to the outer object in a double object structure takes place through optional reanalysis of the lower V’ as V. We may assume that in “Dative Shift” derivations involving
3. Control

The structures proposed above for persuade, force, and promise have been introduced independently of the issue of control. Nonetheless, they can be related very directly to the facts of controller choice. We can make the connection through the following version of Rosenbaum’s (1970) ‘‘Minimal Distance Principle’’:

**Minimal Distance Principle (MDP)**

An infinitive complement of a predicate P selects as its controller the minimal c-commanding noun phrase in the functional complex of P.

The notion of a ‘‘functional complex for predicate P’’ derives from Chomsky (1986), where it is used to define the local domain of anaphors under the binding theory. In brief, the ‘‘functional complex of P’’ is the structural domain in which thematic roles determined by P are discharged. Anaphors are required to obtain an antecedent within the functional complex of their governor. Here we are, in effect, treating control as a form of anaphora with the extra proviso that infinitives select the closest available antecedent.7

Suppose we assume now that the MDP applies at D-Structure, the level where thematic relations are transparently represented. Then we predict controller choice correctly for our two verb classes. In constructions involving persuade and force such as (19), the surface object (Mary) is the closest NP in the functional complex of the verb that c-commands the infinitive at D-Structure. Hence, we predict object control. Contrastingly, in constructions involving promise such as (21), the eventual surface direct object (Mary) fails to c-command the infinitive at D-Structure and hence is not a possible controller. The closest available NP in the functional complex of promise is the higher VP subject John. Hence, we predict subject control.

---

7 The notion that control is fundamentally a form of anaphora has been discussed by Koster (1978; 1984), Bach and Partee (1980), Chomsky (1981), Manzini (1983), and Williams (1980), among others.
Under this view, the “special” control behavior of promise dissolves as such. Controller choice follows directly from the status of promise as a double object verb under the MDP.

3.1. Two Generalizations

This analysis can accommodate two well-known generalizations concerning argument manipulations with control verbs.

3.1.1. Visser’s Generalization. Visser (1973) observes that passivization is possible with object control verbs (24a), but not with subject control verbs (24b,c):\footnote{Visser’s Generalization actually makes the wider point that structures of subject-oriented predication resist Passive, as shown by the following examples from Koster (1984):}

\begin{align*}
(24) & \quad \text{a. John was } \begin{cases} \text{persuaded} \\ \text{forced} \end{cases} \text{ to leave.} \\
 & \quad \text{b. } \ast \text{It was tried to leave.} \\
 & \quad \text{c. } \ast \text{John was promised to leave.}
\end{align*}

This generalization may be taken to follow from our principles of control. Note first that (24a–c) all involve D-Structure representations whose highest VP subject position is empty. In (24a) this situation has no consequences for control; at D-Structure the infinitive will have a c-commanding NP to serve as controller (namely, the underlying object John). The latter will thus be selected as controller just as in the active case, as shown in (24a'). The surface form is generated by raising John to SpecVP position and then to subject position, and by raising V to [v c].

With (24b,c), however, the absence of an underlying IP subject does have consequences. In these examples there simply is no c-commanding NP at D-Structure to serve as controller for to leave. All commanding argument positions are nonthematic and hence empty, as in (24b') and (24c'). Since some controller is required, but none is available, these sentences are ruled out.\footnote{Hoekstra (1984) and Koster (1984) also suggest that examples like (24b,c) are ruled out by lack of a suitable controller.}

As discussed by Koster (1984), the close relation between control and anaphora may also shed light on why the object of a by-phrase cannot control an infinitive in promise constructions. Note that (ia) seems as bad as (24c). This fact appears to be related to the general difficulty in anaphoric relations where the target antecedent occurs in a by-phrase (ib):
(24) a'.

```
     IP
    /   \
   NP   I'
  /    /  \
 e    I   VP
     |   /  \  
    was NP  V'
     /   /    \  
    e V   V'   
     /  /  /    \  
    e NP  V    α
    /    /   /  
     John V  to leave
```

(24) b'.

```
     IP
    /   \
   NP   I'
  /    /  \
 e    I   VP
     |   /  \  
    was NP  V'
     /   /    \  
    e V   V'   
     /  /  /    \  
    e NP  V    α
    /    /   /  
     try V  to leave
```

(i) a. *John was promised to leave by Mary.
    b. *John was introduced to herself by Mary.

If control is fundamentally a form of anaphora, then the ill-formedness in (ia,b) can be assimilated.
(24) c'.

\[
\begin{align*}
\text{IP} & \quad \text{VP} \\
\text{NP} & \quad \text{NP} \\
\text{e} & \quad \text{was} \\
\text{l} & \quad \text{NP} \\
\text{VP} & \quad \text{V'} \\
\text{V} & \quad \text{NP} \\
& \quad \text{e} \\
& \quad \text{V'} \\
& \quad \text{a} \\
\text{promise} & \quad \text{John} \\
\text{to leave}
\end{align*}
\]

3.1.2. Bach's Generalization. Bach (1979) points out that detransitivization is available with subject control verbs but proscribed with object control verbs:


\[\text{b. } \ast \text{John} \{\text{persuaded, forced}\} \text{ to leave.}\]

This observation cannot be explained along the same lines as Visser's Generalization, where ungrammaticality results from the absence of a controller. If we take examples like (25b) to arise by simply not projecting the direct object at D-Structure, then the IP subjects of persuade and force will constitute potential controllers for the infinitive under the MDP, as shown in (25b'):

(25) b'.

\[
\begin{align*}
\text{VP} & \quad \text{V'} \\
\text{NP} & \quad \text{V} \\
\text{John} & \quad \text{a} \\
& \quad \text{persuade} \\
& \quad \text{force} \\
& \quad \text{to leave}
\end{align*}
\]
To account for Bach’s Generalization, we will take a different tack: we appeal to the general difference in deletability of complements noted earlier (recall (7)–(8) and (13)):

(26) a. John promised the charity a donation.
    John promised a donation.
    *John promised the charity.

b. John persuaded Mary of a certain conclusion.
    *John persuaded of a certain conclusion.
    John persuaded Mary.

(26a,b) show that the “inverse” behavior of promise and persuade with respect to which complements can “delete” is independent of control. It is observed not only with infinitival complements as in (7), (13), and (25) but also with NP objects, where anaphoric dependence is not involved.

On the present account, the contrast in (25)—Bach’s Generalization—may be assimilated to this latter, independent difference. Essentially, it seems that only internal arguments other than themes are optionally projected at D-Structure in English. Structures like (25b’) are thus ruled out, not on grounds of illicit control relations, but because they violate the Projection Principle (Chomsky (1981)). They fail to syntactically represent an argument that in fact must be structurally represented.

3.2. An Alternative Account

It is revealing to contrast the account of control in promise constructions developed here with the general family of proposals by Stowell (1981), Thomason (1976), Bach (1979), and Bach and Partee (1980).

Stowell’s (1981) analysis involves the structure shown in (27) for promise–NP–Infinitive:

(27)
In (27) the verb and NP object form a constituent that excludes the infinitive. Stowell suggests that the category of this small constituent is V—that promise and Mary in effect make up a complex lexical verb taking the infinitive as an object.

Essentially the same structure is proposed within the framework of Categorial Grammar by Thomason (1976), Bach (1979), and Bach and Partee (1980). They assign the following derivation tree:

(28)  \[ \text{John will promise Mary to leave} \]

Here constituency is indicated in the relative order of combination of the verb and its complements. Promise first combines with its NP argument to yield a complex predicate promise Mary, as in Stowell’s analysis; the latter then combines with the infinitive to leave.

These structural analyses can be related to control under a Minimal Distance Principle just as in the account proposed here. Thus, in Stowell’s (27) John is the minimal c-commander of the infinitive; hence, this structure predicts subject control. The same result can be obtained for analysis trees, under the following, trivially modified form of the MDP:

\[ \text{MDP}' \]

An infinitive \( \alpha \) selects as its controller the first NP that combines with a constituent containing \( \alpha \).

In (28) the first NP composed with a phrase containing to leave is the subject John; hence, MDP’ predicts subject control.

These proposals are similar in spirit to the one advanced here in attempting to predict controller choice structurally under a Minimal Distance Principle. However, they diverge sharply from the present account on the issue of where the MDP applies and the structure it applies to. Stowell, Thomason, Bach, and Partee assume that the level where the MDP applies, and where the surface NP object of promise fails to c-command the infinitive, is S-Structure (or the equivalent). In contrast, the analysis proposed here assumes that the level where the MDP applies, and where NP fails to c-command the infinitive, is D-Structure. At S-Structure, these relations are inverted by “Dative Shift,” and c-command between NP and the infinitive is established.

As it turns out, the assumption that the MDP applies at S-Structure to structures like (27) and (28) entails a serious drawback: it requires us to abandon the idea that control properties of promise follow from its status as a double object verb. The reason
for this is straightforward. It can be shown directly that the structures in (27) and (28) are not double object structures. This means that Stowell, Thomason, Bach, and Partee must assume quite distinct analyses for promise–NP–Infinitive and promise–NP–NP, and so must lose the possibility of an explanatory connection between them.

That (27) and (28) are not double object structures is demonstrated by the results of Barss and Lasnik (1986). The authors cite a variety of data showing that in a double object structure, the inner object asymmetrically c-commands the outer object. For example, anaphors must be c-commanded by their antecedents. In a double object structure the inner object may be the antecedent for an outer object anaphor, but not conversely:

(29) a. I showed \{ Mary herself \}.

In general, a quantifier must c-command a pronoun at S-Structure if it is to bind it. In double object structures a quantified inner object may bind a pronominal outer object, but not conversely:

(29) b. I gave \{ every contestant, his prize \}.

Constructions of the form each . . . the other such as Each man saw the other or Each man saw the other’s friend may have a reciprocal reading when and only when the each-phrase c-commands the other-phrase. Double object structures show an asymmetry with respect to the each . . . the other construction on its reciprocal reading:

(29) c. I sent \{ each man the other’s socks \}.

Finally, negative polarity items must be c-commanded by an S-Structure “trigger,” such as a negation or negative quantifier, in order to be licensed. In double object structures an inner object trigger may license an outer object negative polarity item, but not conversely:

(29) d. I promised \{ no one anything \}.

The derivational analysis of double object structures proposed in section 2 is compatible with these data, since, as noted, in post-“Dative Shift” structures the inner object (asymmetrically) c-commands the outer complement (consider (18) and (22)). On the other hand, the structures assumed by Stowell, Thomason, Bach, and Partee are not compatible with Barss and Lasnik’s data. In (27) and (28) the inner object fails to c-command the outer object.11

11 Bach (1979), Bach and Partee (1980), and Thomason (1976) do not in fact assume that promise–NP–Infinitive is a double object structure. Rather, they adopt an alternative derivation for the latter in which the proper c-command relations do hold:
These results show that the basic points of our analysis of the control behavior of *promise* are intimately connected. Essentially, if we wish to maintain (a), then we can make use of (b) only if we also hold (c) and (d):

(a) Controller choice is determined by the MDP.
(b) Control constructions involving *promise* are double object structures.
(c) Double object structures are syntactically derived.
(d) Controller choice is fixed at D-Structure.

Suppose we adopt the MDP. Then since the inner object of a double object structure c-commands the outer object at S-Structure, assuming that *promise*-NP–Infinitive is a double object form entails assuming that NP c-commands the infinitive at S-Structure. This not only means that the MDP cannot apply at S-Structure, on pain of yielding the wrong results for *promise*. It also entails that double object structures must have a level in which the c-command relations of their complements are inverted and at which the MDP can apply.

4. Projection of Control Structures

Under the view that control is determined at the level of initial syntactic configurations through the MDP, controller choice largely reduces to the issue of how such initial structures are projected. In Larson (1988a) V-Raising structures are proposed to follow from the interaction of three simple components: the restricted X-bar theory in (30) and the principles of argument realization in (31a,b):

(30) a. XP \rightarrow YP X'
   b. X' \rightarrow X ZP
(31) a. If α is an argument of β, then α must be realized within a projection of β.
   b. Roles determined by a predicate α are projected according to the hierarchy Agent > Theme > Goal > Oblique, such that if θ₁ > θ₂, then the argument to which θ₁ is assigned c-commands the argument to which θ₂ is assigned.

This derivation is compatible with Barss and Lasnik’s facts but abandons the idea of a connection between the differing behaviors of *promise* in its various complementations.

D. Pesetsky has observed that standard c-command tests appear to show that the inner object c-commands the infinitive in *promise*-NP–Infinitive structures, and hence refute the Stowell/Thomason/Bach and Partee theories directly. He points to the following data:

(ii) a. I promised each child to visit the other’s parent.
   b. I promised no one to talk to any of the committee members.
   c. I promised every man to have Mary visit his mother.
Consider first VPs headed by *promise*, which determines an agent, a theme, and a goal. These roles must be projected in conformity with X-bar theory. However, the X-bar theory in (30) permits at most two arguments of *promise* to be realized within a single projection of V. Assuming that infinitives may bear the role of theme like ordinary NPs (for instance, a *reward, a sports car*), (31a,b) determine the initial tree shown in (32a):

(32) a.

```
   VP
     /\    \
    α  V'   PP
   /\     /\   /
 to leave V promise to Mary
```

This structure leaves the agent role unprojected, and no site to project it in. To accommodate the remaining argument, we must make some elaboration of (32a). (32b) is, in effect, the minimal structural elaboration compatible with the three principles given above:

(32) b.

```
   VP
     /\    \
    NP V'   VP
   /\     /\        /\    
  John V  VP V'       α  V'
   /\ /\     /\     /\    /
 to leave e to leave V promise to Mary
```

Here an X-bar “shell” with an empty head has been projected to accommodate the agent phrase. In this structure, all arguments of *promise* are realized. The structure satisfies X-bar theory (30). Prominence of roles on the thematic hierarchy is properly reflected in the c-command relations of the arguments bearing those roles (31b). Finally, all arguments either do (or, after V-Raising, will) fall within a projection headed by V (31a).
D-Structure realizations for "Dative Shift" sentences are determined in a similar way. We proceed as before, but rather than projecting the theme infinitive to leave in a specifier position, we instead realize it as an adjunct attached to V', as shown in (33a):

```
(33) a.
  VP
    NP  V'
      e  V'
          α
    V  NP  to leave
promise  Mary
```

On the assumption that θ-theory is "blind" to whether roles are realized as arguments or adjuncts, the VP projection in (33a) will count as "filled" (see Larson (1988a) for discussion); we therefore require another argument position for the agent. This requirement is satisfied by projecting the X-bar shell shown in (33b), as above:

```
(33) b.
  VP
    NP  V'
      John  V  VP
            NP  V'
                e  V'
                    α
    V  NP  to leave
promise  Mary
```

The derivation then proceeds as in (22), subject control having been fixed from this structure according to the MDP.
I assume that configurations involving object control verbs like persuade and force are projected analogously to the oblique promise construction in (32b), but with the infinitival complement corresponding to the goal phrase of the latter (recall (19)). This analysis is independently supported by the data in (34) (brought to my attention by H. Nakajima):

(34) a. John forced Mary \{ into the corner \).
    b. John persuaded Mary into filling out the complaint.

As (34a,b) illustrate, infinitival complements to persuade and force can be directly replaced by simple directional PPs expressing goal or result of action. It seems plausible to conclude, then, that infinitival clauses bear the goal role when realized as complements to these verbs.\(^2\)

5. Objections

Configurational theories of the kind pursued here encounter two well-known lines of criticism, one involving the specific verb promise and one involving other superficially similar “double object” verbs like ask, teach, and allow.

5.1. “Shifting Control”

It has been widely observed that passivization in the infinitival complement of promise seems to affect control relations in certain cases. Thus, in well-known examples like (35a) the embedded clause is most naturally construed with the matrix object Mary and not the matrix subject John. Such behavior appears problematic for theories of control like the one proposed here. The structural relations among the complements of promise in (35a) do not appear different from those in the nonpassivized example (35b); hence, a shift in control is unexpected:

(35) a. John promised Mary to be allowed to leave.
    b. John promised Mary to leave.

A plausible view of (35a) can be motivated by appeal to certain general semantic properties of dative verbs discussed by Oehrle (1975). Consider typical dative and double object constructions like (36a,b):

(36) a. John gave an apple to Mary.
    b. John sent Mary a letter.

---

\(^{12}\) Proposals appealing to hierarchies of thematic roles or grammatical relations, like this one, evidently represent at best descriptive approaches to the question of argument projection. Dowty (1988) has proposed that such general hierarchies can be dispensed with in favor of a binary template involving two “Proto-roles”: Proto-Agent and Proto-Patient. He further suggests that the basic prominence of Proto-Agent over Proto-Patient may be an iconic reflection of the logical/temporal precedence of causes over effects, as organized by our conceptual apparatus.
Oehrle points out that such constructions all share an important class of entailments involving "transfer of possession," which we might express as follows:

(37)  X→Vσ→Y→Z \Rightarrow Z \text{ gets } Y \text{ for dative verbs } V

Thus, if (36a,b) are true, then as a matter of the semantics of give and send, (38a,b) will be true as well:

(38) a. Mary got an apple.
    b. Mary got a letter.

If John gives an apple to Mary, then possession of the apple is transferred to Mary. Likewise, if John sends Mary a letter, then in a course of events where things go as planned, the letter comes into Mary’s possession. This entailment holding of dative give and send holds of dative promise as well. Thus, if (39a) is true, then some appropriately modalized version of (39b) is also true:

(39) a. John promised Mary a sports car.
    b. Mary gets a sports car.

If John promises Mary a sports car, then in some course of events where things go as promised, a sports car is transferred to Mary.

Notice that transfer of possession entailments go through not only with concrete theme nominals like an apple, a letter, or a sports car, but with abstract nominals as well. Thus, (40a,b) entail (41a,b), respectively (in appropriately modalized forms):

(40) a. John promised permission to leave to Mary.
    b. John promised Mary authorization to visit Albania.

(41) a. Mary gets permission to leave.
    b. Mary gets authorization to visit Albania.

Interestingly, in the latter examples a further entailment holds. If Mary gets what is denoted by the second object in (41a,b), then appropriately modalized versions of (42a,b) are also true:

(42) a. Mary leaves.
    b. Mary visits Albania.

If Mary has permission to leave, then in some permissible course of events she leaves. And if Mary has authorization to visit Albania, then in some permissible course of events she visits Albania. Mary thus comes to be understood as the subject of the infinitives in (40a,b) through a chain of entailments: (40a) implies (41a), which in turn implies (42a), and similarly with (40b). Control is not involved here, as is clear from the fact that Mary does not c-command the infinitive in (40a) although it is the notional subject.

I want to propose that what is at work in "shifting control" examples like (35a) is a species of what is observed in (40)-(42). Specifically, I suggest that the interpretation of the infinitival in (43a) is determined not by control, as in (43b), but rather through
entailments, as in (43c):\textsuperscript{13}

(43) a. John promised Mary to be allowed to leave.
b. John promised Mary to leave.
c. John promised Mary permission to leave.

On this view, the infinitive in (43a) is without a surface controller and hence analogous to the occurrences of \textit{to be allowed to leave} in (44):\textsuperscript{14}.

(44) [To be allowed to leave] is \{a. unusual \b. always pleasant\}.

Its construal with \textit{Mary} in (43a) reflects the fact that, as a dative construction, this sentence entails (a modalized version of) (45a), which in turn entails (a modalized version of) (45b):

(45) a. Mary gets to be allowed to leave.
b. Mary leaves.

This proposal ties the occurrence of ``shifting control'' crucially to the presence of a dative verb. We thus predict that passivization in the complements of nondative verbs like \textit{persuade} and \textit{force} will not induce similar effects. This prediction appears correct:

(46) a. #I persuaded John to be allowed to leave.
b. #I forced John to be allowed to leave.

The possibility of subject control in such examples is quite marginal in my judgment, much weaker than in the comparable cases with \textit{promise}. Given object control, and the semantics of the complement, the sentences are anomalous.

Further evidence linking shifting control to datives can be seen in the class of infinitival complements where shifting control occurs. As has been frequently noted, not all passive complements of \textit{promise} allow object construal (47a,b). Moreover, not all complements that show shifting control are passives. Farkas (1988) observes examples like (47c), which some English speakers can understand as allowing subject or object construal of \textit{to stay up}:

\textsuperscript{13} The approach to ``shifting control'' adopted here is similar to that taken in Oh (1988).
\textsuperscript{14} The parallel between (43a) and (44) is further supported by the following contrasts:

(i) a. John promised Mary to leave.
b. *John promised Mary for him to leave.

(ii) a. To be allowed to leave at 5:00 p.m. is unusual.
b. For him to be allowed to leave at 5:00 p.m. is unusual.

(iii) a. John never promised Mary to be allowed to visit Paris.
b. John never promised Mary for her to be allowed to visit Paris.

In obligatory control structures like (iia) the infinitive is not replaceable by one containing a \textit{for} complementizer and an overt subject even when the latter is coreferential with the intended controller. However, in non-obligatory control structures like (iia) such replacement is possible. Note now that (43a) appears to pattern like the nonobligatory examples in that the ``controlled'' infinitive is replaceable with an infinitive with an overt subject, where the same level of acceptability is maintained in my judgment.
(47) a. #John promised Mary to be kissed by Felix.
    b. #Max promised Mary to be rumored to be leaving.
    c. The mother promised the children to stay up.

This result can again be understood via the semantics of dative verbs. As noted earlier, datives entail a "transfer" of the theme out of the keeping of the agent, and into the keeping of the goal. This of course requires the theme to have been in the keeping of the agent at the point of transfer.\footnote{For example, if John loses a dollar and a gust of wind by chance brings it into my hand, I cannot report this (except facetiously) using the sentence \textit{John gave me a dollar}. The point is that although a dollar has come into my possession, John has not transferred it into my keeping from his.} Now infinitival complements do not denote objects that can be possessed like apples or dollar bills. Nonetheless, there is a natural sense in which the kind of object picked out by an infinitive—an event, or course of action \( e \)—can be "in the keeping" of a person \( x \), namely, if \( x \) can bring \( e \) about. Following Farkas (1988), we might say that when \( x \) can bring \( e \) about, \( x \) is \textit{potentially responsible for} \( e \). Given then that responsibility for \( e \) is the equivalent of possession of \( e \) by the source, we expect "shifting control" to be possible only when the infinitive denotes an event for which the source is responsible.\footnote{See Farkas (1988) for more on the notion "responsibility."}

This expectation is borne out for the good cases of object construal (35a) and (47c) (repeated here):

(35) a. John promised Mary to be allowed to leave.
(47) c. The mother promised the children to stay up.

We understand the possibility of leaving to be in the control of John in (35a). And we understand bedtime schedules to be in the control of the mother in (47c). Likewise, the expectation is borne out for the unacceptable cases (47a,b) (repeated here):

(47) a. #John promised Mary to be kissed by Felix.
    b. #Max promised Mary to be rumored to be leaving.

We understand responsibility for kissing to lie with Felix and not John in (47a); hence, object construal fails. Similarly, we understand the responsibility for the rumor to lie with no one in (47b), so again object construal fails. These results lend plausibility to the view that "shifting control" with \textit{promise} does not involve control but instead involves certain entailments associated with the verb. The notion "transfer of possession" appears to illuminate both how the infinitive can be construed with the object of \textit{promise} when subject control fails, and also what kind of infinitives will permit such construal.\footnote{It is worth emphasizing that although we appeal to entailments here in accounting for sentences like (36a) and (48), the result is \textit{not} a general entailment theory of control as in Chierchia (1984) or Dowty (1985). On this analysis, control and construal by entailment would be distinct phenomena, the former syntactic, and the latter essentially semantic. Furthermore, the entailments appealed to here would not be \textit{control entailments} in the sense of Chierchia \textit{or} Dowty. On the suggested view, what governs object construal with \textit{promise} is simply the standard set of entailments that this verb carries by virtue of its dative status. In general, then, construal of the understood subject of an infinitive has no specific principles here. Construal by control follows from the (independently motivated) shape of D-Structure. And construal by entailment follows from the general entailments of the verb.}
One important question that I must leave unresolved here, but which must be addressed ultimately if this suggestion is to amount to an actual solution, is when precisely an infinitival complement is subject to control versus construal by entailments. The issue is evidently a tricky one; in view of (47c), for example, it seems that application of Passive in the complement of promise is not necessary to trigger entailment construal. Nonetheless, the general division of labor suggested here between control and entailment seems plausible and seems moreover to answer to the general intuition that examples of “shifting control” differ in status from their controlled counterparts—that although they can be made acceptable to a degree, they are never as natural as the latter, and indeed are highly variable in their acceptability by native speakers. On the view explored here, this would directly reflect the grammatical status of the control relation versus the semantic/pragmatic status of the construal relation.

5.2. Apparent Object-Control Double Object Verbs

Under the proposals made above, the subject control properties of promise follow directly from its status as a double object verb. This leads us to expect subject control quite generally with double object verbs taking an infinitival complement. Consider the behavior of verbs like ask, teach, and allow, however. These verbs show a double object form with NP arguments:

(48) a. Max asked Felix a question.
   b. John taught Oscar a song.
   c. The judge allowed Lizzie a last request.

But when they occur with infinitival complements, parallel to promise, the result is object control:

(49) a. Max asked Felix to leave.
   b. John taught Oscar to sing.
   c. The judge allowed Lizzie to escape.

Superficially, ask, teach, allow, and similar predicates in English (order, tell, permit, and so on) appear to contradict our generalization linking complementation and control. On closer examination it becomes clear that verbs like those at issue do not in fact jeopardize the correlation between control and selection. For we observe that when these predicates occur with infinitival complements, they diverge from promise in more than control behavior. For example, note that although (48a–c) have oblique variants, (49a–c) do not:

(50) a. i. Max asked a question of Felix.
   ii. *Max asked to leave of Felix.
   b. i. John taught a new song to Oscar.
   ii. *John taught to sing to Oscar.
   c. i. The judge allowed a last request to Lizzie.
   ii. *The judge allowed to escape to Lizzie.
This contrasts with the behavior of promise when it takes an infinitive:

(2) b. ii. ?John promised to leave to Mary.

Furthermore, note that the constraints on extraction of the inner object holding for infinitival promise (recall (3a–c)) are not observed with ask, teach, or allow:

(51) a. Who do you think John \(
\begin{align*}
\text{asked} \\
\text{taught} \\
\text{allowed}
\end{align*}
\) to sing?

b. John was tough to \(
\begin{align*}
\text{ask} \\
\text{teach} \\
\text{allow}
\end{align*}
\) to sing.

c. John \(
\begin{align*}
\text{asked} \\
\text{taught} \\
\text{allowed}
\end{align*}
\) to sing [all the kids from school].

Realization of complements, which we saw above to be independent of control, also distinguishes teach and allow from promise (compare (7)):

(52) a. John taught/allowed Felix to sing.

b. John taught/allowed Felix.

c. *John taught/allowed to sing.

Finally, observe an interesting difference in the extractability of the outer complement with ask, teach, and allow versus promise. In my judgment, there is a contrast in the acceptability of NP versus infinitival answers in (53)–(55):

(53) a. What did John ask Felix?
   A question about tarantulas./*To sing.

b. What did John ask Felix to do?
   To sing.

(54) a. What did John teach Oscar?
   A new song./*To sing.

b. What did John teach Oscar (how) to do?
   To sing.

(55) a. What did the judge allow Lizzie?
   A last meal./*To escape.

b. What did the judge allow Lizzie to do?
   To escape.

Unlike promise (recall (5)), ask, teach, and allow seem to permit extraction of an outer object NP, but not an outer infinitive.

The upshot of these facts is clear: when they take infinitival complements, ask, teach, allow, and similar verbs not only diverge from promise with respect to control, they fail to show any of the latter’s double object behavior. Instead, the three pattern
like persuade, force, and other object control verbs. The correlation between control behavior and double object complement structure observed with promise thus is maintained, even in the case of ask, teach, and allow. What is different about these verbs is that their double object complementation with NP objects is not carried over to infinitival complementation. Instead, a new pattern seems to assert itself, one like the pattern observed with force and persuade.

This last result raises a natural question: why does a new pattern of complement structure emerge with ask, teach, and allow but not with promise? To answer this, we must examine the verbs in question more closely.

5.2.1. Ask. The problematic status of ask is directly clarified by certain additional facts. Observe first that ask departs sharply from promise in its NP complementation. Specifically, whereas the latter shows the familiar oblique dative double object alternation (56a), the former does not (56b). In place of to, ask must employ the nondative preposition of (56c):

(56) a. Mary promised John an apple.
    b. Mary asked John a question.
    c. *Mary asked a question to John.

This fact is significant since it is not clear that V–NP–of–NP and V–NP–NP frames are transformationally related; nor is it clear, even if they are related, that it is the oblique form that represents the underlying c-command relations (as with promise). Consequently, although promise and ask share a surface V–NP–NP form, it is not evident that this corresponds to the same syntactic structure in the two cases.

This point is strengthened by a second important difference between ask and promise. Whereas ask shows V–NP–NP and V–NP–Infinitive forms like promise, it also permits a V–NP–Interrogative complementation, which promise does not:

(57) a. Mary asked John \{ a question/the time to sing when to sing \}.
    b. Mary promised John \{ a song to sing *whether Bill would sing \}.

Notice furthermore that, intuitively, the interrogative semantics of ask overtly expressed by the wh-clause in (57a) is also covertly present with the NP and infinitival complements. Infinitives with ask appear always to be understood as implicit polarity questions; for example, (58a) seems closely related in meaning to (58b):

(58) a. Mary asked John \{ to sing if he would sing \}.
Likewise, outer NPs with *ask* are largely restricted to two kinds: NPs that refer to questions (explicitly or implicitly) (59a), or NPs constituting ‘‘concealed questions’’ in the sense of Grimshaw (1979):18

\[(59)\]

\begin{align*}
\text{a. } & \quad \text{Mary asked John} \begin{cases} \text{that same question} \\
\text{something} \end{cases} . \\
\text{b. } & \quad \text{Mary asked John} \begin{cases} \text{the time} \\
\text{the height of the building} \end{cases} .
\end{align*}

*(Compare Mary asked John \{what the time is \\
\text{what the height of the building is}\} .)

Taken together, these data suggest the following view. Despite surface appearances, *ask–NP–NP* and *ask–NP–*Infinitive are not analogous to *promise–NP–NP* and *promise–NP–Infinitive*. Whereas the latter are dative constructions, the former are essentially ‘‘disguised’’ variants of *ask*’s V–NP–Interrogative pattern. This conclusion is supported by the nondative behavior of *ask* with NPs (56) and by the semantics of infinitival and outer NP complements (57)–(59), which are always interpreted as ‘‘concealed’’ questions, or as referring to questions.

Given this result, the issue of control with *ask* now reformulates itself in an interesting way. Notice that object control with *ask* will be explained if outer complements to *ask* are uniformly interrogatives, and if interrogatives project ‘‘lower’’ than the inner, theme object: the latter will be the minimal c-commander for an outer infinitive, yielding object control under the MDP, as in (60). As it turns out, there are independent grounds for expecting interrogatives to project in this way. Interrogative complements to *ask* (and similar verbs such as *inquire* and *wonder*) evidently represent a form of indirect speech, and as discussed by Munro (1982), indirect (and direct) speech complements are treated quite generally across natural languages as adjuncts or oblique phrases, failing to trigger transitivity marking and other syntactic processes expected with genuine object-like arguments (see Munro (1982) for detailed discussion). If interrogative complements to *ask* are indeed thematically adjuncts or obliques, then their inferior structural position vis-à-vis the object is directly accounted for by the principle in (31b). The latter

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18 Examples involving *ask . . . a favor* represent a rather complex case. Note that *a favor* in (i) is not understood as a concealed question, nor does the NP itself refer to a question. Note also that with *a favor*, *ask* permits not only an oblique form with *of*, but also one with *for* (ii):

\[\text{(i) } \quad \text{John asked Mary a favor.}
\]
\[\text{(ii) } \quad \text{a. } \quad \text{John asked a favor of Mary.}
\]
\[\quad \text{b. John asked Mary for a favor.}
\]

It seems that *a favor* may be understood both like an infinitival—that is, as a disguised polarity question (iii)—and like the theme object of *for*; however, the source of this ‘‘ambiguity’’ is unclear to me at the moment:

\[\text{(iii) } \quad \text{a. John asked Mary to do a favor.}
\]
\[\text{b. John asked Mary if she would do a favor.}
\]

(See footnote 19 for further discussion.)
ranks themes higher than obliques on the thematic hierarchy, and furthermore requires this thematic prominence to be reflected in structural prominence at D-Structure.\textsuperscript{19}

5.2.2. Teach. The verb \textit{teach} is similar to \textit{ask} in allowing interrogative as well as nominal and infinitival complements:

\begin{equation}
\text{(61) Mary never taught John } \begin{cases}
\text{a. that song} \\
\text{b. to sing} \\
\text{c. why he should care about tumblebugs}
\end{cases}
\end{equation}

Furthermore, again as with \textit{ask}, an intuitive interrogative semantics appears to assert itself with infinitives and certain nominals. Infinitives like (62a) are very naturally understood as concealed “how to” questions, as in (62b). And nominal examples like (62c)

\textsuperscript{19} T. Stowell has pointed out to me that the account of “shifting control” given in section 5.1 for \textit{promise} will accommodate the corresponding phenomenon with \textit{ask}. Observe that although \textit{ask} is normally object-controlled, Passive in its complement appears to license subject construal, despite the fact that no double object derivation is involved:

(i) a. John asked Mary to leave.
   b. John asked Mary to be allowed to leave.

As Stowell observes, in certain usages the intuitive semantics of \textit{ask} seems to involve a transfer of possession, as with \textit{promise}. However, the transfer of possession is understood as going in different directions in the two cases: to the subject from the object in the former, and from the subject to the object in the latter. Compare:

(ii) a. John asked Mary a favor (and she got it).
   b. John promised Mary a favor (and she got it).

Suppose then that examples like (ii), like their counterparts with \textit{promise}, do not in fact involve control but instead involve construal by “transfer of possession” entailments. Then we expect the subject to be associated with the infinitive under (an appropriately modalized form of) the entailment:

(iii) X—asks—Y—for Z \rightarrow X gets Z
are naturally construed along the lines of (62d):

(62) a. John taught Felix to sing.
    b. John taught Felix how to sing.
    c. John taught Felix a song.
    d. John taught Felix how to sing a (certain) song.

These data suggest that at least some examples with teach like (61b) and (62a) might be analyzed parallel to ask, with infinitives projected similarly to an interrogative clause. However, there is an important additional fact about teach that bears on control. Unlike ask, teach is a true dative-shifting verb:

(63) a. Mary taught a new song to John.
    b. Mary taught John a new song.

Since teach has not only an interrogative pattern like ask but also a dative pattern like promise, it follows that we cannot rest with saying that teach shares the former’s control behavior. Clearly, we must also say something about why it doesn’t seem to show the control behavior of promise. Since teach exhibits both of the basic complementation patterns, why doesn’t it exhibit both control paradigms as well?

The answer appears to lie in the interpretation of infinitives when they are inserted into promise-type structures with teach. Recall that infinitival complements of teach and promise distribute differently in that the latter allows an oblique dative form whereas the former generally does not:

(64) a. John promised Mary to leave.
    ?John promised to leave to Mary.
    b. John taught Mary to sing.
    *John taught to sing to Mary.

Note also that simple infinitival complements are fully well-formed with promise, but generally ill-formed with teach:

(65) a. John promised to sing.
    b. *John taught to sing.

(Compare John taught how to sing.)

Interestingly, there is a context in which both sets of examples improve—namely, when they can be understood as conveying an injunction of some kind, typically moral:

(66) a. Jesus taught \{[to honor thy father and mother] \}.
    (Compare Jesus taught \{‘‘Honor thy father and mother!’’\}.)
    b. ?Jesus taught [to love thy neighbor] [to the people of Galilee].

Under this type of construal, infinitival complements of teach also behave analo-
gously to those of promise in another respect. In this situation such complements denote something that can be referred to by a nominalized form of the verb:

(67) a. John promised [to sing].
    Q: What was his promise?
    A: To sing.

b. Jesus taught [to love thy neighbor as thyself].
    Q: What was his teaching?
    A: To love thy neighbor as thyself.

These data point to the following view. Contrary to initial impressions, teach does in fact realize both its ask-type complementation and its promise-type complementation with infinitives. The former is represented by infinitives on their “how to” reading; the latter is represented by infinitives on their “injunctive” reading. This then suggests why the expected subject control behavior of teach is missing. If the promise-type infinitives with teach always have an injunctive reading—in other words, are always understood essentially as “concealed imperatives”—then their understood subjects are always in a sense antecedently fixed.\textsuperscript{20} As a matter of semantics, they must always be construed as referring analogously to generic you or one in examples like You should always look both ways before crossing the street or One should always look both ways before crossing the street. The expected infinitival complementation pattern with teach is thus present, but promise-type subject control is excluded on independent grounds.

It is natural to wonder why infinitives with teach take on injunctive force in promise-type constructions. Although I don’t have a secure answer, the data in (67) suggest a clue. Recall that in promise-type constructions, infinitives are inserted in the position of themes and thus behave essentially as NPs—that is, as “thing”-denoting expressions—and not as clauses. Suppose the way this occurs is that the infinitive is understood as nominalizing the action of the verb: as denoting “the promise” or “the teaching.”\textsuperscript{21} Interestingly, in the latter case there appears to be a strong tendency for the notion of “teachings” to be understood with some kind of implicit proclamatory force. One might

\textsuperscript{20} The notion of “concealed imperatives” appears to apply in other cases beyond teach. Consider the verbs order and tell in examples like the following:

(i) John \{ a. ordered \b. told \}
    Mary to leave immediately.

Intuitively, ordering and telling (in the sense of (i)) involve the issuing of a command. Canonically, the semantic notion of “command” is realized by an imperative, as in the direct quotational variant of (i):

(ii) John told Mary, “Leave immediately!”

Note that if we assume imperatives to be projected like other direct and indirect speech complements, we derive that the “concealed imperative” infinitives in (i) are projected lower than the object NP and hence must show object control under the MDP.

\textsuperscript{21} In this connection it is interesting to recall the familiar paraphrase relation between (i) and (ii):

(i) a. I promise you that X.
    b. I give you [my word that X].

This once again illustrates the basic dative character of promise and underscores the notion that in promising, the clause—understood as the promise—is conceptualized as a “thing” passing from the agent to the goal.
speculate, then, that the injunctive reading of infinitives with teach arises through the requirement that they be understood as nominalizations of the verbal action, together with the way such nominalizations are understood with this particular verb.

5.2.3. Allow. The verb allow is similar to teach in showing a true double object alternation (68) and hence raises a similar question regarding why this alternation is apparently not expressed with infinitives:

(68) a. The judge allowed a last request to Lizzie.
    b. The judge allowed Lizzie a last request.

As in the previous cases, certain additional properties of allow not manifested by promise suggest an answer. Recall first that allow differs significantly from promise in permitting Exceptional Case Marking (ECM) complements; this difference is illustrated by the availability of expletives and idiom chunks in the complement of allow versus their unavailability with promise:

(69) a. The government will never \{allow *promise\} there to be a demonstration.
    b. John \{allowed *promised\} the cat to get out of the bag.

Thus, whereas V–NP–Infinitive with promise involves a double object structure, with allow the situation is evidently more along the lines of (70), where what follows allow is a clausal constituent:

(70)

\[
\begin{array}{c}
\text{VP} \\
\text{NP} \\
\text{the judge}
\end{array} \quad \begin{array}{c}
\text{V'} \\
\text{V} \\
\text{allow}
\end{array} \quad \begin{array}{c}
\text{IP} \\
\text{NP} \\
\text{Lizzie}
\end{array} \quad \begin{array}{c}
\text{I'} \\
\text{to}
\end{array} \quad \begin{array}{c}
\text{VP} \\
\text{escape}
\end{array}
\]

\[22\] Mittwoch (1976) observes that allow and permit have the apparent notional status of causatives-of-modals. Thus, (ia) is conceptually quite close to what is represented in (ib):

(ia) a. John allowed Mary to leave.
    b. John CAUSE [Mary can/may leave].

Given the canonical character of causatives as ECM verbs, this observation perhaps offers the beginnings of an explanation of why allow and permit take an ECM complement.
Given this result, our original question with *allow* assumes a different and somewhat sharper form. Instead of inquiring why the dative complementation of *allow* fails to manifest itself when the latter occurs with infinitives, we are now interested in how dative and ECM complementations are related with *allow*.

A plausible answer can be adapted from Mittwoch (1976), who proposes, in effect, that V–NP–Infinitive frames for *allow* and *permit* license an ECM structure together with an implicit dative argument.\(^{23}\) On this view, examples like (71a) receive the form in (71b), where *(to Lizzie)* is the implicit oblique:

(71)  a. The judge allowed Lizzie to escape.
      b. The judge allowed [Lizzie to escape] (to Lizzie).

This analysis can capture the familiar deontic versus epistemic ambiguity observed in (72), where, on the former reading, the government grants permission to John, and where, on the second reading, the government simply allows the situation to occur:

(72)  The government allowed John to leave.

Specifically, we can understand the former as the case where the implicit dative is construed with the ECM subject (73a), and the second as the case where the implicit dative is construed as a generic or arbitrary pronoun equivalent to *one* (73b):

(73)  ... *allow/permit [\(\alpha\) to VP] (to \(\beta\))
   a. Deontic: \(\beta = \alpha\)
   b. Epistemic: \(\beta = \text{pro}_{\text{arb}}\)

If this proposal is on the right track, then the differential control behavior of *promise* and *allow* is explained straightforwardly. We see that despite superficial similarity, the pair in (74) involves control only in the first member; the second is an ECM structure:

(74)  a. John promised Mary to leave.
      b. John allowed Mary to leave.

Furthermore, we observe that the dative complementation of *allow* manifested with NP objects is in fact preserved in its infinitival complementation. Under our adaptation of Mittwoch (1976), ECM structures with *allow* are actually oblique dative structures with the ECM complement corresponding to the theme object and with an implicit oblique dative argument whose identity determines the understanding of the complement as deontic versus epistemic. As in the previous cases, then, the status of *allow* as a counterexample to the MDP appears to dissolve on a more careful examination of its specific grammatical properties.

\(^{23}\) For discussion of implicit dative arguments, see Brody and Manzini (1988) and Larson (1988b). It should be stressed that the account of *permit* and *allow* given in Mittwoch (1976) actually involves both ECM structures with an implicit dative argument and a "deontic" reading, and a control structure involving a PRO subject. Hence, the analysis proposed here, which eliminates the second and retains only the first, is a simplification of Mittwoch’s own views.
References


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