THE GRAMMAR OF SPANISH CAUSATIVE COMPLEMENTS

by

IVONNE A. BOPDELOIS

Profesora en Letras de la Facultad de
Filosofía y Letras de la Universidad de Buenos Aires

1958

SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE

DEGREE OF DOCTOR OF

PHILOSOPHY

at the

MASSACHUSETTS INSTITUTE OF

TECHNOLOGY

June, 1974

Signature of Author... Jumne Bodeleit

Department of Foreign Literatures & Linguistics

June 10, 1974

Certified by... Mavis Devery

Thesis Supervisor

Accepted by... Mavis Devery

Chairman, Departmental Committee
on Graduate Students
THE GRAMMAR OF SPANISH CAUSATIVE COMPLEMENTS

by

Ivonne A. Bordelós

Submitted to the Department of Foreign Literatures and Linguistics on June 10, 1974 in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

ABSTRACT

This thesis explores the nature of Spanish Causative Constructions, attempting to relate them to similar constructions in other Romance languages.

In the first chapter, a correlation is established first between Causative complements and other Infinitival complements, second, between causative verbs all across simplex and complex structures, the whole net of correlations being formally contained in the Isomorphic Principle. A distinction in subcategorization features is postulated for transitive and intransitive Causative complements, and the efficiency of this grammar is being tested against transformations such as Passive, Marking, Clitic Movement and Extraction.

In the second chapter, the Crossing Constraint is presented, according to which some of the outputs of derived Causative complements are to be rejected, since they enter a crossing configuration relating pairs of constituents linked to their respective traces under conditions of control. This configuration is shown to be illegal for many other derivational types involving different classes of transformations; examples from French and English are given in support of the validity of the constraint. The application of the Crossing Constraint to Causative clauses confirms, furthermore, the analysis offered in the first chapter.

In the conclusions, a brief comment is made about the possible scope and consequences of the Isomorphic Principle and the Crossing Constraint for the general theory.
To the memory of my mother,
Felisa Magdalena,
who always contended that I
studied too much.
ACKNOWLEDGMENTS

Thanks be given to Gillian Cane, Ellen Kaufman, Lisa Selkirk, Joan Maling, Joan Bresnan, Emily Pope, Nomi Erteschik, Tanya Reinhart, and Donna Jo Napoli; to Katya Chvany; to Miriam Eccles, Anne Rapkin, Frances Kelley and Nancy Peters; to Francois Dell, Joseph Emonds, Michael Braine, Stephen Anderson, Ray Jackendoff, Carlo Quicoli, Roger Higgins, Jean-Roger Vergnaud, Richard Oehrle, John Goldsmith, Alberto Rivas, and Joan Mascaro; to Noam Chomsky, who honored me by treating me as an equal; to Kenneth Hale, who was rich in patience and extraordinary linguistic insights; to James Harris, who generously gave time and unconditional support; to David Perlmutter, John Ross and Paul Kiparsky, who all provided me with inspiring questions; to Hugh Matthews and his unforgettable smile; to Lauri Karttunen, the most enthusiastic among my teachers; and last but not least, to Morris Halle, who, all along enlightening discussions and in spite of considerably serious personal disagreements, managed to persuade me, on more than one occasion, not to leave M.I.T.

To be honest, acknowledgments should be inseparable from griefs. Being a foreigner, a woman, and almost forty years old has not been an easy task for me at M.I.T.; actually, I believe I have had to pay an outrageous price for this in several respects. After all, this has been my own choice; for "Tech is hell", as I was fairly warned by Morris from the very beginning. Hell, however, may also be a place where science and wisdom are acquired - at your own risk, that's true. And in the tradition I come from, hell is only a previous
and necessary step towards resurrection.

For those who come after me, foreigners, women or exiles, I wish them to be strong enough to keep persevering, all along the way, in their hope for resurrection.
# TABLE OF CONTENTS

FOREWORD. ................................................. 6

CHAPTER 1: THE ISOMORPHIC PRINCIPLE. ................. 9

  I. The Given. ........................................... 9
  II. The Background. ................................... 14
  III. The Transitive Tree. ............................... 33
  IV. The Intransitive Tree. ............................. 66
  V. The Case of the Embedded Dative. ................... 77

Footnotes to Chapter 1 .................................. 84

CHAPTER 2: THE CROSSING CONSTRAINT. ................... 89

  I. Intraposition. ....................................... 90
  II. The Crossing Constraint. .......................... 102
  III. Coming Back to the Isomorphic Principle. ....... 125

Final Conclusions. ....................................... 131

Footnotes to Chapter 2 ................................. 134

REFERENCES. .............................................. 135

BIOGRAPHICAL NOTE. ..................................... 139
who pays any attention

to the syntax of things

will never kiss you wholly

e.e. cummings

Rather than an object,

language is a being

Maurice Merleau-Ponty
FOREWORD

This work was originally aimed at describing the structure of causative complements in Spanish within the framework of generative grammar.

Given the paucity of studies on Spanish from the point of view of transformational theory, one may wonder why this very specific topic should have been chosen as the subject of a thesis. Originally, these constructions attracted our attention because of the exceptional behavior of Clitic Movement within their scope. Trying to design a grammar which could satisfactorily deal with these peculiarities led us progressively to inspect other syntactic idiosyncrasies of causative complements, and to obtain a clearer image of the general mechanism at work in them.

In a way, we considered causative complements a test case for the grammar, because their striking difference with respect to other complements and with root sentences seemed to require, at least as a first approach, a heavy transformational apparatus. At the same time, causative structures, while "deviant" from the point of view of the superficial ordering of their elements, appear to be surprisingly resistant to the application of normal cyclic transformations within their own scope. Thus they are exceptional, not only in that their extrinsic arrangement seems to imply some extramachinery, but also in that the normal transformational machinery has to be prevented from applying under their domain. It is in this sense that they represent an interesting challenge for a theory which strongly—and reasonably—tends to
question and restrict the power of its devices.

Given the variety of its sentential complements, Spanish appears to provide an ideal field to study these constructions, since the richness of the existing contrasts permits the illumination of many of the peculiarities of these structures. On the other hand, the important role played by the feature of Animacy, which is particularly transparent in Spanish and other Romance languages, must not be overlooked in their description. But in its full scope, this work tries to capture generalizations that carry beyond the specific characteristics of Romance Causatives and which concern the treatment of the intriguing anomalies we have mentioned above in an explanatory way, thus enriching the actual form of the theory.

In particular, we would like to invite the reader to focus on two basic notions that will be presented in the course of our description, which are:

- The Isomorphic Hypothesis, an attempt to systematically correlate simplex and complex sentences in terms of conditions of subcategorization.

- The Crossing Constraint, which precludes the emergence of certain sentential outputs exhibiting a particular crossing configuration, under coreferentiality.

In the first chapter, we will try to show the strength of the Isomorphic hypothesis at work in the relation that articulates Causative Complements—as well as Infinitival Complements in general—across simplex and
complex structures, and the specific consequences that derive from this hypothesis for the analysis of transitive and intransitive clauses embedded under hacer, which are to be represented in two different —although cognate—trees.

In the second chapter, we will show how some of the possible derivations of causative structures are to be ruled out by the Crossing Constraint, which, of course, being a general principle, applies as well to other structures, also to be considered and exemplified in that chapter.

The final conclusions will explore the place and the significance of these general notions for Linguistics, and will propose some of the possible questions to be pursued in the direction they open.
CHAPTER 1
THE ISOMORPHIC PRINCIPLE

I. The Given

By causative constructions we understand here the infinitival complement embedded under the verb hacer, as in

1) Me hizo leer el libro
He had me read the book

Similar constructions are to be found embedded under dejar (let), oir (hear) and ver (see), which we will call also causative constructions, even though, in the case of the last two, no causation is implied in their meaning. It is a fact that in many languages all of these verbs enter in a very particular type of construction, but for most of them it is the verb expressing the causative meaning which represents the paradigm case, thus justifying the choice of this label here.¹

Syntactically, the most striking feature of these complements is their total lack of auxiliaries; that is, not only are they tenseless, but also Perfect, Progressive and Passive Auxiliaries fail to appear in their environment, as the following examples show:

Perfect:
2) *Me hizo haber comprendido
He made me have understood (Perfect)

Progressive:
3) *Te hará estar jugando
He will make you be playing (Progressive)

Passive:
4) *Lo hizo ser detenido
He had him be arrested (Passive)

All of these sentences are perfectly acceptable
in the absence of the corresponding Auxiliaries:
5) Me hice comprender
   He made me understand
6) Te hará jugar
   He will make you play
7) Lo hizo detener
   He had him arrested
Notice that this is not at all the case for other
Infinitival Complements—in Spanish as well as for
English—. For instance:
8) Siento haber ido allí
   I regret having gone there (Perfect)
9) Querría estar bailando
   I would like to be dancing (Progressive)
10) Espero ser admitido
    I expect to be admitted (Passive)

Notice also that in Spanish, however, hacer does not
take only this auxiliariesless acomplement; we find just
as well a tensed form expressed in Subjunctive, as shown
in:

11) Hizo que yo leyera el libro
    He had me read(Past Subjunctive) the book
This alternation between infinitival and subjunctive
clauses is not restricted to hacer; a verb like ordenar
(order) exhibits the same contrast, parallel to (1) and
(11):

12) Me ordenó leer el libro
    He ordered me to read the book
13) Me ordenó que leyera el libro
    He ordered that I read the book
But a significant difference separates these complements.
While subjunctive and infinitivatum clauses may always
alternate under ordenar, this is not the case under hacer, as witnessed in the following examples:

14) La bomba hizo explotar el edificio
The bomb made the building explode

15) ?La bomba hizo que el edificio explotara
The bomb brought it about that the building exploded

Sentence (14) may be considered as expressing a sense of immediate causation. On the contrary, the strangeness of (15) seems to stem from the fact that the subjunctive counterparts of the infinitival complements convey a meaning of non immediate causation, which is at odds with the semantics of the environment in this particular case, since "non immediate causation" is hard to attribute to inanimate subjects in the context of "expLOTAR". In fact, Hacer + Subjunctive conveys the meaning "brought it about that" rather than one of immediate causation – a difference similar to the one existing between "killing" and "causing to die" or "breaking" and "causing to break" (as seen by Fodor (1970)). Thus although one might say:

16) El detective descubrió que fue el rayo, y no la bomba, lo que hizo que el edificio explotara
The detective discovered that it was the lightning and not the bomb, which made the building explode

, it is also true that in this specific case one has to be referring to the event of the explosion as dissociated, at least speculatively, from its source -- whereby the subjunctive becomes acceptable within this context.

By themselves, these considerations are useful in questioning the possibility of relating the tenseless and the tensed complements of hacer by means of a trans-
formation. Besides the semantic differences, however, one may find many other gaps in the syntax of the infinitival complement when compared with its tensed counterpart:

18) Una pura coincidencia hizo que el plato volador fuera visto por el chico (Past Subjunctive)
19) *Una pura coincidencia hizo ver el plato volador por el chico (Infinitive)
Cheer chance permitted the kid to see the flying saucer.

20) El escándalo hizo que se criticara al gobierno
21) *El escándalo hizo criticarse al gobierno
The scandal made people criticize the government
22) Su ironía hizo que su respuesta me irritara
23) *Su ironía hizo irritarme su respuesta
His irony made his answer irritating to me
24) La codicia de las compañías americanas hizo que hubiera escasez de combustible
25) *La codicia de las compañías americanas hizo haber escasez de combustible
The greed of American companies caused there to be a fuel shortage
26) El mago hizo que empezara a llover
27) *El mago hizo empezar a llover
The magician made the rain begin to fall

These gaps have been enumerated only to show the many ways in which the tensed and the tenseless complements of hacer differ, making a transformational analysis relating them highly implausible. On the other hand, there are certain processes that seem to take place only within the scope of hacer plus infinitival complement. Thus consider the behavior of the reflexive se (third person singular here) in the following examples:
28) El se arrodilló
    He knelt down
29) *El arrodilló
30) Hicieron que se arrodillara
    They had him kneel down (Subjunctive)
31) *Hicieron que arrodillara

We find acceptable, however, the following
32) Lo hicieron arrodillar

but also, in other dialects – and sometimes coexisting in
the same dialect, as mine
33) Lo hicieron arrodillarse

In other words, a reflexible may be missing in a causative
complement – as in (32) – which is obligatory elsewhere.

Let us now review our summary of peculiarities of Hacer
complements:

- Total lack of Auxiliaries;
- Specific semantic interpretation in the
  sense of Direct causation;
- Defectiveness with respect to diverse
  syntactic processes;
- Exceptional syntactic behaviour, as in
  (32).

To these we may add the very particular subject final
ordering that these complements exhibit, when transitive,
at the surface level, which we shall discuss directly in
the following chapter. Taken all together, these
characteristics call for a unitary description – unless we
resign ourselves to marking them as separate exceptions to
many relevant syntactic processes. It is our contention
that the apparent exceptionality of these complements
conceals indeed some of the deepest features of grammatical
processes present in Romance grammar. To the study of these regularities are devoted the following sections.

II. The Background

In order to correctly introduce the questions of what structures should be assigned to causative complements according to the Isomorphic Hypothesis which we are going to state in this chapter, a look at the other structures available within the system of infinitival complements appears to be indispensable. Therefore, we shall briefly review the major classes of those complements, leaving aside the cases where the subject of the infinitive clause is present in surface structure, i.e., when it has not been raised or deleted by previous transformations, and it shows in a nominative form cooccurring with the noninflected verb. This is the case of Adverbial Classes in Spanish, as shown in:

1) Al llegar Roberto empezó el truco
   Upon Roberto's arrival, the truco (game) began
2) Llegar ellos e irnos nosotros fue todo uno
   Their arrival and our leaving was all the same
3) Informed el general de estar cerca el enemigo,
   dio la orden de combate
   Informed of the enemy proximity, the general gave
   the order to fight

Sketchy as it may be, we consider this presentation necessary in order to understand what is really specific to Causative Complements, and what they share with other infinitival Complements. Present and past descriptions of these structures have stressed above all their idiosyncracy, to be captured necessarily by exceptional transformations or features projected onto them; what
follows is rather an effort to reduce the apparently irreducible singularity of these complements by assigning them a natural place within the whole set of infinitival clauses, without requiring from the grammar unnecessary extra machinery to describe them.

In studying this set, we will adopt the assumptions current in the analysis of similar structures in English, according to the most widely accepted transformational practice and theory. Even if this analysis is specifically intended to be valid for Spanish, its principal claims are likely to be appropriate also for Italian, French, Portuguese, and Catalan, where most of the decisive arguments and data presented here may find their correspondence. If so, the grammar of Causative Complements might be seen as a particular chapter of the grammar of Romance languages. This chapter is intended to be a contribution, from the Spanish point of view, to this hopefully not too utopian adventure.\(^5\)

The complements we will be studying fall into two large categories:

I The subject of the embedded clause is transformationally related to the Subject position in the matrix clause. Two subclasses are to be found here:
   a) Equi NP Deletion verbs (Subject Controller). \(\text{Example: } \text{Querer (want)}\)
   b) Raising Verbs (Raising into Subject Position).
      \(\text{Example: } \text{Parecer (seem).}\)

II The subject of the embedded clause is transformationally related to an Object position in the Matrix Sentence. Equi NP Deletion verbs. \(\text{Example: } \text{Invitar (invite).}\)
An obvious question here concerns the possible complementary existence of subjects raised to—rather than deleted from—an object position, for which we find no positive answer in our data, with which we leave the question open for further research.

Let us now briefly enumerate the most significant features for each category.

I A) Equi NP Del Verbs (Subject Controller)
   Example: Querer (want). 7
4) Quiero ir a casa
   I want to go home
   Other examples are: decidir (decide), preferir (prefer), esperar (expect, hope).

The sentential complements of these verbs may include auxiliaries:
5) Siento haberlo hecho
   I regret having done it
6) Espero poder empezar mañana
   I expect to be able to begin tomorrow
7) Preferiría estar bailando
   I would rather be dancing

They also allow for Clitic Movement, a transformation which turns out to be crucial in the study of causative constructions. Since the matter is going to be relevant to our discussion, let us indicate some properties of clitics, which behave in a specific way in the presence of infinitival complements, and whose morphological characteristics are assembled here:

<table>
<thead>
<tr>
<th>First Person</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masc./Fem.</td>
<td>me</td>
<td>nos</td>
</tr>
</tbody>
</table>
Second Person  
te  

Third Person  

This table refers only to object (oblique) pronouns. Subject pronouns—normally deleted, unless they are emphatic—are: yo, tú, él/ella for the singular and nosotros/nosotras, ustedes, ellos/ellas; unlike French, they never cliticize to their respective verbs.

Combinations of le(s) / lo, la(s) yield se lo(s), la(s), according to a rule named by Perlmutter (1968) the *Spurious Se rule*. Se is the form of the third person reflexive pronoun (both for plural and singular) and the mark of certain impersonal constructions. Dative NP complements are copied through the corresponding clitic in all Spanish dialects; in certain regions of Latin America, like my own country, Argentina, the copying of a Direct Complement (+Animate, +Specific) through an Accusative Clitic has become also obligatory.

In Spanish, Clitic objects may optionally climb one or many clauses, provided that an uninterrupted chain of infinitives governed by Egui NP Deletion verbs be on their way. For instance:

10) Querría poder ir a decírselo
    I would like to be able to go to tell it to him
11) Querría poder [írse]lo a decir
12) Querría poder[selo] ir a decir
13) Se lo querría poder ir a decir

In tensed contexts, however, object pronouns obligatorily procliticize to the inflected verb within the same
sentence:
14) Lo tengo
   I have it
15) Téngolo
   (In fact, (15) is possible in literary language, but never in spoken style).
This complementarity between tensed and tenseless sentences ensures clitic objects a consistent second position everywhere, since tenseless clauses are invariably verb-initial in Spanish—except of course, in the case of Negatives, which may precede the verb:
16) No creer esto es no querer creer en nada
   Not to believe this is not wanting to believe in anything
The regularity of the second position may be observed in:
17) Por decírselo yo, se puso furioso
   Because tell to him it I, he got furious
   Because of my telling it to him, he got furious
18) Porque yo se lo dije, se puso furioso
   Because I to him it told, he got furious
   Because I told it to him, he got furious
We may say that in both cases:
19) Infinitive - [clitic object] - Subject
20) Subject
    Inflected verb
(We assume here, naturally, that nor and porque are to be considered as complementizers). Imperative behave, naturally as Infinitives, being tenseless as they are; the same holds true, as expected, of gerunds.
Italian follows the same pattern as Spanish; they both differ from French, where clitics only procliticize, regardless of the form of the verb:
21) Je le veux
    I want it
22) Je veux le faire
   I want to do it
Let us now move to one the following category.
   I B) Raising verbs:
These verbs are described as having an empty subject
in deep structure - a fact corroborated by their limitless
selectional restrictions. Among them is the classical
Parecer (seem):
   23) Parece haber quedado afectado por la noticia
     He seems to have remained affected by the news
Other examples are Empezar (begin), which appears also in
root configurations as an Equi NP Del. Verb - we presuppose
here an analysis à la Perlmutter (1970b). Same structures
are to be assigned to Tender (tend), and Soler (be frequent).
From the example above, one may easily see that Auxiliaries
are freely accepted in the embedded sentence without
restrictions. Interestingly enough, Clitic Movement is
disallowed in this context:
   24) Parecía proponérmelo
     He seemed to propose it to me
   25)*Me lo parece proponer

Clearly enough if us compare (25) with (13) = Se lo querría
poder ir a decir, derived structures obtained through
Raising or Deletion appear to behave differently with
respect to clitic movement since only deletion verbs
like querer allow for it. One might wonder whether a
theory of traces would be of any help here; unfortunately,
French seems to offer some evidence that a distinction
between Raising verbs and Equi NP Deletion Verbs in terms
of traces is not available, at least in what respects
liaison phenomena, and the concomitant phonological evidence,
according to Selkirk (1972), who notes the fact that
liason is present in both cases. Therefore the difference between querer and parecer in this sense remains to be explained on some other grounds, a question we will explore when examining intransitive clauses under hacer.

II A) This category consists of those verbs taking an object controller in the matrix sentence - as force in English. Although these verbs show up in a manyfold variety in surface structure, they may be easily reduced to a very simple classification, as we will show below. Let us first consider their surface properties with the following examples:

- Verbs in this category introduce their Infinitival Complement either directly or preceded by the preposition a:

26) Nos ordenaron barrer el patio
    They ordered us to sweep the court
27) Nos invitaron a barrer el patio
    They invited us to sweep the court

- The controller NP - that is, the matrix object that controls the embedded subject under Equi - may be marked either as a Dative or as an Accusative, depending on the verb:

28) Le ordenaron barrer el patio
    To him they ordered to sweep the court
29) Lo invitaron a barrer el patio
    Him they invited to sweep the court

Any other marking would result in ungrammaticality:

30) *Lo ordenaron barrer el patio
31) *Le invitaron a barrer el patio
   (We do not consider here, of course, those Spanish dialects where the distinction between lo and le
has been merged in favor of the last).

- Finally, the controller and the Infinitival Clause may freely exchange positions in surface:

32) Les ordenaron a los chicos barrer el patio
   They ordered the kids to sweep the court
33) Les ordenaron barrer el patio a los chicos
34) Los invitaron a los chicos a barrer el patio
   They invited the kids to sweep the court
35) Los invitaron a barrer el patio a los chicos.⁹

The facts above described suggest a number of questions, the most obvious one concerning the level of predictability of these data. For instance, one may wonder whether the difference in case marking, accusative or dative exhibited by the controllers, is governed by their respective verbs — i.e., it is lexically assigned — or else may be deduced on the basis of more general facts. Our claim is that each of these features is indeed thoroughly predictable, and that they are the natural consequence of the application of very elementary rules interacting with usual conditions of subcategorization.

In order to prove this, we will introduce the question by recalling some facts that are operative at the simplex sentence level, concerning the relation between Accusative and Dative complements.

A marking rule introduces in Spanish the preposition a before an indirect object; that is, we get from the sequence \( V_1 \, NP_2 \, NP_3 \) the surface string \( V_1 \, NP_2 \, NP_{a+3} \):
36) Prestarás atención al poeta
You shall pay attention to the poet
A is also present before (+ Animate), (+ Specific) Direct Objects.

37) Vimos a Jorge
We saw Georges

Thus two sequences of a PP's are possible in certain cases:

38) Presentamos a Jorge al poeta
We introduced Georges to the poet

Only Direct Complements (i.e., Accusatives) may be passivized in Spanish. Thus:

39) Jorge fue visto por nosotros
Georges was seen by us

40) *María fue dada pan por mí
Mary was given bread by me

However, there is a rule that intrapose Dative complements, since, we find parallel to:

41) Le di el pan a María
I gave bread to Mary

42) Le di a María el pan
I gave Mary the bread

I will refer to this process henceforth as intraposition; it superficially resembles one possible version of English Dative Movement but some important differences, to be studied later on, do not permit us to treat them as one and the same rule.

We may deal with the facts stated above simply by realizing that, since Passive applies to sequences of NP₁ V₁ NP—but not NP₁ V₁ a NP—we can correctly predict
grammatical and ungrammatical sentences by ordering:
   - Passive
   - Marking
   - Intraposition

which will yield the correct results.

These three Transformations, Passive, Marking and Intraposition—will provide by themselves an adequate frame for description of the Infinitival Complements we are analyzing.

Let us consider first the distribution of the complementizer a for the sentential complement. Our data indicate that in fact, it cooccurs with an Accusative controller NP—a as witnessed in (29)-(31).

On the other hand, the absence of a as a sentential complementizer is concomitant with a Dative NP controller; and the proof is provided by (28) and (29); only in the last one, the accusative controller cooccurs with an a complementizer.

Forzar, llamar, enviar, impulsar, etc. (force, call, send, impulse) follow the invitar pattern (Verb a NP—a clause), whereas pedir, rogar, aconsejar, mandar, (ask, implore, warn, command) etc. behave as ordenar. It does not take much imagination to refer these patterns to the ones observed at work in simplex sentences, and to the mutual interplay of Accusative and Dative marking.

Here is where the Isomorphic Hypothesis becomes relevant, which mainly asserts that whenever a given verb enters simultaneously a simplex and a complex frame, both environments should be collapsible by means of the
current notational conventions (parenthesis, braces or bracketed angles) in order to correctly represent the subcategorization features of this verb. Or else, as suggested by Noam Chomsky in a stricter formulation, if a verb enters a complex frame XSW, where $S = \text{sentence}$, then it also enters a simplex frame XYW, where $Y \neq \text{sentence}$.

In the hypothesis we are working here with, the verbal complements we are studying have substantially the same basic form we may observe in simplex sentences, that is:

\[
\begin{align*}
\text{Acc.} & \quad \text{Goal Complement} \\
a. \text{Invitar a los chicos a la fiesta} \\
& \quad \text{To invite the kids to the party} \\
43) & \quad \text{V NP NP} \\
\text{Acc.} & \quad \text{Dative} \\
b. \text{Ordenar la retirada a las tropas} \\
& \quad \text{To order the withdrawal to the troops}
\end{align*}
\]

We will see that any of the NP's may dominate a sentential node, that is, either

\[
\begin{align*}
44) & \quad \text{V NP NP (ordenar)} \\
& \quad \text{or else} \\
45) & \quad \text{V NP NP (invitar)}
\end{align*}
\]

are possible.\footnote{10}

The stipulations of Marking, however, indicate that (44) will require a Dative Controller; while in (45) it will be the NP dominating the Infinitival Complement which will bear, as expected, the complementizer related to goal complements - the controller being in this case
an Accusative. Both for (42) and (43), then, the right-most NP exhibits an introductory a. Further confirmation of the soundness of this analysis is provided by Passive. Let us notice the following contrast:

46) Le fue ordenado barrer la vereda
   Sweeping the sidewalk was ordered to him

47) *El fue ordenado barrer la vereda
   He was ordered to sweep the sidewalk

48) El fue invitado a barrer la vereda
   He was invited to sweep the sidewalk

49) *Le fue invitado a barrer la vereda
   Sweeping the sidewalk was invited to him

Here are the corresponding trees, according to our analysis:

46)  

```
   VP
     \   |
      \  |
       V NP(+ Direct NP (+ Dative) Complement)
           \     |
            \   |
             \  |
              S  (el) barrer la vereda a el (represented by clitic le)
```

48)  

```
   VP
     \   |
      \  |
       V NP(+ Accusative) NP (Goal Complement)
           \     |
            \   |
             \  |
              S  (a el) barrer la vereda
```

The star in (47) corresponds exactly to the one in (49); it illustrates the fact that non-accusative complements may not be passivized in Spanish. On the other hand, the
acceptability of (46) supports the correctness of our analysis, since only NP's may be passivized; therefore the infinitival complement adjacent to ordenar must be dominated by an NP, as we have proposed in (44). That there is no obligatory Object Preposing, but only Subject Agreement, should come as no surprise for a language as Spanish, where sentences surface often as verb initial, and the effect of Passive is shown only in person and number agreement of the verb with the deep object. Notice that a Sentential Deep Object will always be represented as (+ singular) (+ masculine) for all respects concerning agreement matters. Therefore we get (ordenado) in (46), where -o: (+ singular) (+ masculine), and never ordenados (plural) or ordenada (femenine).

The nominal nature of the sentential object is also shown in Pseudocleft:

48) Lo que le ordenaron fue barrer la vereda
   What they ordered him was to sweep the sidewalk
Compere:
49) *Lo que le hicieron fue barrer la vereda

Notice that lo que represents only nominal elements in Spanish. Thus:

50) Lo que le regalaron fue un libro
    What they gave him was a book
but
51) *Lo que vino fue ayer
    What he came was yesterday
52) *Lo que parece es enfermo
What he looks like is sick

Also Pronominalization indicates the presence of a dominating NP node for the sentential complement in ordenar, but not in hacer

53) Le ordenaron regar las rosas a Pedro, y a Margarita también se lo ordenaron.

Compare:

54) * Le hicieron regar las rosas a Pedro y a Margarita también se lo hicieron.

Let us now compare the behavior of clitics in these complements. We have said above that clitics are allowed to climb a series of Infinitives, provided that only Infinitives be in their way, as illustrated in the following contrast:

55) Quiero ir a leerlo a casa
    I want to go to read it home

56) Quiero ir a casa a leerlo
    I want to go home to read it

57) lo quiero ir a leer a casa

58) *Lo quiero ir a casa a leer

where "a casa" in (58) interrupts clitic movement.

This contrast may be compared with:

59) ? Me mandaron hacerlo
    They ordered me to do it

60) Me lo mandaron hacer
Notice that mandar will receive a Dative Controller, while invitatar an accusative one. (In this sense, one may say that it is the regime of the verb which selects among accusative or dative complements the possible controller. I fail to see any semantic or syntactic feature that might enable us to predict when a dative or an accusative is to be chosen as controller for a give verb; why, for instance, ordenar takes a dative but forzar or impulsar an accusative? I assume, however that this distribution should follow from a more general, abstract pattern, which I am presently unable to capture.)

In order to understand our point, the reader must remember that the rule that proposes clitics requires an uninterrupted chain of infinitives in order to operate (the preposition a is considered here as a mere complementizer and therefore does not act as an "interruptor"). This explains why both (58) and (62) are ungrammatical: in the first case, the presence of a casa in the middle of the infinitival sequence prevents lo from climbing; in the second case, it is the presence of the accusative controller which prohibits it.

But when the controller is located at the left most branch of the tree -as it is the case in (52) - and the infinitival way is clear from any obstacle, then the controller itself and whatever clitic objects adjacent to it are free to climb together the top most level of the tree, given the fact that the embedded
subject has been deleted. Graphically:

58)

\[
\begin{align*}
V & \quad \text{VP} \\
& \quad S_1 \\
\text{quiero} & \quad (yo) \text{ ir a casa} \\
& \quad S_2 \\
a & \quad (yo) \text{ leer} \quad \text{lo}
\end{align*}
\]

*Lo quiero ir a casa a leer

62)

\[
\begin{align*}
V & \quad \text{VP} \\
& \quad \text{NP} \\
\text{invitaron} & \quad \text{yo} \\
& \quad S \\
& \quad (yo) \text{ hacerlo}
\end{align*}
\]

*Me lo invitaron a hacer

60)

\[
\begin{align*}
V & \quad \text{VP} \\
& \quad \text{NP} \\
\text{mandaron} & \quad \text{yo} \\
& \quad S \\
& \quad (yo) \text{ hacer} \quad \text{lo}
\end{align*}
\]

Parenthetic NP indicate NP's that have been deleted under identity; such NP's, obviously, do not count as "obstacles" for the clitics to move.

Notice that the conditions we are presupposing here for Clitic Movement to obtain are purely linear and do not require, in particular, the pruning of any sentential structure.

A last feature we may emphasize is the fact that those verbs having a Dative controller do not permit auxiliaries in their complements, cf:

63) *Le ordené estar cantando
*Le ordené haber cantado
   ser arrestado
I ordered him to be singing/to have sung/
   to be arrested

Verbs having an Accusative controller occasionally allow a Passive in their complement:

64) Lo invitaron a ser examinado por el médico
They invited him to be examined by the doctor

but not Perfects or Progressives:

65) *Lo invitaron a {estar cantando}  
    {haber cantado}

Thus categories I and II differ crucially in the admissibility of Auxiliaries in their complements; it is to be noticed that those verbs having no complementizer — like ordenar and hacer — admit no auxiliaries in general, although this is not the case for the invitar type. Thus a clear correlation is established between Auxiliaries and complementizers in this case.

The very simplified frame we have outlined here allows us to draw two provisional conclusions:

a) The marking of the controller corresponds to its original position in the tree and to the operation of the Marking Rule at work in simplex sentences; a NP dominates S in ordenar type.

b) Restrictions on clitic movement are predictable according to the position of the controller;
c) There is a correlation between the presence of an object controller and the lack of auxiliaries in the sentential complement; conversely, Subject Controllers and Raising Verbs — embedded subjects raising into subject position — govern complements that take Auxiliaries freely.

One question might ask about this subject is whether there is any evidence that these causatives are indeed sentential complements as distinct from VP’s for instance. Here we may repeat the arguments given by Aissen (1973), indicating that transformations usually considered to be taking place only under a sentential node are also present in these cases. Thus:

66) El se vistió
   He dressed himself

67) Su padre lo hizo vestirse
   His mother had him dress himself

The presence of the clitic se indicates that Reflexivization has taken place both in (66) and (67); and Reflexivization may be considered to be a typical "sentential" transformation. A similar fact may be observed in

68) El prefirié vivir en Inglaterra
   He prefers to live in England

69) Las circunstancias le hacen preferir vivir en Inglaterra
   The circumstances make him prefer living in England
Equi NP Del has operated equally in (68) and (69). Notice that both these operations — Reflexivization and Equi NP Deletion — involve the presence of a subject, at least for the specific examples we are considering.

Agreement is another feature to be found in these complements:

70) Ellos se volvieron generosos
    They became generous

71) La adversidad los hizo volverse generosos
    Adversity made them become generous

(70) shows an adjective in agreement ((+ masculine and + plural ending os) with its subject (+ masculine) and (+ plural), through a predicative verb, volverse. The same fact obtains in (71), where los is to be interpreted as the subject of the complement. It would be very difficult to account for all of these facts without presupposing the usual tree dominated by and S node these phenomena are currently ascribed to. In fact, the only alternative in sight is to consider these as VP NP complements (as presupposed, actually in the analysis for easy sentences by Lasnik and Fieno (1973)). This choice, however, entails not only a complication of the interrepetive rule that identifies a subject in a tree but also — in Spanish at least — a rather drastic — and in my opinion, entirely unnecessary — revision of the agreement rule, which has to be extended in order to apply not only to VS\[0\] but also to V\[0\]S in this very specific case, if we want to get sentences like (70)
III The Transitive Tree

Once the syntactic status of causative complements has been established, the problem arises of accounting for the superficial order of their constituents and in particular, for the final position of their subjects whenever transitive contexts are involved.

A possible way of handling the problem is to set up one or more transformations, which will lead us to the actual order of constituents such as they appear in surface structure. This was essentially the solution proposed by Kayne (1969), which we rephrase here for Spanish:

Surface Structure

1) Hizo barrer la vereda a Juan
   He had John sweep the sidewalk

Deep Structure

2) Hizo (Juan barrer la vereda)₅

Hacer Attraction

3) Hizo barrer (Juan la vereda)₅

Complement Reordering and a Insertion

4) (Hizo barrer la vereda a Juan)ₜₚ

Under this analysis, a lexically determined transformation, Hacer Attraction - also called Predicate Raising - initiates the process of dislocation of the embedded sentence. A second transformation, applicable only in case the lower verb is transitive, accounts for the
final position of the Subject in such cases; it also results, according to Kayne, in the pruning of the lower sentential node; so that the final outcome strikingly yields a tree very similar to the structure of a VP in a simplex sentence. Graphically:

6) \[ V \rightarrow \text{VP} \]
   \[ \text{hacer} \quad \text{Juan barrer la vereda} \]

7) \[ V \rightarrow \text{VP} \]
   \[ \text{hacer} \quad \text{barrer} \quad \text{NP} \quad \text{NP} \]
   \[ \text{la vereda} \quad \text{Juan} \]

8) \[ V \rightarrow \text{VP} \]
   \[ \text{hacer} \quad \text{barrer} \quad \text{NP} \quad \text{NP} \]
   \[ \text{la vereda a Juan} \]

There is a considerable amount of ad-hocity in this process. First, Predicate Raising operates only under causative verbs; secondly, Complement Reordering works exclusive on the output of Predicate Raising. Although this is a possible way of handling the data and although the simplex-like character on the tree may be useful in relation to other grammatical processes - like Clitic Movement and Quantifier Movement in French,\(^\text{12}\) - there is nothing to recommend this solution as plausible, let alone necessary, in terms of the understanding it provides about the deep syntax of these constructions. Why should causative verbs trigger Predicate Raising? Why should Predicate Raising be followed by Complement Reordering in the transitive cases? Is there any
independent data in the grammar that would make predictable such bizarre behavior on the part of Causative verbs? In our opinion, these questions have not yet been answered because they are, in fact, unanswerable; that is, they presuppose mechanisms for which there is indeed no justification in the grammar, and as such they represent a false enigma. Although Causative verbs exhibit, it is true, some specific and irreducible properties, unshared by other verbs, the transformational way is not necessarily the correct one to capture them. Rather then burdening the transformational component with extramachinery, we would like to explore here - along the lines illustrated in recent work by Bresnan (1972), Higgins (1973) among others - the possibility of an answer in terms of Phrase Structure rules, to see whether they could not provide a more natural solution for this particular problem, with the supplementary help of the Isomorphic Principle.

The approach we want to propose here implies a minimal display of basic and transformational rules and accounts in a unitary way for the most striking properties of causative clauses, including the superficial order of their constituents. This approach advocates.

9) \[(V \ S \ NP)_{VP}\]

for the analysis of causative complements, where NP represents a matrix object holding the role of a controller with respect to the embedded subject. What follows intends to be the defense of a grammar containing such an analysis as the simplest and most
effective grammar for causative constructions when these involve transitive complements. As a first step, we are going to examine the classical objections this analysis may meet. Secondly, we will compare the advantages of this hypothesis - henceforth, the controller hypothesis - when compared to the (V S) analysis, henceforth, the sentential hypothesis - both in terms of Phrase Structure rules and transformations, stressing, in particular, the striking parallelisms to be found between simplex and complex sentences, parallelisms which are expressible only within the (V S NP) frame. A final listing of the pros and cons of each analysis will support - we hope - the reasons of our choice.
THE CONS

I. Passive

Let us consider first the most obvious objection one may raise against a controller analysis: the one concerning the synonymy of Passive in the embedded clause, classically used in English to distinguish between *believe* complements and *force* complements.

While discussing this issue, Kayne (1969, p.107) - who considers the possibility of a V NP S analysis against the V S description he is offering - quotes the following example, which is also valid for Spanish:

10) Je ferai lire ce livre à Jean
Haré leer este libro a Juan
I will have John read this book

11) Je ferai lire ce livre par Jean
Haré leer ese libro por Juan
I will have the book read by John

Sentences (10) - (11) are apparently pairwise synonymous, which, according to Kayne, would contradict a controller analysis, the assumption being that the alternation between deep and derived subjects in the embedded clause is necessarily reflected in the corresponding variation in the matrix controller, with the predictable changing in meaning one may expect in these cases. All we want to show here with respect to these sentences in their relation to the controller analysis is that a deeper look at their properties seems to indicate that transformational relation between the active and passive
version of the embedded sentence is not always granted against what is being presupposed by the sentential analysis. Notice first that from a perspective à la Kayne, it is to be expected that for every active-passive pair one may find at the root level, the same pair will be available at the embedded level—whereas such correspondence is not to be expected for a controller analysis. Thus:

12) I believe John to have read the book
13) I believe the book to have been read by John
14) I forced John to read the book
15) *I forced the book to be read by John

The defectiveness of Passive in relation with force follows naturally from the fact that only Animate NP may be selected as controllers by force and therefore only those embedded Passives yielding derived Animate Subjects are available here.

The defectiveness of Passive, is thus an indication of the presence of a controller in the higher sentence.

Let us now have a look at some significant gaps one may find under causative verbs:

16) Los Magos vieron la estrella
   The Magi saw the star
17) La estrella fue vista por los Magos
   The star was seen by the Magi
18) El ángel hizo ver la estrella a los Magos
   The angel had the Magi see the star
19) *El ángel hizo ver la estrella por los Magos
The angel had the star seen by the Magi

The contrast between (17) and (19) is not to be expected under the sentential hypothesis, and requires some extramachinery to be accounted for. Later on, we will see that the grammatical star on the last sentence is predictable under a series of conditions—which go, in fact, beyond the feature of Animacy on the controller. The examples above displayed have been brought up just to point out the limitations of a sentential analysis in this case; a second array of facts concerns directly the issue of synonymy. Consider the following sentences:

20) El estudiante vio los nervios
The student saw the nerves

21) Los nervios fueron vistos por el estudiante
The nerves were seen by the student

Both sentences are synonymous, and both are ambiguous. On a first reading, they account for a perceptual experience; on a second one, they refer to a research activity undertaken with a certain purpose with respect to the nerves. Now observe:

22) El profesor hizo ver los nervios al estudiante
The professor had the student see the nerves

23) El profesor hizo ver los nervios por el estudiante
The professor had the nerves seen by the student

While the first sentence has the two readings we
described before, only the performative meaning is available for (23): which means that they are not synonymous, and that they do not reproduce the relations to be found at the root level for the same pair of sentences.

It is possible, of course, to implement some filter device which will exclude for (23) the meaning of being shown that the other sentences of the set exhibit; but such device will have to be made operative only under the scope of hacer - an unwanted complication for the sentential analysis.

To conclude, we may say that the behaviour of Passive under causative complements does not prelude a controller analysis; on the contrary, it tends to confirm it. On the other hand, the lack of synonymy and the gaps exhibited in comparing actives and passives under causatives seem to throw considerable doubt on the sentential analysis.

Having spelled out this first apparent difficulty, let us move now to consider a second one: the one represented by weather verbs.

II Weather Verbs

The second objection presented by Kayne concerns weather verbs, and relates directly to the presence of a controller in the matrix sentence. Given the grammaticality, of a sentence like:

24) Le magicien a fait pleuvoir
El mago hizo llover
The magician made it rain
one may wonder what the hypothetical controller for these sentences may be. Obviously the Third Person Singular pronoun il is not a serious candidate here, since we may not derive:

25) *Il l'a fait pleuvoir
26) *Lo hizo llover

as opposed to

27) Il l' a fait courir
28) Lo hizo correr
   He made him run

where a true deep il, él may be postulated, later represented by the clitic le/lo. Thus, concludes Kayne, the impossibility of postulating a controller in these cases argue for the sentential analysis.

Reasonable as the objection appears to be, still it is true that Spanish offers some evidence of the possible irrelevance of these examples.

First, weather-subjects are always absent in surface structure:

29) *El llueve
30) *Ella nieva

contrast with

31) LLueve/ It rains
32) Nieva/ It snows
Therefore, a sentence like (26) may never be a counterexample to our claim, since no source may be found for the clitic pronoun in this nor in any other context.

Secondly, there is evidence that weather subjects may act as controllers for other tenseless contexts at least in Spanish.

33) Quiere llover
   It wants to rain/ It is about to rain

Thirdly, notice that weather verbs may take occasionally lexical subjects, whenever a frequentative meaning is involved:

34) Lluven aplausos, críticas, insultos
   Clapping, criticisms, insults rain

These facts allow us to posit a lexical NP node as the deep subject of weather verbs, having no morphological representation when the literal meaning is involved and being filled by a PRO. There is a difference between a truly grammatical subject - like the expletive it in English - and a lexical subject having a PRO representation at the surface level, as weather subjects - and different syntactic behaviors are to be expected in each cases.

The examples above have shown that
- weather subjects are bona fide deep subjects which may act as controllers
- weather subjects never have a morphological expression in deep structure

; therefore, deriving (24) from a controller analysis appears to be a legitimate move within this perspective.
As for French, notice that the ungrammaticality of (25) is a problem both for the sentential theory and for the controller theory. If the deep structure of (25) is

35) Le magicien a fait (il pleuvoir)

as that of (27) is

36) Il a fait (il courir)

and if further transformations lead us to

37)\[
\text{VP} \\
V \quad V \quad \text{NP}
\]

faire pleuvoir il

38)\[
\text{VP} \\
V \quad V \quad \text{NP}
\]

faire courir il

, as proposed by Kayne, it is not evident which mechanisms will preclude

39) *Il l'a fait pleuvoir

or

40) *Il l'a fait neiger

while admitting

41) Il l'a fait courir

What seems to be involved here is that il is not a representation of the weather subject as such - since these subjects have no morphological representation - but rather the product of a late insertion rule which provides for a subject form in the environment of a tensed verb. The divergence in the treatment of weather subjects in French and Spanish is directly related of course, to the fact that only in Spanish, but not in French, may subjectless sentences surface.

Since the clause embedded under faire is tenseless,
there is no reason to expect il insertion in such a context; the controller, on the other hand, does not stand in a subject relation with respect to any verb, and therefore the insertion rule is not allowed to apply in this case either.

Although we do not claim to have covered all of the problems involved in this issue, one point should remain clear, and that is that the mythical subject of rain presents exactly the same difficulties and suggests the same solutions in a sentential analysis and in a controller analysis; hence it may not be granted any relevance in deciding on any of the two theories.\(^\text{14}\)

III HABER

We have explored a case where the presence of a controller might be questionable for a given sentence—and have proved the assumption not to be sufficiently grounded. A still better case for the controller hypothesis would be to find a sentence for which no controller could be invoked and which, inserted under hacer, would produce ungrammatical results. Obviously, such example would represent a serious obstacle for the sentential analysis. Such sentences do in fact exist and are exemplified below:

42) La reducción de los aranceles hizo que hubiera más inscripciones
   The reduction of the fees caused there to be more applications

43) *La reducción de los aranceles hizo haber más inscripciones

Sentences (42) - (43) exhibit the verb haber which in
Spanish may be complemented only with accusative objects. This verb takes exclusively the morphological endings of Third Person Singular - some of them morphologically unique, in this case, like in hay (instead of expected ha). Originally a transitive verb meaning have or possess, haber may be described today as a syntactic device similar - but not identical - to there in English and il y a in French, representing, essentially, an existential marker:

44) Hay une naranja
   Il y a une orange
   there is one orange

One important difference between haber and llover is that the first may never take lexical subjects triggering agreement, as shown by the agreement in the following sentences:

45) Llovieron protestas
    Protests were intensely frequent
46) *Llovid protestas
47) Hubo protestas
    There were protests
48) *Hubieron protestas

As expected, haber does not accept embedding under an Equi NP Del verb

49) *Quiere haber fiestas
    It wants there to be parties

These circumstances make predictable the ungrammaticality of (43), since the purely grammatical subject of haber is not likely.
to function either as a controller or as a controlled item. Since **haber** is a transitive verb, it requires a controller, according to our analysis; however, no controller is available in this case, which makes the sentence unacceptable. On the other hand, the sentential analysis has no explanation for such a gap, given the acceptability of (42).

Notice in particular that no semantic reasons may be invoked for the absence of **haber** under **hacer**, since the immediate causation meaning is perfectly available here as it is in:

50) El anuncio del trabajo hizo **aparecer** numerosos candidatos
   The advertising of the job made numerous candidates show up

and also in

51) *El hizo **haber** una explosión
   *He made there to be an explosion

; it is just the syntactic subjectlessness of **haber** which prevents the acceptability of the starred sentences we are considering.

The examination of **lover** has proven to be harmless to the controller hypothesis: but **haber**, the other side of the coin, represents serious evidence against the sentential analysis and its consequences. With this in mind, let us review some of the positive arguments that may be presented in favor of the controller hypothesis.

THE PROS

Having disposed of some of the objections that may arise under the controller analysis, we may look now
into the data that make it not only feasible, but also advantageous. First we will review the process of Marking, which will give us the switching Dative-Accusative Marking on the controller. Secondly, we will investigate another transformation, Clitic Movement, operating under the scope of Causatives. In every case we will compare the interaction of data with the two analyses we are trying to evaluate here.

Transformations

I Marking

One of the most striking features of causative complements is the switching of the case on the NP interpreted as representing the embedded subject: Dative if the clause is transitive, Accusative otherwise: this is shown in the different forms the Clitic exhibits, once they have been proposed.

52) Lo hice correr
    I made him (Acc.) run

53) Le hice leer el libro
    I made him (Dat.) read the book

By themselves, these very facts seem to represent strong evidence against the controller analysis. In the preceding section, we have seen that verbs like ordenar and invitar take invariably a dative or an accusative controller — and they never exhibit an alternation determined by the structure of the embedded clause as the one we are witnessing here.

In order to account both for the ordering of the constituents in surface and the alternative marking
on the controller, we may try the following description. The initial tree will be:

54)

\[
\begin{array}{c}
\text{VP} \\
\text{V} \\
\text{NP} \\
\text{S} \\
\text{NP} \\
\text{hacer} \\
\text{Juan} \\
\text{leer el libro} \\
\text{Juan}
\end{array}
\]

which is NP Del applies, yielding

55)

\[
\begin{array}{c}
\text{VP} \\
\text{V} \\
\text{NP} \\
\text{leer el libro} \\
\text{Juan}
\end{array}
\]

The tree is ready now for the application of case marking which will yield

56) Yo_{1} le_{3} hice leer el libro a Juan_{3}

I_{1} made John_{3} read the book_{2}

where the copying clitic le exhibits the dative form. We remain the reader that the marking Rule operates over strings of the form \[ V - NP - NP \] and yields as result \[ V \text{ NP NP} - \text{NP} \] whatever the structure of the dominant node.

In order to understand the work of the Marking Rule we may compare (54) with another case of rightmost controller, the case of ordenar:

57)

\[
\begin{array}{c}
\text{VP} \\
\text{V} \\
\text{NP} \\
\text{S} \\
\text{ordenar} \\
\text{Juan} \\
\text{leer el libro} \\
\text{Juan}
\end{array}
\]
The existence of the NP node above the sentential complement may be tested with:

58) Le fue ordenado a Juan leer un libro

where le represents the copying clitic, a redundant sign of the indirect complement, so to say, Juan the dative controller (once intraposited), and the sentential complement the superficial subject derived through Passive. Notice that Object Preposing is never obligatory in Spanish:

59) Fue festejada la Independencia por todo el país
    Was celebrated the Independence by all the country
    The Independence was celebrated by all the country

Now let us compare (58) with

60) *Le fue hecho a Juan leer un libro

This contrast is going to be crucial for the operation of Marking; for the NP node over S has to be scanned by the Marking Rule for ordenar, yielding an invariable dative; whereas it will be the presence or absence of a direct complement in the embedded clause which is going to decide on the fate of the controller – accusative or dative – for hacer. Graphically:

61) \[
\text{ordenar} \quad \text{S} \quad \text{Dat.}
\]

62) \[
\text{hacer} \quad \text{NP} \quad \text{Dat/Acc}
\]

It is the different position and status of the underlined
NP node which determines in each case the different result, fixed for *ordenar*, unpredictable for *hacer*.\textsuperscript{15}

Let us now reconsider the sentential analysis, à la Kayne and its approach to these facts. The deep input will be

62) Il a fait (*Julien acheter des chaussures)*\textsubscript{S}

Predicate Raising

63) Il a fait acheter -(*Julien des chaussures)*\textsubscript{S}

A Insertion

64) Il a fait acheter (*à Julien des chaussures)*\textsubscript{S}

Complement Reordering

65) Il a fait acheter des chaussures à Julien

He had Julien buy shoes

Kayne notices that à is to be inserted if and only if the subject is followed by a Direct Complement once Predicate Raising has operated, although, acknowledging certain difficulties in determining what a Direct Complement is, he suggests (p110) that A- Insertion is not to be stated in the form he has used, and leaves the question open.

What appears to be highly questionable in this analysis is that the grammar of French should implement two rules resulting both in sequences:

66) V \rightarrow NP \rightarrow à NP

whenever a verb is followed by a Direct Complement; for consider:

67) J' ai dit adieu aux enfants
I have said good-bye to the kids

68) J'ai rendu le livre à Marguerite
    I gave back the book to Maggy

69) J'ai fait dire adieu aux enfants
    I had the kids say good bye

70) J'ai fait rendre le livre à Marguerite
    I had Maggy give back the book

Notice in particular, that **adieu** is not really a Direct Complement, as shown in:

71) *Adieu a été dit par les enfants

**Le livre**, however, admits the Passive:

72) Le livre a été rendu par Marguerite

Thus, whatever the status of the NP following the verb, the Marking Rule treats them in the same way in simplex and complex sentences - which is, precisely, the point we wanted to emphasize, as a natural consequence of the Isomorphic Principle.

Thus the controller analysis yields naturally the required sequence through the regular work of the Marking Rule operating on the immediate output of the PS rules. In this analysis, the subject does not change its position: it is the controller instead with is directly generated in final position. Although some refinements needed as well will see later on, particularly in the case of intransitive clauses, it seems clear that the Controller analysis requires no particular transformational
machinery to account for the marking and ordering of the constituents at surface level—since Deletion and Marking are part of the grammar anyway. The sentential analysis, on the other hand, presents us with three specific transformations, and misses an important generalization in the statement of the Marking Rule.

It is to be noticed, however, that not always does embedded verb exhibit just an intransitive verb or a verb followed by an NP. Some of the remaining possibilities are listed below:

I The verb is followed by a Adjectival or Nominal Predicate; the Controller shows up as an Accusative:

73) Las circunstancias la hacían ser cauta
    The circumstances made her be cautious

There are other instances, in simplex sentences, where a verb is followed by a Nominal Predicate plus an NP, which happens to be marked as an Accusative; like:

74) Lo hicieron académico
    They made him academician (they nominated him to the Academy)

Notice that lo is not treated here as a direct complement, since we do not get:

75) *Fue hecho académico

Whatever the refinements required in the Marking rule to account for these facts, it is evident that they
will cover simplex and complex instances in a unitary way; which allows us to examine the following example:

II   The verb is followed by a Prepositional Phrase; the controller receives an Accusative Marking:

76) La pelea lo hizo salir de la casa
    The fight made him get out of the house

Compare:

77) Estas cosas lo sacan de las casillas
    These things take him out of the stalls
    (these things irritate him)

78) *Fue sacado de las casillas por tu insistencia
    He was exasperated at your insistence

As was the case above, these sentences show that the same phenomena are implied in both levels. Rather than involving ourselves in considerations concerning basic structures and rule ordering in these cases, what we want to show is that causatives offer to the Marking rule an environment similar to simolex sentences without requiring, however, to be reduced into a simolex structure, as claimed by the sentential hypothesis.

III   The verb is followed by an Accusative plus a Dative: the controller in the higher matrix is also a Dative.

Cases of the kind are present in examples deriving from sources like:
79) *Le hice comprar zapatos a María a Pedro
I had Peter buy shoes for Mary
Since sequences a NP - a NP are rejected in the grammar
-as we will see later on- we only may process (79) in
case the controller is a clitic, which will give us:

I_made Peter buy shoes for Mary

80) Yo le hice comprárselos
1 2 4 3
I_made him (Dat.) buy them for her
(Remember that le_4 los_3 yields = se los)
This appears to be the only genuine instance of an
extension of the Marking Rule needed by Causative
Complements. As it has been seen, it is triggered by
the uncommon sequence

81)
V - NP - NP - NP

, never available at the simplex level. In itself
the instruction is trivial; it just says: mark as a
Dative the third NP to the right of a verb; obviously,
it does not interfere with the previous Accusative or
Dative Marking, but rather entails them.

There are still three cases left: a) when the embedded
verb has a Reflexive Object; b) when the embedded verb
has a sole Dative Object; c) when the embedded verb has
an Animate Object. In all of them the Controller
exhibits an Accusative Marking. We shall study them in
the section corresponding to Intransitive cases, the
animate object being an exceptional case among the
transitives. As for the cases that have been described here, let us draw a final conclusion. It is clear that one and the same rule is at work throughout the grammar with respect to Marking, and nothing idiosyncratic has to be noted for Causative Constructions in that respect - except for the minimal extension required by III. In the sentential analysis, it is a coincidence if an a shows up in those cases where an embedded subject is postposed to a V - NP sequence and an a precedes a Dative complement after a V - NP sequence in simplex sentences. But the controller analysis reads these coincidences as the expression of one and the same phenomenon, Dative Marking operating on sequences of V - NP both at the simplex and at the comlex level - an interesting confirmation, by the way, of the force of the linearity principle in transformations, since the structural description entails in this case different types of trees and dominances.

Thus the controller analysis simplifies the description by avoiding a number of transformations also by making manifest the unity of the process of Marking across the grammar. These two features appear therefore to recommend it over the sentential analysis. Further evidence in favor of this alternative is provided by Clitic Movement.

II Clitic Movement

As noted and exemplified in previous sections, Clitic Movement across Infinitival Clauses is optional. It also may be prevented by lexical factors of a nature hard to specify. 16 Causative Constructions contribute
a further difficulty to the description of Clitic Movement: within their scope, it becomes obligatory. 
Thus:

82) Se lo vi hacer
    I saw him do it/ Him it (I) saw do

83) *Vi hacérselo

84) Me la hizo cantar
    He made me sing it

85) *Hizo cantárermela

In the sentential analysis, the obligatoriness of Clitic Movement has been explained in terms of derived structure. In effect, the last tree in a causative derivation à la Kayne looks like a simplex sentence:

86) 

We have here, in fact, a VP exhibiting a tensed vertical form, vi. This is enough, according to Kayne, to motivate the obligatoriness of the movement of clitics in these cases, triggered in French as well as in Spanish by the derived sisterhood of the relevant constituents – which justifies, restrospectively, the specific output of the transformational process he has been proposing. It is the presence of tensed vi which precludes (83), since an inflected form may not fail to attract clitics within the same VP, according to the conditions of the rule.
As stated, this appears to be a reasonable approach to the otherwise puzzling behavior of clitics in this environment. Our discussion of the argument will develop two points:

- The controller analysis predicts as well as (86) the obligatoriness of Clitic Movement.
- There are cases that only a controller analysis may explain.

The first point should be by now almost obvious. The tree corresponding to (82) is in our terms:

87)

```
     VP
    /\  \\
   /   \\
  V     VP\ NP
   vi    hacer lo  a él (le)
```

It is evident that le must clitize in front of ver, being as it is dominated by the same VP node. The accusative clitic, on the other hand, may not be stranded and is incorporated to the movement, here as well in:

88)

```
     VP
    /\  \\
   /   \\
  V     VP\ NP
   mandé    hacer lo  él
```

89)  Mandé hacer lo a él
90)  ¿* Le mandé hacerlo
91)  Se lo mandé hacer
      I ordered him to do it
As they stand, both analysis appear equally adequate to handle the facts. However, if we consider the situation in Spanish, a certain difficulty may arise that the reductionist theory does not resolve clearly by invoking sisterhood. While in French clitics move only within the domain of simplex sentences and causative verbs, in Spanish they also move—optionally—across successive sequences of infinitives, as shown in the following contrast:

92) Je voudrais pouvoir le faire
93) *Je voudrais le pouvoir faire
94) *Je le voudrais pouvoir faire

95) Quisiera poder hacerlo
96) Quisiera poderlo hacer
97) Lo quisiera poder hacer

I would like to do it

Notice now the semiauxiliary verb poder, which may be compared querer in its syntactic behavior:

98) El quiere matar a José y tu también lo quieres
    He wants to kill Joe and you do want it too

99) *El puede matar a José y tu también lo puedes
    He may kill Joe and you may (it) too

As this shows, only querer complements allow for pronominalization.
This might be taken as an indication that the difference in structures is:

100) 
\[ \text{querer} \quad \text{hacerlo} \]

101) 
\[ \text{poder} \quad \text{hacer} \quad \text{lo} \quad (+ \text{Auxiliary}) \]

The relevant point here is that sisterhood in (101) does not necessarily lead to obligatory Clitic Movement, since we get both

102) Lo puedo hacer

103) Puedo hacerlo

Retroactively, this means that from a tree like

104) 
\[ \text{hice} \quad (\text{él}) \quad \text{correr} \quad \text{lo} \quad \text{made} \quad \text{he run} \quad \text{him (controller)} \]

, from the deep input

105) Hice él correr
    I made him run
where, according to the sentential analysis, Predicate Raising has operated, pruning the lower tree, we might derive, given the parallelism with (101), both

106) Lo hice correr

and

107) *** Hice correrlo

as well as (83) from (86), which is clearly contrary to factual evidence. Therefore, sisterhood may well not be a sufficient cause for clitic movement - not even a necessary one, as querer sentences prove; it may even compromise the grammaticality of the results, yielding (93) or (95)

On the other hand, the controller analysis, preserving the higher node on the clause complement, discards automatically (107), since no morphological material may be introduced in an exhausted cycle; the controller clitic object in that position naturally moves across its own level to the head tensed verb. In a tree like (104) the VP node over correr will be preserved, as it is and only the correct results will be ensured in both cases.

We have dealt above with the problems of Clitic Movement becoming obligatory under causative verbs from the double perspective of the Sentential Analysis and the Controller Analysis. The main thrust of Kayne's analysis in this direction, however, concerns not so much the issue of obligatoriness as the different behavior of the transitive and intransitive clauses under faire in their relation with clitic movement. Here is where the
reductionist analysis may find itself teleologically justified, since only this analysis provides, according to Kayne, the appropriate frame for such a distinction by means of the specific derived that it implies, which are different in each case.

In a way, the discussion here becomes especially relevant not only to show the comparative merits of the controller analysis, but also by itself, since the style of Kayne's argument is particularly revealing of the state of the art in the late 60's, when structural and mechanic considerations prevailed, by and large, in transformational thought and practice. The argument points to the following contrast:

108) Jean te fera connaître à elle
    John will have her meet you
    from
109) Jean fera (elle connaître toi)§
110) *Jean te fera parler à elle
    from
111) Jean fera (tu parler à elle)S
    John will have you talk to her

Here are the trees proposed by Kayne for each case, once the derivations are through

112)  

113)  

\[
\text{faire connaître} \quad \text{tu elle}
\]

\[
\text{faire} \quad \text{parler} \quad \text{VP}
\]
The VP node shown in (113) is called by Kayne an anomalous syntactic structure—a label we will not dispute here. But it is this anomaly, precisely, what prevents *te (from tu) from moving in (113), since sisterhood is present in (112), but not here, and only sisterhood, according to Kayne, allows for clitics to move.

Connaittre, being as it is a transitive verb, triggers Complement Reordering, resulting in a simplex like structure; such is not the case for parler, taking only a dative complement, which ensures the continuity of the triple labeled structure. In a further footnote, Kayne acknowledges the fact that "this is not to say that we have an explanation for why the anomaly manifests itself in this particular way", (p.142) and leaves the question open. Of the same type is the contrast:

(114) Je lui ferai écrire une lettre
from: Je ferai écrire une lettre à elle
I will have (someone) write a letter to her

115) *Je lui ferai écrire ce garçon

from: Je ferai écrire ce garçon à elle
I will have this guy write to her

Again we find here the two different structures:

116)  
\[
\text{VP} \\
\text{V} \quad \text{V} \\
\text{faire écrire une lettre elle}
\]

117)  
\[
\text{VP} \\
\text{V} \quad \text{V} \\
\text{faire écrire} \quad \text{VP} \\
\text{ce garçon} \quad \text{PP}
\]

\(\text{a elle}\)
We may make two comments concerning this presentation. First, Kayne does not take into account the intermediate case, when both the direct and the indirect object are present in the embedded clause. i.e. sentences like '118) Je lui ferai donner ce livre à Georges from:"

119) Je ferai (il donner ce livre à Georges)

120 I will make him give the book to Georges

Through: Je ferai (donner ce livre lui à Georges)

We are following here, of course, Kayne's analysis; transitive donner triggers Complement Reordering, and the embedded subject, once postponed, is correctly cliticized onto the matrix verb. If, however, we invert Nouns and Pronouns in (118), the result is surprising:

121) *Je lui ferai donner ce livre à Georges

from Je ferai (Georges donner ce livre à lui)

I will have Georges give the book to him

through: Je ferai (donner livre à Georges à lui)

Graphically:

124)
If sisterhood were the sole device to trigger Clitic Movement, then it is not clear why only the innermost elle is allowed to move in (124), yielding correctly (118).

Therefore, no syntactic structural anomaly may be claimed neither in (124) or in (121) as a source of ungrammaticality; and consequently, the reductionist argument loses its validity. 17

Another line of comments refer to the situation of clitics originating from embedded passives, as in:

125) Je lui ferai écrire une lettre par Marie
    I will have him be written a letter by Mary.

According to Kayne, this sentences derives from a transitive clause where Object Preposing has not applied. That is, from an original

126) Je ferai Marie écrire une lettre à lui

we obtain, through Subject Postposing in the first cycle

127) Je ferai écrire une lettre à lui par Marie

, from which (125) is directly derived.

Observe, however, that the failure of Object Preposing to apply, for which Kayne gives a convincing argument, (p. 136) 18, deprives Faire Attraction of its natural input, since now the embedded subject is no longer between the matrix and the embedded verb. That is, none of the canonical Keynian transformation applying under
causatives is appropriately set in motion here, and consequently, no collapsing of the tree may be expected—still we get, and only get, (125) and not:

128) *Je ferai lui écrire une lettre par Marie

for which no justification may be found in the reductionist theory.

Resuming: However powerful, sisterhood is not necessary, let alone sufficient, to explain the behavior of clitics under faire: which deprives the sentential analysis, and the complex mechanics it implies, of most of its motivation. The simplex tree predicts grammatical sentences where we find ungrammatical ones (121) and vice versa (125), and obligatoriness is better ensured under the controller analysis than here. It is in the nature of mechanical arguments to be indefinitely perfectionable: so that for every description and objection we have developed one might substitute for a counterdescription and a counterobjection. The point we wanted to bring us, however, is that the crucial distinction between transitive and intransitive sentences under causatives—upon which we agree—should reflect itself in a sharper and clearer contrast than the one reflected by anomalous and sister structures, which follows from no general principle within the grammar or the theory.
IV The Intransitive Tree

Let us present now our own stand with respect to this matter.
Given the tree we have proposed for causative clauses in the transitive case, like (87), the controller is bound to cliticize onto the matrix verb, since the verb in the lower clause could never be an effective recipient for it, being as it is, a part of an exhausted cycle. While moving, the controller drags along the next most clitic, which gives us sentences as (82), which we repeat here for convenience:

82) Se lo vi hacer
    I saw him do it

What about the cases where an Indirect Object is involved? Here we may distinguish two classes:
Sentences where only an Indirect Object is present and sentences where both a direct and an indirect object are present.

The second case is to be treated just as another instance of the transitive tree.

The first case we would like to deal with in conjunction with a similar class: that of the verbs which show up with a reflexive object. That is, we consider the source of the ungrammaticality of

129) * Me le hizo pegar
    instead of correct
130) Me hizo pegarle
She made me hit him
as well as that of
131) Se la hizo suicidar
to instead of
132) La hizo suicidarse
He made her commit suicide
as coming from the same and one source.
In order to support our analysis, let us remember
first the implications of the Isomorphic Hypothesis for
our analysis.

Since hacer in simplex sentence has to be subcategorized as

\[
V \quad NP \quad (NP)
\]
as shown by simple sentences like

133) Hice una casa
I made a house
134) Le hice un regalo a Maria
I gave Mary a gift

a possible way to subcategorize through collapsing
notation both simplex and complex environments with
hacer might be the following:

\[
V \quad \left\{\begin{array}{c}
NP \\
S\end{array}\right\} \quad (NP)
\]
Now, we know that transitive sentences under \textit{hacer} are to be analyzed as sentential complements dominated by a rightmost NP controller, which is marked as a dative according to the usual rule.

For the intransitive cases, we may posit equally a V S NP frame, where the accusative marking on the NP may be obtained through applications of the marking rule similar to those we studied along (73) – (81).

In fact, our claim is that for sentences like (135)

(135) Lo hice salir de la casa
    I made him get out of the house

(136) La hice feliz
    I made her happy

a controller analysis may be also postulated at least for Spanish, the following sentences show up:

137) Lo hice salir de la casa a Juan

138) La hice feliz a Marta

In these cases, the rightmost position of the NP (copied by an accusative clitic in the matrix) is probably telling us that a controller is present, that is, that the parenthetical NP within the V S (NP) frame for \textit{hacer} has actually been chosen.

Languages like French, however, present a different, and in a way, more interesting situation. Here transitive
sentences differ altogether from intransitives when embedded under faire, and the lexical NP representing in surface the embedded subject has only one possible location, different for transitive and intransitive cases.

Thus observe the following contrast between French and Spanish.

139) Lo hice salir de la casa a Juan
140) Lo hice salir a Juan de la casa
141) J'ai faire sortir Jean de la maison
142) *J'ai faire sortir de la maison Jean

The Spanish sentences are perfectly synonymous and only differ in the position of a Juan.

But French accepts only the case where Jean is immediately adjacent to the verb. In case we want to maintain a controller analysis for French in this case, we would be obliged to say that the controller moves into this position by an obligatory transformation just in case the embedded verb is intransitive - a statement extremely hard to accept for any sound grammar. Kayne resolves these cases simply by virtue of Faire Attraction, which would automatically yield the required position for the embedded subject. In our perspective - according to which we do away with Faire Attraction - we would like propose the idea that sentences like (140) and (141) represent more or less straightforwardly the deep order of Infinitival Clauses - probably for French, certainly for Spanish - , that is, that a
Verb - Subject - Object

ordering is to be posited at the base for tenseless clauses, and therefore, a sentence like

140) Lo hice salir a Juan de la casa

represents rather immediately the natural order of constituents to be found at the level of Phrase Structure rules, in case no controller has been chosen (as allowed by the V S (NP) frame).

In order to defend our position, we may present the following arguments

a) A V S O ordering is common in root sentences in Spanish:

143) Pronunció el embajador un discurso
Gave the ambassador a speech
The ambassador gave a speech

b) The unmarked order for sentences having verbs of movement and location is always verb initial

144) Vino Juan
John came

(A sentence like "Juan vino" is usually interpreted contrastively - i.e. "It was John and not Peter who came").

C) Gerundives, Infinitives and Participial Clauses
may never show up with a proposed subject.

145) Habiendo llegado Juan, comenzó la fiesta
   John having arrived, the party begun

146) Al llegar Juan 
   } comenzó la fiesta

147) Llegado Juan

Upon John's arrival, the party began

148) *Juan habiendo llegado 
   *Al Juan llegar 
   *Juan llegado
   } comenzó la fiesta

149) El embajador pronunció un discurso

Notice that assuming the opposite stand, i.e. an SVO "orthodox" basic order, would irremediably imply an obligatory and rather drastic transformation in order to obtain the necessary "postposition" of the subject in the tenseless causes illustrated in (c). Since tenseless clauses are always subordinate, this hazardous move would also contradict the preserving hypothesis by Emonds and also the Penthouse Principle by Ross (1972), for here a rearranging transformation becomes necessary at
the embedded level and optimal otherwise - against all the specifications of above mentioned theories.

e) We have seen through (a - d) that a V S 0 deep order for Spanish is both plausible and convenient in terms of superficial data and theoretical considerations required to account for them. What we want to show now, however, is that the V S 0 hypothesis contributes a valid explanation for problems in the distribution of clitics we have been observing up to now.

A first step to clarify the situation is to remind the reader that clitics may move only if a free way is provided to them, that is, whenever a non interrupted chain of infinitives is present.

Now let us reconsider the following examples:

149) Juan parece admirarlo
150) *Juan lo parece admirar
    John seems to admire it
151) Juan me hizo escribirle
152) *Juan me le hizo escribir
    John made me write to him
153) Juan la hizo lavarse
154) *Juan se la hizo lavar
    John made her wash herself
For all of these cases the embedded object has been prevented from being cliticized onto the matrix verb. This openly contrasts with

155) Juan me lo hizo comer

John made me eat it

, where lo moves together with the controller me into the proclitic position. These facts are easy to be accounted for if we draw the following trees:

a)

```
     S
    /\  
   /   \  
  V NP S
   \   /  
    \ /   
     V NP NP
        \   
         admira Juan el
```

b)

```
     S
    /\  
   /   \  
  V NP S
   \   /  
    \ /   
     V NP NP
        \   
         escribir yo el
```

c)

```
     S
    /\  
   /   \  
  V NP S
   \   /  
    \ /   
     V NP NP
        \   
         hacer ella ella
```
We observe first that for (a), (b) and (c) the embedded subject clitic precedes in the tree the object clitic. If we hypothesize Clitic movement as working form right to left, then the object clitics corresponding to él, él and se respectively find in their way the presence of a specified subject which bars their movement, in accordance with Chomsky's conditions. In the case of Raising Verb as illustrated in (a), we have to hypothesize, furthermore, that Clitic Movement precedes Raising, since otherwise there would be no obstacle for él to move upward.

( Remember that no "shadow" may be posited in the case of raising subjects, according to Selkirk (1972, ps. 269). Since asserting this ordering appears not to involve any difficulty, we assume that this is the case here.

For (d), however, the case is entirely different. Here the subject has been deleted by the controllers, and the controller and the embedded object are therefore free to move onto the matrix verb, since no specified subject is to be found in their way.

We see then that the V S O hypothesis plus the study of transformations like Clitic Movement do confirm our working hypothesis concerning the basic difference between transitive and intransitive complements of
hacer, as predicted by the Isomorphic Principle; the natural extension of this analysis to the parecer cases appears to validate once again the force of the V S O hypothesis.

As for Passives, they represent no problem for our analysis — as they do for Kayne. Since we do not posit sisterhood — a rather strong condition, by the way, requiring us to check the structure of the whole tree before performing a transformation — as a sine qua non for Clitic Movement, nothing prevents us from moving le in:

e)

\[\text{to get, as expected}\]

156) Le haré escribir una carta por Maria
I will have him be written a letter by Mary

or its equivalent in French:

157) Je lui ferai écrire une lettre par Marie

Notice that the dative le May go across una carta, which does not represent a specified subject; same facts, naturally, obtain for French. Thus, while Kayne is
unable to explain the grammaticality of (156), since it is obvious that no sisterhood is involved between the dative embedded object and the main verb, this posits no problem for our analysis, which stipulates only that embedded objects raise from their deep location and travel across infinitives up to the first tensed verb, provided no specified subject or any obstacle is found between the infinitives and the main verb. Our analysis equally predicts the different behavior of transitive connaître and intransitive parler without appealing to any anomalous structure.

With this we close our study on the difference between transitive and intransitive sentences embedded under causatives, which reflects itself in a difference in terms of subcategorization, represented, respectively, in a VS NP frame as opposed to a VS frame.

It is to be noticed that subjects of transitive verbs (usually agents) are in themselves apt to be focused on as recipients of a causative action, and therefore likely to be given a distinctive syntactic status.

In Spanish—as well as in French or any other Romance Language—there is a definite difference between

158) Lo hice llorar
    I made him cry

and

159) Le hice abrir la puerta
    I made him open the door

In the first case, there is a possible interpretation
according to which a whole event is reported, with no specific focus on the embedded subject; it may well be that the matrix subject acts unwillingly on the occasion, with no specific purpose directed towards the subordinate subject.

This may never be the case for (159), where the intention of the main agent is clearly aimed at the embedded subject, with a concrete purpose: to get him to open a door.

Thus the fact that different internal structures in transitive and intransitive clauses result directly in different conditions of subcategorization for complex hace should come as no surprise, since different semantic properties are involved in both cases, and even the interpretation of the main verb is given a different force in each example. 19

V. The case of the embedded Dative

Let us finally examine what we consider to be one of the most decisive arguments in favor of the controller analysis, and also the major flaw of the sentential hypothesis: the case of the embedded dative.

Transitive clauses embedded under hace, as is natural, may take both a Direct and Indirect Object. Thus, if we embed

160) Maria le compró zapatos a Pedro
Mary bought shoes for Peter

under *hacer*, we obtain

161) Le hice comprarle zapatos a Pedro a María
    I made Mary buy shoes for Peter

, a sentence which will be rejected because of the ill-formed sequence a NP - a NP. In case the NP's are substituted by clitics, however, we may obtain

162) ¿Le hice comprar selos
    To her I made buy for him them

, where *le* represents the dative controller, identical to the embedded subject. We may notice, on the other hand, an interesting property of the embedded dative: not only it is immune to Clitic Movement; it also resists Extraction of any kind. In order to avoid complications introduced by Clitic Copying, we will exemplify the case with French sentences. Assume we have a sentence parallel to (161), where the embedded dative, furthermore, is represented by a clitic. Then the following sentence is ungrammatical:

163) Je lui ai fait acheter des souliers à Marie

, where *Marie* is to be understood as a controller and identical, therefore, to the embedded subject, while *lui* represents the embedded dative.
Now let us test Extraction. The results are equally ungrammatical:

164) *Pedro, a quien le hice comprar zapatos a Maria ...

165) *Pierre, à qui j'ai fait acheter des souliers à Marie

Peter, for whom I made Mary buy shoes ...

166) *A quién le hiciste comprar zapatos a Maria?

167) *A qui as tu fait acheter des souliers à Marie?

For whom did you make Mary buy shoes?

These sentences present the sentential analysis with an overwhelming difficulty. For, given the existence of a transitive environment, Complement Reordering must apply, yielding:

168)

```
VP
 V  V  NP  NP  ?
 hacer comprar zapatos a Maria a Pedro faire acheter des souliers à Marie à Pierre
```

(Recall that under Kayne's hypothesis the subject Maria must move right after the Direct Object, zapatos). It would be rather farfetched to propose that, after Complement Reordering has pruned the embedded structure in what respects the sequence Verb - Direct Object, a
anomalous node is still holding over Pedro to ensure its islandhood; such an analysis should be rejected just on grounds of common sense. In the case of the sole Dative Complement, Kayne might have had a case in stating that in

169)

\[
\begin{array}{c}
\text{VP} \\
\text{PP} \\
\text{a Pedro}
\end{array}
\]

\[
\begin{array}{c}
\text{V} \\
\text{V} \\
\text{S} \\
\text{VP} \\
\text{NP} \\
\text{PP}
\end{array}
\]

faire parler Georges à quelqu'un

have speak George to someone

, the fact that Georges does not undertake any trajectory rightwards preserves over quelqu'un the anomalous labelling. But in (168), such a position becomes untenable, since everywhere else Complement Reordering has been assumed to be always responsible for the final collapse of the whole embedded tree.

Vergnaud((1971), pp. 63-64), who noted this difficulty - mentioned as well by Ruquet (1971) - noticed also perceptively that if the embedded subject -that is, the controller, in our terms - has been criticized, then the embedded Dative is free to move through Extraction:
170) A qui Pierre lui fera-t-il acheter un livre?
   For whom will Peter make him buy a book?

which will follow naturally, says Vergnaud, from the order
   - Clitic Movement
   - Wh- Movement

if the ungrammaticality of the sentences above resulted
from a structure that might be "liberated" through
Clitic Movement. We quote him:

"Let us revise Jackendoff's hierarchy to:

1. Agent, Subject
2. Location, Source, Goal
3. Theme
4. Indirect Object (as defined by Bowers)

We might posit the following principle:

In a case of absolute structural ambiguity in which one
and the same constituent occurs twice in a derived
structure, respectively as $X_1$ and $X_2$, "a movement
transformation cannot move $X_2$ if it is lower than $X_1$ in the
hierarchy."

Before commenting on this proposal by Vergnaud, let us
consider first what the controller hypothesis itself
has to say about these facts. Interestingly enough, the
controller hypothesis has nothing to say in this case.
For the islandhood of Pedro follows naturally from the
superiority principle as stated by Chomsky (1973)
applying on two dative nodes, as it is transparent in:

171)

\[
\begin{array}{c}
\text{V} \\
\text{VP} \\
\text{V} \\
\text{NP} \\
\text{hacer} \\
\text{comprar} \\
\text{zapatos} \\
\text{a Pedro} \\
\text{(+ Dative)} \\
\text{a Maria} \\
\text{(+ Dative)}
\end{array}
\]

since, according to Chomsky (p. 246) "no rule can involve X, Y in the structure X ... ... Z... - WYZ where the rule applies ambiguously to Z and Y and Z is superior to Y."

Since the structural description of Clitic Movement as well as of Extraction involves the presence of two datives, one being superior to the other, it is clear that only this one may be selected by the principle. An objection raised by Ross at the time of the defense of this thesis may be relevant here; it concerns the possibility of extracting an Accusative Object from under an accusative Controller, as it is the case in a sentence like:

172) La casa que lo invitó a visitar estaba vacía

The house that I invited him to visit was empty.

The possibility of extracting the Direct Object casa may well be related - as Chomsky pointed out at the same occasion - to the fact that invitar complements are introduced by a complementizer a - which is not the case for causative complements, as we know- and the presence of the complementizer would permit casa to "escape" in this case. Although the interaction of the constraints...
involved here is rather intricate, and I would rather not commit myself to the cyclic nature of Extraction, as proposed by Chomsky, this is certainly a possibility worth exploring, in the absence of any other alternative. What is clear at least is that the sentential hypothesis has no means to explain the case of the embedded dative, while the controller hypothesis represents the two datives in a different way, granting them different positions in the tree; it is also clear that *invitar* and *hacer* complements differ in many relevant ways, as we have noticed in the previous sections, which may in principle explain the star in (164) as opposed to the acceptability of (172). Thus the controller hypothesis, according to the Isomorphic Principle, grants us a better ground to study these significant differences, while in a reductionist perspective they become necessarily blurred in the single level tree.
FOOTNOTES

CHAPTER 1

1. Turkish, for instance, has a causative construction restricted to the causative predicate; perception verbs like hear, see, follow a different pattern. It may be possible that a semantic complementarity links causative and perceptual verbs, which I would very tentatively represent in this way — following suggestions by Gruber (1965) and Jackendoff (1972):

   I made the house
   source theme
   I heard the music
   theme source

According to this representation, one is, in a sense, acted upon by music when perceiving it, in a manner which may be considered similar to the way a house is acted upon by he who is building it. Ross has suggested to me (personal communication) that theme may be replaced in these cases by \{Goal, Experience\}, which seems to be a plausible alternative to our approach.

2. In an unpublished paper on Infinitives we have supported the idea that there is a correlation between lack of Auxiliaries in the complement clause and the semantics of the higher verb, which makes predictable the tense of the embedded clause. Factive and perceptual verbs are all implicative (Cf. Karttunen (1970)) and therefore require a simultaneity feature on their complement; therefore, a total lack of auxiliaries is to be expected in this case.
3. The sources of ungrammaticality are, respectively: in (19), the por phrase; in (21), the se pronoun; in (23), irritar plus the reflexive; in (25), haber; in (27), empezar. It should be clear that, in case one would preserve the tensed versions of hacer clauses as deep sources for their infinitival counterparts, then a complex machinery would be needed to prevent the starred sentences from surfacing. It is our contention that the failure of transformations to apply within the scope of causatives is related to the lack of Auxiliaries within them. See Bordeloius "On Passives under Causatives" (forthcoming).

4. Subjects show also in a postverbal position in gerundival clauses and in nominalizations.


6. I regret not knowing Rumanian well enough to illuminate this study with examples from it.

7. As want in English, querer does not require obligatorily deletion under Equi; in case subjects are different, the embedded clause shows up with a Subjunctive verbal form:

a) Quiero que venga

I want you to come

As in English, some few verbs require obligatory Equi NP Deletion; among them, declinar (declinar) but not tratar (try) nor probar.
8. As for (14), we are taking into account the position of the deleted initial subject:
   a) Yo lo tengo

9. Notice Dative and Accusative Copying in both cases. As we have said above, Accusative Copying is obligatory only for some Spanish dialects, so that los in (34) and (35) is out for the remaining dialects.

10. We are examining here only those cases where a verbal phrase frame is involved. Spanish has, as English, the possibility of complementing a verb with both sentential subjects and objects:
   Que Juan llegara tan tarde prueba que no estaba interesado en el asunto.
   That John arrived so late proves he was not interested in the business.

11. These representations are certainly only fairly approximative. In particular, I believe Spanish to be a VSO language, —as we will see later on— so that the sentential complement in both cases should read "barrer él la vereda".
   Since in both instances, however, the subject gets deleted under identity, its representation is irrelevant at this point in our analysis.
12. This is in fact Kayne's claim, which we are going to discuss below.

13. In fact, they are not; only (11), for instance, conveys the possibility of a professional reading, a task undertaken, i.e., for a publishing house or the like. On these and related matters, see Bissell (1944), who makes interesting observations about the same facts. We come back to the issue of synonymy in examples (20) - (23).

14. As a matter of fact, we believe that weather verbs, being intransitive as they are, enter the sentential analysis when embedded under hacer or faire. All we wanted to show here, however is that the specific arguments presented by Kayne do not resolve the issue in any significant way.

15. An intransitive embedded clause will yield different results for ordenar and hacer, as expected:

   Le ordenaron correr
   The ordered him to run
   Lo hicieron correr
   They made him run

16. Thus we find the following gradation in grammaticality:

   Lo quiero hacer
   ?Lo trato de hacer
   *Lo intento hacer
   *Lo decido hacer
   *Lo evito hacer
respectively:

\[
\begin{align*}
\text{I} & \quad \text{try} \quad \text{intend} \quad \text{decide} \quad \text{avoid} \\
\text{want} & \quad \text{to do} \quad \text{doing} \quad \text{it}
\end{align*}
\]

17. I understand that in the new version of this work—which is still in preparation—Kayne is precisely revising some of his own arguments along the main lines of Chomsky's conditions (1973), particularly with reference to the specified subject constraint. Naturally, the criticisms here do not affect the value of this thesis—extraordinarily rich and perceptive in many respects—; they refer instead to the rather unavoidable methodological frame in which this type of arguments developed, implying in the first place the existence of such nodes as \(S\), \(VP\), and making then such "anomalous" constructs responsible for the failure of a given transformation to apply with no generalization nor independent positive results obtained through this process.

18. Kayne interestingly observes (n.136) that in case object preposing were operative, one should expect sentences like "* Je laisserai ce livre lire mon fils" to show up, or else make Faire Attraction obligatory for \(laisser\) just in case Passive is involved in the embedded clause, a move which he reasonably rejects.
19. A case that remains unexplained, both for Kayne and for me, is the mysterious asymmetry between:

a) Se lo hizo comer
b) Je le lui a fait manger
   He made him eat it

and

c) *El se lo hizo saludar
d) *Je le lui ai fait saluer
   He had her greet him

That is, Clitics may not move together if a (+Animate) object is involved and the verb is (+Agentive). Notice by the way:

e) El me lo hizo conocer
f) Il me l'a fait connaître
   He had me know (meet (-Agentive)) him

(c) and (d) may be rendered only through:

g) El la hizo saludarlo
h) Il l'a fait le saluer

It is as if the (+Animate) pronouns tended to dissimilate in complex structures. This is probably related to the constraint against two a NP — a NP phrases we will study later, in ways that still remain unclear to me.
CHAPTER II
THE CROSSING CONSTRAINT

I. Intraposition

For all causative verbs — except for hacer — there exists a double alternation:

1) Dejé a Juan comprar cigarrillos
   I let John buy cigarettes
2) Vi a Jaime robar una silla
   I saw Jim steal a chair
3) Oí a Pedro hacer un comentario
   I heard Peter make a comment
4) Dejé comprar cigarrillos a Juan
5) Vi robar una silla a Jaime
6) Oí hacer un comentario a Pedro

Hacer is restricted to the second pattern:

7) Hice comprar cigarrillos a Juan
8) *Hice a Juan comprar cigarrillos

In the sentential analysis à la Kayne sentences (1) — (3) henceforth pattern (a) — reflect immediately the deep order of the embedded clause, that is, Subject — Verb — Object: NP V NP. (We remind here the reader that under this hypothesis Subjects are generated in initial position by PS rules).

For this specific case, we may assume that Faire
Attraction, which is optional for all causatives except faire, has not operated, and consequently it is the deep order unaltered which emerges at the surface.

Sentences (4) - (7) - pattern (b) - must be derived, therefore, via one or more transformations - which are obligatory for hacer.

In the controller analysis, on the other hand, it is pattern (b) which is to be taken as basic for transitive sentences. A sequence like

(comprar - cigarrillos - a Juan)

represents a VP followed by a controller - once deletion has taken place. Pattern (a) is obtained through the interposition of the controller - a process not available for hacer.

In the present section we intend to test the implications and consequences of both analysis for the grammar. Our purpose is to show that far from being equivalent, their explanatory power differs considerably, both at the level of distributional facts and with respect to certain transformations interacting with these patterns - like Extraction.

Let us examine first the distributional facts.

The first question we are faced with is: Are pattern (a) and (b) genuine free variants, i.e. can they accommodate the same combinations of lexical items - or is there some complementary distribution among...
these patterns?

The following examples will provide an answer:

Pattern (a)  (NP V (NP))

9) *Dejó la silla caer
   He let the chair fall
10) Dejó a Juan salir
    He let John leave
11) Dejó a María comer los fideos
    He let Mary eat noodles
12) Dejó a Pedro abrazar a Lucía
    He let Peter embrace Lucy

Pattern (b)  (V (NP)  NP)

13) Dejó caer la silla
14) Dejo salir a Juan
15) Dejó comer los fideos a María
16) *Dejó abrazar a Lucía a Pedro

Let us first deal with the problem represented by sentence (16). The first thing to notice is that sequences of two animate objects result in ungrammaticality in contexts other than causatives and therefore they are to be treated through some general device. An illustration of the extension
of this phenomenon is provided by the following examples:

17) Le ordenaron a Juan saludar al general
They ordered John to greet the general

18) *Le ordenaron saludar al general a Juan

19) Lo invitaron a Juan a saludar al general
They invited John to greet the general

20) *Lo invitaron a saludar al general a Juan

It has been shown before that ordenar is a V S NP NP verb, while invitar is a V NP S NP verb, as indicated by Marking, Passive and Pseudocleft.

This means that the ungrammatical sentence in the ordenar case represents the basic order, and that only if Intraposition has operated, yielding (17), will the sentences become grammatical. A possible way of handling the situation, therefore, will be to make Intraposition obligatory whenever two animate objects are involved, which will rule out the star both in (18) and in (16).

The consideration of the remaining example, however, indicates the unfeasibility of such a move. For invitar provides us with the opposite situation. Here it is only after Intraposition has operated that this sentence becomes ungrammatical, since it
exhibits the prohibited sequences of two Animate Objects. Obviously, making Intraposition obligatory in an (a NP - a NP) context and blocking it whenever it would result in such sequence would imply the loss of a significant generalization for the grammar. The appropriate way of dealing with these facts appears to be an output constraint, precluding sequences of the form

21) * a NP - a NP
- where both NP are (+ Animate)

We leave open here what the scope of the constraint is. Thus in my dialect sequences of two animate objects are acceptable in simplex sentences - although difficult to decode:

22) Le presenté a Juan a María
    I introduced Mary to John
    I introduced John to Mary

The sentence is ambiguous, and the interpretation with the dative intraposed appears to be favored - at least for some speakers. A way to disambiguate these sentences is via clitic copying, since the marking of gender on the accusative clitic indicates unmistakingly which NP is to be taken as a Direct Object:

23) Se lo presenté a Juan a María
    To her him I introduced John to Mary

Naturally, Clitic Copying is incarable to...
disambiguate those sequences where the two objects have the same gender:

24) Le presenté a María a Laura
25) Se la presenté a María a Laura

I introduced Mary to Laura
I introduced Laura to Mary

In any event, it is clear that as it stands, (21) is too restrictive, since it will preclude derivations such as (22). Therefore, a reference to a complex context may be needed in order to appropriately formulate the constraint.

Let us turn now to the case of (9). Comparing it with (13), it is clear that what triggers ungrammaticality here is the feature of (- Animate) on the initial NP.

Within the sentential analysis, presupposing a basic NP V (NP), the problem may be handled by making the transformations leading to pattern (b) obligatory if the embedded subject is inanimate, optional otherwise. That is, from a basic.

20) Dejó la silla caer
one has to derive obligatorily
21) Dejó caer la silla

given the (- Animate) character of the subject.

In the controller analysis, silla may be generated directly in the final position as a controller.
In order to avoid (9) while deriving (13), all we have
to specify is that Intraposition must apply only to
+ Animate NP's, which it does optionally.

Notice that the two descriptions differ considerably in
terms of simplicity. What the sentential analysis entails
is that the rule(s) resulting in the final position of
the subject apply to a disjoint set of NP's, Animate and
Inanimate, and that they apply optionally in the first case,
obligatorily in the second. What the Controller Analysis
says is that Intraposition applies optionally to the
class of (+ Animate) controllers.

This is a cumbersome situation for the sentential
analysis, where one has to explain why Faire Attraction
becomes obligatory just in case a (- Animate) NP
subject is involved; nowhere else in the grammar, to my
knowledge, does this feature correlate with the
obligatoriness of any transformation. On the other hand,
it may be recalled here that the mention of Animacy in
the structural description of a transformation is not an
idiosyncratic feature of Intraposition. In Spanish
direct objects that are (+ Animate), (+ Specific), are
to be preceded by the preposition a, which is transfor-
mationally inserted in this context; they are also copied
by a redundant accusative clitic in many dialects, as we
have pointed out before. In footnote 1 of this chapter
we have referred the reader to the case where two clitics
representing (+ Animate) objects are to be dissociated
whenever the corresponding verb carries an agentive
meaning. Another context where both Animacy and Agency
are involved is mentioned by Kayne (p. 137):
22) Je lui a fait tomber Pierre dessus
    I have made Peter fall over him

23) *Je lui ai fait tirer Pierre dessus
    I have made Peter shoot over him

; the sentences translate equally in Spanish, with the same correspondence in stars and checks; what they imply is that within a causative complement, an Animate object may not move across a verb if the verb is Agentive.

It is not surprising, therefore, to find the feature of Animacy playing a crucial role in Intraposition. What is interesting to notice is that similar conditions apply in the case of Intraposition in simplex sentences:

24) Le arreglé la pata a la silla
    I fixed the leg to the chair

25) Le cosí el ruedo a la pollera
    I sewed the hem to the skirt

26) Le bajé la pantalla a la lámpara
    I lowered the screen to the lamp

The dative complement in all of these cases happens to be a \((-\text{Animate})\) NP. And for all of these cases Intraposition yields very unnatural results:

27) *Le arreglé a la silla la pata

28) *Le cosí a la pollera el ruedo

29) *Le bajé a la lámpara la pantalla

Similar restrictions - although expressed in a different
way – are to be found in English with respect to Inanimate Datives. Thus observe the contrast:

30) He gave the book to John
31) He gave John the book
32) I gave the car a coat of paint
33) *I gave a coat of paint to the car

Although is not altogether clear whether these sentences are transformationally related – see R. Oehrle, forthcoming – it is evident that here as well as in Spanish there are severe limitations in the distribution of Inanimate Datives.

These facts seem to suggest that Intraposition is a general phenomenon, submitted to similar constraints in simplex and complex sentences – and possibly to be expressed by one and the same rule. But this generalization is possible only if the order V S NP is posited as basic, and once pattern (a) is derived from pattern (b) via Intraposition, since (b) will appropriately feed the structural description of this transformation, which we take to be:

\[
34) \quad V - \left\{ \begin{array}{l}
NP \\
S \\
NP
\end{array} \right\} \rightarrow \quad V - NP - \left\{ \begin{array}{l}
NP \\
S
\end{array} \right\}
\]

\[
\begin{array}{ccc}
1 & 2 & 3 \\
1 & 3 & 2
\end{array}
\]

, applying optionally whenever NP in term 3 is (+Animate).

The only difference between complex and simplex contexts is that Intraposition is followed in the former case by
a Readjustment rule which will turn to Accusative those Dative NP's that result from the transitive embeddings. Compared to the shortcomings of the sentential analysis, where the generalization above stated is missed and the feature -Animate has to be explicitly mentioned against any expectation in the description of Faire Attraction, this seems to us a minor flaw in our analysis; nevertheless, it has to be taken into account, as a possible indication that still other solutions are imaginable for this array of data.

Further support for a conjoined treatment of Intraposition across simplex and complex sentences in Romance languages is provided by the fact that intraposited NP's never passivize in either case; cf:

35) *María fue ofrecida pan
   Mary was offered bread

36) *María fue hecha ofrecer pan
   Mary was made to offer bread

which was described, in the previous chapter, as following from the ordering

Passive
Intraposition

It is also to be noticed that there is a tendency for the controller not to be intraposed when the embedded Object is Inanimate.

A survey among sixteen Spanish native speakers of
different countries — Spain, Mexico, Venezuela and Argentina — checked this fact with the following examples:

37) Lo dejó leer una carta
38) Le dejó leer una carta
   He let him read a letter
39) Lo dejó saludar a Pedro
40) Le dejó saludar a Pedro
   He let him greet Peter

For the first pair of examples, ten informants rejected lo (implying Intraposition) and fifteen accepted instead the dative le. For the second pair, on the contrary, fourteen preferred the Accusative and twelve rejected the Dative. Thus it is clear that a trend exists in the grammar to eliminate Intraposition if a (— Animate Object) is involved in the embedded clause. In a way one may see both Intraposition and Constraint (21) as a conjoined effort — or conspiracy — to eliminate sequences of two Animate NP's from the surface — given the difficulty in decoding such sequences for the hearer, one might allege.

But if so, the restrain in the application of the rule of Intraposition whenever an Inanimate Object is involved should come as no surprise, since sequences of Inanimate NP + Animate NP present no difficulty in their interpretation. On the contrary, the clear preference for a pattern like the one exhibited by (39) indicates that there exists a strong tendency to dissimilate
sequences of (+ Animate) NP's in Spanish.

The last question we may ask before entering the next topic concerns the exceptionality of hacer with respect to other causatives in being the only verb in the set negatively marked for Intraposition. To this respect, let us say that it does not seem to be a coincidence that while the other causatives in the set admit + Animate NP as their Direct Objects in other contexts, this is not the case for hacer:

41) Vi a Juan
   I saw John

42) Oí a Juan
   I heard John
43) Dejé a Juan
   I left John
44) *Hice a Juan
   I made John

(The same situation obtains, of course, for Italian and French). There is an interesting correlation to be explored here - although the present state of the theory does not offer any appropriate device to this effect. (Notice however that the meaning of dejar is not the same here as it is in causative constructions: the distinction being represented in English by leave/let).

Let us now conclude our review of distributional facts concerning Intraposition with respect the two hypothesis we are evaluating:
- Intraposition handles naturally the gap concerning - Animate controllers, since it only refers to Animate NPs - a process which is paralleled at the level of Simplex Sentences, where only Animate Dative may be intraposed. Under the sentential analysis the parallelism is missed, and the rule(s) postponing the subject have to be irremediably complicated in order to account for the invariable final position of Inanimates in this case.

- Intraposition, plus Constraint (21), accounts for the accusative Marking on the controller whenever a + Animate Object (Direct or Indirect) is involved. In this respect and as far as constraint (21) is valid also within the grammar containing the sentential hypothesis, both analysis are equally adequate.

- The failure of the intraposed controller to passivize is also correlated with analogous behavior on the part of intraposed derivs in simplex sentences, a fact that is better captured in the controller analysis, since the sentential analysis has to mark causative verbs as exceptions to Passive.

II The Crossing Constraint

The conclusions above stated favor undoubtedly the controller analysis over the sentential analysis. Further evidence for Intraposition may be drawn from a different area of data: those concerning the interaction of patterns (a) and (b) with Extraction.
In studying this relation, we are going to submit a constraint, the Crossing Constraint, which we claim to be active in the examples to be examined as well as in many other instances. In fact, we consider this proposal to be the most positive result obtained from the discussion concerning the sentential hypothesis as opposed to the controller hypothesis with respect to Intraposition because, in addition to providing substantial support for the latter, it covers a wider range of facts, presumably universal in their scope, characteristic of Spanish Grammar.

The data we are interested in concern Extraction from an (a) pattern - i.e., the V NP S pattern presupposed by the sentential hypothesis whenever Faire Attraction does not operate.

(Notice that the (a) pattern may be also the consequence of an analysis claiming that causative constructions are to be described as V NP S deep structures, where the controller holds basically the Direct Object position. This theory we will consider a notational variant of the sentential hypothesis, since it essentially implies the same arrangements and mechanisms in most of the aspects that are relevant here). Interestingly enough. Relativization yields ungrammatical results when operating on an (a) pattern. Thus compare:

45) Lo invité a leer el libro
I invited him to read the book

46) El libro que lo invité a leer era Ivanhoe
The book I invited him to read was Ivanhoe
47) Lo dejé leer el libro
    I let him read the book

48) *El libro que lo dejé leer era Ivanhoe

For _dejar_, Relativization is possible only from the (b) pattern, implying a final string V NP NP and the dative Marking on the controller:

49) El libro que le dejé leer era Ivanhoe
    The book that I let him read was Ivanhoe

from a tree

50)  
    \[ \text{VP} \]
        \[ \text{V} \quad \text{S} \quad \text{NP} \]
            \[ \text{dejé} \quad \text{leer (el) el libro} \quad \text{a él} \quad (\text{Dative}) \]

A predictable conflict arises for those cases where only the NP V NP order is available - that is, where the embedded Object is Animate:

51) *Dejé besar a la muchacha a Juan
    52) Dejé a Juan besar a la muchacha

    I let John kiss the girl

When asked to translate a sentence like

53) The girl that I let him kiss was Gloria

a native speaker, after puzzling for a while, will avoid both
54) *La muchacha que lo dejé besar era Gloria
55) *La muchacha que le dejé besar era Gloria

and will produce instead the tensed version of the sentence:

56) La muchacha que dejé que él besara era Gloria
      The girl that I let that he kiss (past subjunctive) was Gloria

Same facts obtain in the domain of Question Movement; thus:

57) * Qué libro lo dejaste leer?
58) * Qué libro le dejaste leer?
      Which book did you let him read?

Interestingly enough, this rather subtle distribution is never accounted for in grammar books, nor is it taught in schools. Native speakers, however, never hesitate in the choice of the right context for Extraction in these cases – which leads us to suppose that a rather general device is at work here. Let us look at the facts from the point of view of the sentential analysis. Under this hypothesis, which implies the order NP V NP as basic, it is difficult to see what may preclude Relativization from applying to a well formed sequence directly generated by the PS rules, since no general constraints appear to be relevant here. Thus compare (48) with

59) El libro que lo forcé a leer era Ivanhoe
      The book that I forced him to read was Ivanhoe

The situation, therefore, seems to require an
irremediable ad-hoc treatment, which would include necessarily the specific mention of the governing causative verb.

Under the controller analysis, however, perspectives appear more promising. Under this hypothesis, NP V NP sequences are not basic under Causative Complements, but derived via Intraposition. This implies that two movements, Extraction and Intraposition, have been operating on the same string. Graphically:

60) Intraposition

```
V
  /\  
V  VP NP
  |   |
  v   v
dejé leer el libro  él
```

61) Extraction

```
V
  /\  
V  NP VP
  |   |
  v   v
  dejé  lo  leer el libro
```

If we superpose both trees, it is easy to see that the paths leading form the source place to the goal place for each constituent cross each other:

62)  

```
V
  /\  
V  VP NP
  |   |
  v   v
dejé leer el libro él
```

Naturally, for this fact to be linguistically relevant, it is necessary first to show whether it has any consequences for the rest of the grammar. The examples that follow represent a positive answer to this question.
Consider first this couple of sentences:

63) Fui al hospital a ver al médico
64) Fui a ver al médico al hospital
   I went to the hospital to see the doctor

These sentences show the rather trivial fact that Directional Complements and Goal Complements may freely exchange their positions in Spanish. What is not so trivial is that Extraction may operate only from (64), not from (63):

65) El médico que fui a ver al hospital se llama Perico
66) *El médico que fui al hospital a ver se llama Perico
   The doctor that I went to the hospital to see is called Perico

This strongly suggests that Extraction is precluded whenever the Directional Complement has been preposed:

67)

Again, the crossing of the interconnecting paths results in a star.
Another instance of this constraint is represented in this example, where one of the lines represents not a movement, but the anaphoric relation between a pronoun and its antecedent:
68) Juan invitó al hombre a seguir a Pedro
John invited the man to follow Peter

69) El hombre a quien Juan invitó a seguir a Pedro
era un detective
The man that Joan invited to follow her was
a detective

70) Juana invitó al hombre a seguirla
Joan invited the man to follow her

71) *El hombre a quien Juan invitó a seguirla era
un detective
The man that Joan invited to follow her was
a detective

Clearly, from the contrast between (70) and (71) one
may infer that only the connection between the pronoun
and its antecedent is responsible for the blatant
ungrammaticality of (71)

Let us represent again the infraction contained in

72)

A striking contrast may be found also in the following
sentences:

73) Juana invitó al hombre a seguirla

74) *Juana ordenó al hombre seguirla
75) *Juana dejó al hombre seguirla

Joan invited /*ordered /*let the man to follow her

In the first sentence the direct complement represented by al hombre has not been moved and therefore no double crossing move is involved.

In ordenar, however, Intransposition has taken place, moving the dative controller close to the main verb: the same obtains for dejar; and the intersection of the Pronominalization line and the Intransposition line results necessarily in ungrammaticality for both sentences. Thus

76)

Native speakers, when induced to produce sentences of the kind, opt invariably for the tensed complement:

77) Juana ordenó que el hombre la siguiera dejó

which are perfectly grammatical, since they do not involve Intransposition.

Notice that whenever controllers are final, the sentences are bad for all cases

78) *Juana (invitó) a seguirla al hombre ordenó dejó
However, this appears to be related to the output constraint (21), prohibiting sequences of two Animate NP's in complex contexts.

What is interesting about the last two examples is the consequences they imply for the others. Here one of the connecting paths leads from a constituent to its actual representation in an anaphoric copy, which persists in the original place once the derivation is finished. This suggests that also in the other cases a trace is left by the removed constituent in its original place, once the derivation is finished, holding an anaphoric relation to the same constituent in its new location in the tree—a sort of extension, in sense, of the principle of recoverability of deletion in a broader interpretation. Strong support for the theory of traces as presented by Chomsky (1973), Bresnan (1972), Selkirk (1972) and Perlmutter (1972), is provided by these examples, if our analysis is correct. We may now try to capture the generalization underlying these facts by proposing

79) **The Crossing Constraint**

Prevent the application of any rule resulting in the following configuration

\[
X \quad Y \quad X \quad Y
\]

, where X and Y are constituents under a given sentential node, relating to their respective traces by means of a rule

As stated, of course, the constraint is too strong; in
particular, it will preclude perfectly innocent sentences:

80) Pedro\textsubscript{1} le dijo a Juan\textsubscript{2} que él\textsubscript{1} quería verlo\textsubscript{2}

Peter\textsubscript{1} told John\textsubscript{2} that he\textsubscript{1} wanted to see him\textsubscript{2}

The missing factor in (80) is the absence of control, which was present in all the previous examples, as one may easily recall, affecting either X or Y or the string they belong to.

We propose to incorporate the control factor to the Crossing Constraint by adding to (79) the following stimulation:

"... and where obligatory control is operative within the scope of the crossing paths".

Spanish, which presents alternations of tensed and tenseless complements for the same verb, the ones implying the presence of control and the others excluding it, is rich in the following contrasts:

81) *Juan\textsubscript{1} ordenó al hombre seguirla\textsubscript{1}

82) Juan\textsubscript{1} ordenó al hombre que la\textsubscript{1} siguiera

Joan ordered the man to follow her

In (81) the dative controller \underline{el hombre} has been intranposed from its rightmost position, crossing the path connecting Juan\textsubscript{a} and la; the sentence is rejected. The tensed complement of ordenar, on the other hand, is not strictly submitted to control, as manifest for instance in:

83) Juan\textsubscript{a} ordenó al hombre que todo quedara limpio

Joan ordered the man for everything to be clean
Thus, although the same crossing is patent in (82) and in (81) — that is, Intransposition and Pronominalization interfere actively in both sentences — it is only (81) which is ungrammatical, for only in (81) do the conditions of control clearly hold.

Same constraints hold for French and Italian for most of these examples, as far as I know. It also holds for Quantifier Movement across causative constructions, which Kayne tries to account for via sisterhood. The relevant examples are the following:

84) Il a laissé cet enfant manger tout
   He has let this kid eat everything

85) Il l'a laissé manger tout
86) Il lui a laissé manger tout
87) *Il l'a tout laissé manger
88) Il lui a tout laissé manger

As noticed, the quantifier tout may cliticize onto laisser only in case the dative lui is involved. Pointing out the intriguing contrast between (87) and (88), Kayne (ps. 92–95), while commenting similar examples, indicates that only (88) exhibits the dative lui, a clear symptom, in his system, of the reduction of a causative tree to a simplex-like structure, via Complement Reordering. This he takes to be the appropriate and necessary input for Quantifier Movement to apply; while the accusative construction, where no transformations or levelling may be invoked, is immune to it. Comparing (88) with (89) — which Kayne does in a footnote, p. 115—:
89) Il a tout voulu manger
   He has everything wanted to eat

, we may notice that here again - as in the case of clitics for Spanish - the reduced tree is of no relevance for the distinction; thus we may represent the respective structures in this way:

90)  
   VP
   \ 
   V  V
   laisser manger  tout  lui

91)  
   VP
   \ 
   V  S
   laisser  NP  VP
   il  manger  tout

92)  
   VP
   \ 
   V  VP
   vouloir  manger  tout

From the configurations here presented, it is by no means transparent why should the quantifier in (90) behave as (92) rather than as (91), since no structural identity may be invoked for any of them. (The impossibility of Clitic Movement under vouloir ensures the persistence of the lower VP node on (92), on the other hand; so that no hope may be entertained about the further parallelism of (90) and (92)). Again, appealing to general conditions like the specified subject constraint, might help to resolve this difficulty better than adducing a particular type of derived structure to favor or block Quantifier Movement in this case. But the example may equally be resolved through the
Crossing Constraint, since what we have here is:

93) \[\text{V} \rightarrow \text{VP} \rightarrow \text{NP}\]
\[\text{laisser} \rightarrow \text{manger tout} \rightarrow \text{lui}\]

94) \[\text{V} \rightarrow \text{VP} \rightarrow \text{NP}\]
\[\text{laisser} \rightarrow \text{le manger tout} \rightarrow \text{lui}\]

where Intraposition and Quantifier Movement conflict in (94) but not in (93) - according to our predictions, under circumstances of control; and the expected star dooms, (87), deriving from (94), to ungrammaticality.

Another interesting gap in Spanish grammar that might be explained through this device concerns the correlation between tensed and tenseless complements of verbs exhibiting controller objects. For all of these verbs, we may find the following alternation:

95) Ordeno a Juan venir.
96) Ordeno a Juan que viniera
He ordered John to come
He ordered John that he come (Past Subjunctive)

97) Invito a Juan a venir
98) Invito a Juan a que viniera
He invited John to come
He invited John that he come (Past Subjunctive)

99) Acuso a Juan de mentir
100) Acuso a Juan de que mentia
He accused John of lying
He accused John that he lied (Past Indicative)
The first question we might ask ourselves is whether it is the tense or the tenseless complement which is to be taken as basic; that is, whether what we have here is an originally inflected form, transformationally related to an Infinitive, or else a deep Infinitive onto which tense and mood features are projected from the higher verb. In an unpublished paper (1972), we have supported the second alternative, showing that the presence of tenseless forms in an embedded complement is to be expected whenever the features concerning the contrast Future/Non-Future are predictable according to the meaning of the matrix verb. Since one may not expect things that are past - except in poetry, of course - nor repent for future mischiefs, it is natural -although not mandatory - that verbs like expect or repent command tenseless complements. Thus it is a semantic property of the higher predicate which determines the tenselessness of the subordinate clause, rather than any syntactic property concerning its subject - as Kirarsky and Kiparsky proposed in Fact. The point is confirmed by the existence, in Romance languages, of embedded complements, where Infinitives or Gerunds co-occur with overt nominative subjects, which never lose their syntactic status as such. In Portuguese, the infinitival subject even agrees with its verb - a fact which Quicoli (1972) takes to be evidence against the interpretive analysis of subjects embedded under Equi NP Del verbs proposed by Jackendoff (1969). This is indeed one of the most interesting and intriguing facts of Romance grammar, particularly from a diachronic perspective, since in Latin we find no example of such a construction, and influences from similar cases in Greek are hard to trace back.
Whatever the source of these forms is, what is relevant here is to notice that the inflected forms throughout (94)-(98) are to be seen as the result of a process of verb-verb agreement (*consecutio temporis*) involving features of tense and mood. This is shown by comparing (96), (98) and (100) with

101) *Ordenó a Juan que vino
    vino = preterit indicative

102) *Invitó a Juan a que vendría
    vendría = future conditional

103) *Acusó a Juan de que mentirá
    mentirá = future indicative

It is their failure to conform to the restrictions imposed by Tense and Mood Agreement which makes ungrammatical these sentences, while their basic infinitival counterparts are acceptable.

Let us now see whether the derived products of Tense and Mood Agreement may diverge in their syntactic behavior from their basic inputs in ways that are predictable from the Crossing Constraint. In order to do so, let us compare:

104) Invitó al hombre a venir
105) Invitó al hombre a que viniera
    He invited the man to come

The first sentence contains a plain Infinitive; in the second, however, Tense and Mood Agreement has applied, yielding the required Past Subjunctive. If we try now
to extract the Object Controller, we find the following contrast:

106) El hombre que invitó a venir se llama Blas
107) *El hombre que invitó a que viniera se llama Blas

The man that he invited to come /*that he come was Blas.

Only in case the controller cooccurs with a tenseless complement is extraction possible. This rather bizarre behavior of the controller may be predictable, however, if we realize that, in fact, the data we are analyzing provide an appropriate input for the constraint to become operative. For here as in the preceding cases, we have a situation where control coincides with a crossing of paths relating Consecutio and Extraction:

108)

\[ \text{Invitó} \quad \text{control} \quad \text{a venir} \]
\[ \text{al hombre} \quad \text{consecutio} \quad \text{extraction} \]

Notice that control is crucial to determine the ungrammaticality of (108). Thus we may compare the last sentence with a similar one, where both Consecutio and Extraction cross each other, but no control is involved. Our hypothesis predicts that such sentence should be good, and indeed there exists such example:

109) El hombre que quería que viniera se llama Blas

The man that he wanted to come is called Blas.
As *invitar, querer* requires Consecutive; but no controller is present here as a matrix object, since *Equi*
*NP Deletion* operates only under identity of subjects for *querer*. Therefore, both lines cross each other
without consequences:

110) Quería que el hombre viniera

A further illustration is provided by the star in this example suggested by James Harris:

111) *Juan fue forzado a que lo hiciera
John was forced to do it

Compare

112) Juan fue forzado a hacerlo

What compromises the grammaticality of the first example is the presence of a trace for Consecutive, cooccuring this
time with Object Proposing in the matrix sentence, which undergoes Passive. Graphically:

113)  

As these facts stand, there seems to be no obvious alter-
native which could relate grammatical and ungrammatical
sentences in this set other than the constraint we have
proposed; for, undoubtedly, a transderivational
constraint stating that, for those verbs which may alternate tensed and tenseless complements, Extraction or Preposing of an object controller is permitted only in the latter case, would require an unusual expansion of our capacity of belief. Nothing in the theory, furthermore, appears to prevent the undesired sentences from being generated, since object controllers do not fall, per se, under any specific proviso in terms of universal conditions, stimulations on islands, etc. Therefore, the Crossing Constraint seems to provide a valid approach to these data, and at the same time, it extracts considerable support from them.

Perhaps it is interesting to notice that the facts we have been analyzing represent each a different class of rules: Movement Rules within sentential boundaries (Intraposition of a Directional Complement in (67) and beyond sentential boundaries (Extraction in all examples but the last one); Anaphoric Rules (Pronominalization in (78); Feature Changing Rules (Consecutio in (108) and (113)). Thus the most interesting characteristic of the Constraint is its ability to interact with this very large variety of syntactic processes, making manifest, in a revealing way, the fundamental unity of the grammar.

A fact that may be efficiently handled through the Crossing Constraint is the following contrast in English, brought to my attention by Morris Halle:

114) Sonatas that are hard to play with this violin...
115) *Sonatas that this violin is hard to play with ...

One may assume here one instance of control in both
sentences, by which one may relate the deleted indefinite Propositional Phrase for us with be hard in the embedded clause (we are departing here from the description proposed by Lasnik and Fienko (1973), according to which these sentences exhibit a matrix PP related to an embedded VP through an interpretive rule; it seems to us that the lack of transformations that is characteristic of this environment is not due to the VP status of the complement as they claim, but rather to the absence of Auxiliaries in the embedded sentences, which is frozen here in the same way Nominal Phrases and Causative Complements — typically auxiliariless — are). Then the following configuration arises, which feeds the Crossing Constraint for (115):

116)  
\[
\text{control} \quad \begin{array}{c}
\text{be hard (for us) (for us) to play sonatas with} \\
\text{Extraction} & \text{this violin}
\end{array}
\]

For (114), however, it is a legal configuration which obtains, not a Crossing one, and therefore the sentence is acceptable; for \textit{sonatas} is related to the initial position in the matrix sentence first, and then extracted via Relativization, with no crossing paths involved in the process, since it is the same constituent which is referred to by the different rules in this case.

Coming back now to our main topic, let us inspect now the consequences of the Crossing Constraint for our
analysis. As it has been shown in (62) - where a control relationship has been posited between the dative a él and the subject of dejar - once one assumes that Intraposition is the natural way of relating patterns (a) and (b) in causative complements, then the crossing of transformational paths gives raise to the following configuration:

117)

Intraposition, however, is possible only under the controller hypothesis, for the embedded subject él is generated right next to the matrix verb in a sentential analysis à la Kayne, and no movement is needed to account for its superficial position and its marking as an accusative; furthermore, no control is implied within this hypothesis. Therefore the sentential analysis is unable to explain the contrast between

118) El libro que lo forcé a leer era Ivanhoe

119) Le livre que je l'ai forcé à lire était Ivanhoe
   The book that I forced him to read was Ivanhoe

and

120) *El libro que lo dejé leer era Ivanhoe

121) *Le livre que je l'ai laissé lire était Ivanhoe
   The book that I let him read was Ivanhoe
Notice that the linear order of the constituents is basically the same for the sentential analysis in both cases, although forzar, forcer, imply the presence of a matrix controller - a Direct Object in this case. Thus there is no clear reason for the islandhood of the dejar, laisser sentences - the more so if we consider that infinitival clauses are per se more vulnerable to extraction movements than tensed clauses, and that it is an embedded object, not a subject, which is being moved here.

In the sentential analysis, on the other hand, the grammaticality of (118) - (119) is expressible in

\[
\text{control} \quad \text{Forzé a él} \quad \text{léer el libro} \quad \text{Extraction}
\]

, where no Intraposition is involved, and therefore no crossing of transformational paths may result. (For all relevant matters, forzar is to be considered here identical in syntactical behavior to invitar). From the contrast between (122) and (117), therefore, which is only available under the controller hypothesis, we extract once more a valid piece of evidence for our analysis.

As a last example of the validity of the Crossing Principle, let us compare the different behavior of French and Spanish with respect to the verb ordenar, ordenar, an example that we considered for a while to represent a dismaying piece of counterevidence against
the constraint. The sentences in question are:

123) La chambre que j'ai ordonné à Jean de balayer
était sale
124) *La pieza que le ordené a Juan limpiar estaba
sucia
The room that I ordered John to clean was dirty

Spanish offers a straightforward ground for the application
of the principle. Since ordenar is subcategorized as
\( V_{NP} NP \), where, furthermore, the embedded subject is
controlled by the rightmost NP, a Dative,

125) Ordené a Juan limpiar la pieza

comes out as the natural result of Intraposition, which
applies here optionally:

125) Ordené limpiar la pieza a Juan

However, if we choose to apply Intraposition, a trace
is created that may not be crossed by any new trace
without resulting in ungrammaticality; graphically:

126) 

\[ \text{Ordené barrer la pieza a Juan} \]

- which is clearly illustrated by (124).

As for French, the dative marking on the controller —reproduced by \( lui \) — and the nominal behavior of the sentential complement — cf.
128) Il lui a été ordonné de balayer la chambre
Sweeping the room was ordered to him

leaves no doubts about the existence of equivalent conditions of subcategorization; with which the unquestionable grammatical of (129) becomes all the more discouraging for the supporters of the principle.

There is, however, a very elementary point we are missing here, and this is that French, unlike Spanish, has no rule of Intraposition, as shown in:

129) *J'ai donné à Jean un baiser
130) Le di e Juan un beso
    I gave John a kiss

This implies that a sentence like

131) J'ai ordonné à Jean de balayer la chambre

must come from Extranposition of the Sentential Complement, which is obligatory in this case:

132) *J'ai ordonné de balayer la chambre à Jean

But if so, the crossing conditions do not hold any more, since what we have now is:

133) Ordonner Jean de balayer la chambre

where la chambre moves forwards and backwards around Y—the controller in this case—, with no crossing implied
in this movement. That is:

134) French Spanish

Deep Input V NP NP

Marking +Dative

French Extrap. V NP NP

Spanish Intrap. V NP NP

Extraction French: V NP NP

*Spanish: V NP NP

Thus, far from jeopardizing the validity of the principle, the behavior of French ordonner with respect to Extraction gives a striking confirmation to it; with we will consider the issue to be settled in favor of the efficiency of the Principle, probably to be incorporated in the general theory as a universal device.

III Coming back to the Isomorphic Principle

In the first chapter, we have tested the validity of the Isomorphic Principle, leading to a controller analysis, against the work of transformations such as Passive,
Marking and Clitic Movement; in the present chapter, we have confronted the controller hypothesis with distributional facts concerning Animacy and we have considered its interaction with Intraposition in the light of the Crossing Constraint. In this section, we would like to come back to the basic frame provided by the PS rules in order to consider the connection of Intraposition, Passive and Clitic Movement with a class of complements we have not yet taken into account, and which appear to fill in an unexplained gap in our presentation. The gap we are referring to is expressible in the following manner:

135)

```
V   NP   NP  
|     |     |     |
invitar S   ordenar S

? V   S   NP  

|     |
hecer
```

The obvious question concerns that possibility of filling the gap by positing the complements of V NP S, which would parallel and complement, so to say, the configuration of Causative Complements.

Such structures do indeed exist and they are represented by gerundive complements, which may be headed by a very limited number of verbs, some of which, precisely, are to be found in Causative Constructions:
136) Lo encontré fumando  
I found him smoking

137) Te vi corriendo  
I saw you running

138) Me oyó cantando  
He heard me singing

139) Nos dejaron llorando  
They left us crying

The absence of an introductory a before the gerund indicates the lack of a nominal node dominating S, corroborated by the fact that these complements do not pseudocleft:

140) *Lo que te vi fue corriendo

Compare with:

141) A lo que lo invitaron fue a jugar  
What he was invited to was to play

On the other hand, the controller may be passivized, as expected:

142) Fue visto corriendo  
He was seen running

Clitic Movement may not take place in these structures to move any pronoun from the embedded clause, since the accusative controller, here as well as in the
invitar case, precludes such possibility:

143) Te vi leyéndolo
    I saw you reading it
144) *Te lo vi leyendo

145) Te invité a escucharlo
    I invited you to listen to it
146) *Te lo invité a escuchar

On the other hand, Intraposition yields ungrammatical results, since a bare S may not be referred to as a constituent to be intraposed:

147) Oí a Victoria cantando la Traviata
    I heard Victoria singing Traviata
148) *Oí cantando la Traviata a Victoria

Compare again

149) Invité a cantar la Traviata a Victoria

from

150) Invité a Victoria a cantar la Traviata

Thus we see that for every case, Gerundive Complements and Invitar Complements parallel and diverge exactly in the ways predicted by our analysis, and that the absence or presence of an NP node over the sentential complement is crucial to determine the applicability of all the relevant transformations. Therefore, we are
allowed to complement (145) by proposing

\[ 151 \]

\[
\begin{array}{ccc}
 V & NP & NP \\
 & S & \\
 V & NP & S \\
 & S & \\
 V & S & NP
\end{array}
\]

The verbs in the left column are represented by **invitar** and **encontrar**, in that order; those in the right column by **ordenar** and **hacer**. A relevant question here is how to stop the NP in **hacer** so that it never dominates an S; I see no obvious solution to this problem, given the power presently assigned to our PS rules.

Notice that the fourth group we have been considering enters also, according to the Isomorphic Principle, the simplex frame:

\[ 152 \]

Le encontré un defecto a la máquina

I found a defect in the machine

; that is, both for **encontrar** and **hacer** we may see that the S in the complex frame corresponds to an NP in the simplex frame, so that the basic simplex structure

\[ 153 \]

\[
\begin{array}{ccc}
 V & NP & NP
\end{array}
\]

is possible for all types, although the degree of optionality of the second NP varies according to the
semantics of each verb (obligatory for *ordenar*, optional for *encontrar*). What has to be kept in mind, however, is the striking fact that all through the four classes the number of arguments and the degree of their obligatoriness remains constant for each verb across the simplex and the complex frame, as stated by the principle.

The discussion of causative verbs as taking bare sentences plus a controller within the general frame of complements requiring a controller appears to indicate that this structure is sufficiently motivated within the whole system of infinitival clauses.
FINAL CONCLUSIONS

Needless to say, the mainlines of this thesis remain open, in the sense that, although generally valid for a grammar of Spanish, the Isomorphic Principle and the Crossing Constraint have yet to be tested—and probably refined—against the data provided by a wider category of languages, beyond Romance and Indo-European as well. Given the fact that the first represents a firm condition on the economy and simplicity of subcategorization rules, and the second appears to have a clearly natural value with respect to performance and perceptual strategies, since what is being discarded by the constraint is a construction exhibiting a triple level of complexity, obviously hard to decode, we expect both devices to have a legitimate status within the general theory. As a matter of fact, we expect the Crossing Constraint to be valid beyond linguistic levels, as a general psychological and behavioral principle; it is easy to imagine analogous applications for metrics, dance, perceptual experiments and the like; if so, the Crossing Constraint would belong no more to the realm of linguistics, but it would be included under the far more reaching scope of behavioral sciences as a whole, of which linguistics is only a particular case. These, of course, are intuitions and wishful thoughts rather than prophecies; what we want to indicate here is what appears to be, at a first approach, and according to our personal tendencies, the most promising course of future research on these matters.

As it stands, this investigation has yielded the following results:
It has been demonstrated that the analysis presented here

- accounts for the superficial position of the constituents without requiring any reordering transformations operating under the scope of Causative;

- predicts the ungrammaticality of haber sentences embedded under hacer;

- equally predicts gaps in Passives in the embedded clause, according to the Controller Hypothesis;

- provides an appropriate input for Marking, which operates here basically in the same way as it does in simplex sentences;

- offers an adequate context for Clitic Movement, both for the transitive and the intransitive case;

- allows for an appropriate generalization concerning the unavailability of - Animate NP's to Intraposition;

- in the same way, it presents an adequate explanation for the lack of Passive (Object Preposing) on the intranosed NP's, both in simplex and in complex sentences;

- gives an appropriate context for the Crossing Constraint to apply, ruling out those clauses where both Intransposition and Extraction have operated;
- fits in with the general pattern of the whole infinitival system;

- and appears to be a natural extension of the subcategorization of the same verbs in simplex sentences, according to the Isomorphic Principle.

In the ten cases we have enumerated, the shortcomings of the alternative analysis have been made explicit through numerous examples and counterexamples. For a different perspective, the ability of our hypothesis to respond to this very manyfold spectrum of facts would remain a tantalizing coincidence. Thus, the present analysis has been shown to be not only empirically adequate, but also preferable in terms of explanatory power; and the grammar containing it the simpler one and the one to be provisorily-chosen.
FOOTNOTES

CHAPTER II

1. Even the reference to a complex context may not be sufficient in this specific case. Thus notice the difference (pointed out also by Kayne) between

   a) El hizo conocer a Juan a María
   He made Mary know John

   b) *El hizo matar a Juan a María
   He made Mary kill John

In my opinion, what accounts for the ungrammaticality of the last sentence is the -unlawful- adjacency of a +Agentive ,+Animate) NP plus another (+Animate) NP under the same VP, if V is +Agentive. These are only very sketchy observations; much remains to be done in this interesting area.
BIBLIOGRAPHY


Cuervo, R., 1950, *Disquisiciones sobre Filologia Castellana*, Bogota.


Gili y Gaya, S., 1961, Curso superior de Sintaxis Espanola, Spes, Barcelona.


Haussen, F., 1913, Gramatica Historica de la Lengua Castellana, Halle A.S.


Lenz, R., 1925, La Oracion y Sus Partes, Madrid.


Otero, C., 1972, "The development of the clitics in Hispano-Romance", unpublished paper, UCLA.


Reis, M., 1973, "Is There a Rule of Subject-to-Object Raising in German", in *Proceedings of the Ninth Annual Meeting of the Chicago Linguistic Society*, 619-629.


BIOGRAPHICAL NOTE

I was born in Juan Bautista Alberdi, provincia de Buenos Aires, Argentina, on November 5, 1934. It was there, in the middle of the Pampas, where I received the best education I ever got, from an extraordinary woman called Diosma de Oyhamburu. It was based on admiration. Later years at the Instituto Nacional del Profesorado en Lenguas Vivas, Facultad de Filosofía y Letras de la Universidad de Buenos Aires, the Sorbonne, and even M.I.T. could never destroy it.

Given my personal background and the actual situation in the job market, my plans are vague. I may come back to literature; I may become a gypsy for a while; I may hold a chair in La Plata. "Para mi solo recorrer los caminos que tengan corazón, cualquier camino que tenga corazón." I will always wonder why it took me so long a while to realize what was wrong with Akademia.